ANDY BESHEAR
GOVERNOR

REBECCA W. GOODMAN
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

October 28, 2021

Mr. Tracy Cole
Big Rivers Electric Corporation
5663 KY 85 W
Centertown, Kentucky 42328

Sent via E-mail only

RE: Approval of Minor Modification – Closure Plan Phase I Landfill
Big Rivers Electric Corp - DB Wilson Station Landfill
Agency Interest No. 3319
Solid Waste Permit No. SW09200004
Application I.D. No. APE20200002
Ohio County

Dear Mr. Cole,

The Kentucky Division of Waste Management (DWM), Solid Waste Branch completed review of the application referenced above, received on August 6, 2021, and additional information received on August 17, 2021. The application proposing to modify the closure and post-closure plan for the Phase I landfill is hereby approved.

Please find enclosed a revised permit. To receive an electronic copy of the approved application, please utilize the Kentucky Department of Environmental Protection's eSearch tool via https://dep.gateway.ky.gov/eSearch/Search_Issued_Approvals.aspx on or around November 10, 2021.

Be advised that if you consider yourself aggrieved by the issuance of this permit, you have the right, pursuant to KRS 224.10-420(2) to file a petition demanding a hearing with the Cabinet. This right shall be limited to a period of thirty (30) days. The petition should be filed with The Office of Administrative Hearings located at 211 Sower Blvd., Frankfort, KY 40601. See https://eec.ky.gov/About/Administrative-Hearings/Pages/default.aspx for additional information.

If you need any additional information, please contact Ken Melton, P.E. at (502) 782-6415 or via ken.melton@ky.gov.

Sincerely,

Danny Anderson

Danny Anderson, P.E.
Manager, Solid Waste Branch

Enclosure
DA/km/lkg/sa

c: Mr. Tracy Cole via e-mail: Tracy.Cole@bigrivers.com
Mr. Dennis Connair via e-mail: dennis.connair@aecom.com

Kentucky Energy and Environment Cabinet
Department for Environmental Protection
Division of Waste Management

PERMIT

Facility: **Big Rivers Electric Corp - DB Wilson Station Landfill**
5663 KY 85 W
Centertown, KY 42348

Permittee: **Big Rivers Electric Corporation**
5663 KY 85 W
Centertown, KY 42328

Agency Interest: **Big Rivers Electric Corp - Wilson Station**
5663 KY 85 W
Centertown, KY 42348

The Division has issued the permit under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. This permitted activity or activities are subject to all conditions and operating limitations contained herein. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses or approvals required by this Division or other state and local agencies.

No deviation from the plans and specifications submitted with your application or any condition specified herein is allowed, unless authorized in writing from the Division. Violation of the terms and conditions specified herein may render this permit null and void. All rights of inspection by representatives of the Division are reserved. Conformance with all applicable Waste Management Regulations is the responsibility of the permittee.

Agency Interest ID #: **3319**

Solid Waste Permit #: **SW09200004**

County: **Ohio**

Permitted Activities:

Subject Item	Activity	Type	Status
ACTV005	Special Waste Landfill-Coal/09200004	Construction/Operation	Active
ACTV009	CCR Unit - Landfill/09200004	Construction/Operation	Active

PERMIT

Acreage Summary:

Waste Disposal Area (in Acres):

Activity	Disposal Area
CCR Unit - Landfill	91.83
Special Waste Landfill-Coal	82.47
Total Disposal Area	174.30
Total Permitted Area	700.00

Cost Estimate Summary:

Coverage Type	Cost Estimate	Effective	Comments
Closure	$31,217,562.00	10/28/2021	Approved under APE20200002
Post-Closure	$9,312,695.00	10/28/2021	Approved under APE20200002

Financial Assurance Summary:

The owner or operator shall maintain the following financial assurance approved by the Division in compliance with KRS Chapter 224.40-650, KRS Chapter 224.50-862, 401 KAR 45:080, and 401 KAR 48:310:

Instrument Type	Instrument Number	Amount	Date Received	Comments
Letter of Credit	KY062-H-5102-002	$2,504,400.00	07/15/2009	See Page 3 for Additional Information

First Operational Permit Effective Date: 11/27/1984 -- Inert Landfill

Permit Effective Date: 07/01/1992

Permit Expiration Date: Life of Facility

Permit issued: 10/28/2021

Sincerely,

Danny Anderson, P.E.
Manager, Solid Waste Branch

PERMIT

Permit Conditions:

Facility Information and/or Conditions

1. An updated cost estimate incorporating the technical standards of 401 KAR Chapter 46 was submitted to the Solid Waste Branch (SWB) on June 3, 2021 as part of a proposed modified closure plan, referenced as APE20200002. The proposed estimates to be accepted are comprised of Phase I closure ($16,044,468.00) and post-closure ($1,314,500.00), & Phase II closure ($15,478,914.00) and post-closure ($7,998,195.00). The owner or operator shall submit the increase in financial assurance, in accordance with 401 KAR 45:080 and the updated estimate, no later than November 8, 2021.

Subject Items

ACTV0005 - Special Waste Landfill-Coal

Standard Requirements:

1. General: The owner or operator of a special waste facility shall comply with KRS Chapter 224 and 401 KAR Chapters 30, 40 and 45 for the construction and operation of special waste facilities. [KRS 224.50-760]

2. General: For construction and operation of the special waste landfill, the owner or operator shall comply with KRS Chapter 224.50-760, 401 KAR 45:030, 45:110 and the approved permit application(s). [401 KAR 45:110]

Variances, Alternate Specifications and Special Conditions:

1. Financial Assurance: The maximum extent of operation includes the area of the landfill identified by an operating permit and for which the final cover Construction Progress Report has not yet been approved by the Cabinet. The current maximum extent of operation for this Special Waste Landfill is 91.8 acres. [401 KAR 45:080]

2. General: The Special Waste Landfill previously operated as a single permitted activity recorded as ACTV0005. On August 4, 2021, the permit issued reflected the updates in accordance with the 401 KAR Chapter 46 technical standards. The Special Waste Landfill permitted activity was split into two separate permitted activities: the Phase I Special Waste Landfill and the Phase II CCR Landfill. The Phase I Special Waste Landfill footprint consists of approximately 94.29 acres, which includes disposal area and portions of extended cover and run-off ditches. The Phase I Special Waste Landfill continues to be recorded as a Special Waste Landfill (ACTV005). The Phase II CCR Landfill was split from and converted from a Special Waste Landfill (ACTV005) to a CCR Unit - Landfill (ACTV009) on August 4, 2021. [401 KAR 45:140 Section 2]

3. Wastestreams: The permittee may accept special waste streams as described in the approved plans and applications from the D. B. Wilson Station, Ohio Co., Island, Kentucky. If waste is accepted in the Phase I Special Waste Landfill, the owner or operator shall notify the Solid Waste Branch in writing within forty-eight (48) hours. [401 KAR 45:110 Section 3(7), 401 KAR 45:140 Section 2]

4. Closure: Upon cessation of special waste disposal activities at the landfill, the owner or operator shall implement the approved closure plan in accordance with its terms and the requirements of this chapter. An owner or operator may be required to revise a closure plan prior to implementation. [401 KAR 45:110 Section 5]

5. Wastestreams: The permittee may accept fly ash and bottom ash from the Kenneth Coleman Station, Hancock

Co., Hawesville, KY. If waste is accepted in the Phase I Special Waste Landfill, the owner or operator shall notify the Solid Waste Branch in writing within forty-eight (48) hours. [401 KAR 45:110 Section 3(7), 401 KAR 45:140 Section 2]

6. Closure: Closure: A special waste landfill shall be closed in a manner that complies with 401 KAR 30:031. The owner or operator of a special waste landfill shall submit a closure plan that includes a closure design as specified in subsection (2) of 401 KAR 45:110, Section 5, a closure cost estimate in accordance with Section 2 of 401 KAR 45:080, a narrative discussing the closure plan's conformance with 401 KAR 30:031, and a schedule for implementation of the plan. Deviations from any approved closure plan shall receive prior approval via an approved permit modification. A closure Construction Progress Report shall be submitted upon completion of closure activities within thirty (30) days. [401 KAR 45:110 Section 5]

7. General: The owner or operator may only accept waste at the special waste landfill from the sources which are approved per 401 KAR 45:020, Section 2(1)(a), 45:030, Section 8(1)(a), and 45:110. If waste is accepted in the Phase I Special Waste Landfill, the owner or operator shall notify the Solid Waste Branch in writing within forty-eight (48) hours. [401 KAR 45:110, 401 KAR 45:140 Section 2]

County Sources - The owner or operator may accept waste as authorized by the Cabinet pursuant to KRS 224 and/or 401 KAR Chapter 47 from the following counties:

Kentucky: Hancock, Ohio

Approved Applications - The owner or operator shall comply with applicable statutes and regulations and the following approved applications:

1. 10-01-1979 - As-Built Plans Approved
2. 04-16-1981 - As-Built Plans Approved
3. 09-06-1984 - First Construction Permit Issued
4. 10-10-1984 - As-Built Plans Approved
5. 11-27-1984 - First Operation Permit Issued (Inert Landfill) - Effective on 11-27-1984
6. 12-07-1987 - As-Built Plans Approved
7. 10-28-1988 - As-Built Plans Approved
8. 09-12-1990 - Permit Renewal - APE19890001
9. 03-10-1994 - Major Modification - LI1MOVX1 - Vertical Expansion Approval & Continuation to Operate - APE19920001
10. 01-30-1996 - Groundwater Monitoring Plan - APE19900001
11. 02-28-1996 - Minor Modification #1 - LI1MOMN1 - APE19900002
12. 02-28-1996 - Permit Renewal #2 - LI1PR2 - APE19930001
13. 03-22-1999 - Permit Transfer - LS1PT1 - Transfer Big Rivers Electric Corp to Western Kentucky Energy Corp - APE19980001
14. 11-17-2004 - Add Waste Source - LS1MOAD1 - Fly Ash and Bottom Ash from Kenneth Coleman Plant – APE20010001
15. 12-20-2004 - Special Waste Beneficial Reuse - Poz-O-Tec - ARP20040001
16. 02-25-2008 - Groundwater Assessment Report - AIN20050002
17. 03-14-2005 - Minor Modification - Vertical Expansion - APE20040001
18. 05-05-2005 - Groundwater Assessment Plan - AIN20040001
19. 02-26-2009 - Groundwater Monitoring Plan - APE20080002
20. 10-08-2009 - Monitoring Well CPR & Authorization for Waste Placement in Bond Increment Area 2 – APE20090004

21. 05-19-2010 - Permit Transfer - From Western Kentucky Energy to Big Rivers Electric Corporation – APE20090002
22. 11-30-2017 - Amendment to Groundwater Monitoring Plan - APE20170001
23. 08-04-2021 - See the CCR Unit-Landfill activity (ACTV0009) for additional information
24. 08-04-2021 - Groundwater Assessment Plan - AIN20140001
25. 10-28-2021 - Modification, Phase I Closure and Post-Closure - APE20200002

ACTV0009 - CCR Unit - Landfill

Variances, Alternate Specifications and Special Conditions:

1. General: The Special Waste Landfill previously operated as a single permitted activity recorded as ACTV0005. On August 4, 2021, the permit issued reflected the updates in accordance with the 401 KAR Chapter 46 technical standards. The Special Waste Landfill permitted activity was split into two separate permitted activities: the Phase I Special Waste Landfill and the Phase II CCR Landfill. The Phase II CCR Landfill consists of approximately 91.83 acres. The Phase II CCR Landfill was split from and converted from a Special Waste Landfill (ACTV005) to a CCR Unit - Landfill (ACTV009) on August 4, 2021. Additional information pertaining to this conversion can be found in permitting actions AIN20140001 and APE20200002. The Phase II CCR Landfill is a CCR Unit as defined by 401 KAR 46:101 and is subject to the standards pursuant to 401 KAR 46:110, and the Phase II CCR Landfill remains subject to the procedural requirements in 401 KAR Chapter 45. [401 KAR 45:020, 401 KAR 45:025, 401 KAR 45:030, 401 KAR 45:040, 401 KAR 45:050, 401 KAR 45:080, 401 KAR 45:140, 401 KAR 46:110]

2. General: The owner or operator of a Coal Combustion Residuals (CCR) Unit shall comply with KRS Chapter 224 and 401 KAR Chapter 46 for the construction, operation, maintenance, and closure of a CCR Unit and other provisions pursuant to 401 KAR Chapters 30, 40, and 45 as applicable. The owner or operator shall comply with the applicable provisions in the Approved Applications listed on this permit document for ACTV0005 - Special Waste Landfill-Coal and with all provisions in the Approved Applications listed on this permit document for ACTV0009 - CCR Unit - Landfill. [401 KAR 45:030, 401 KAR 45:140]

3. General: The owner or operator shall submit the $15,000 annual fee no later than July 31 of each year pursuant to 401 KAR 46:120. Applications and reports specific to only the Phase II CCR Landfill, or only other CCR Units, for this facility shall not be subject to the filing fees pursuant to 401 KAR 45:250. [401 KAR 46:120 Section 4]

Approved Applications - The owner or operator shall comply with applicable statutes and regulations and the following approved applications:

1. 08-04-2021 - See the Special Waste Landfill-Coal activity (ACTV0005) for additional information and site history
2. 08-04-2021 - Permit Issued in accordance with 401 KAR Chapter 46 technical standards - AIN20140001

Financial Assurance

ACTV0001 - Financial Assurance

The following is a history of the financial assurance for this facility:

1. 10-07-1984 - SB #B5703-16, $879,600.00
2. 07-14-1994 - SB #CSB0162808, $879,600.00
3. 07-14-1994 - SB #B5703-16 released
4. 07-08-1998 - LOC #SLCDC3896/912678, $879,600.00 rejected
5. 11-16-1998 - LOC #SLCDC3896/912767, $879,600.00 rejected
6. 01-15-1999 - LOC #SLCDC3896/912851, $879,600.00
7. 01-15-1999 - SB #CSB0162808 released
8. 02-26-2004 - LOC #033250100, $951,263.00
9. 02-26-2004 - LOC #SLCDC3896/912851 released
10. 08-19-2004 - LOC #033250100 increased to $966,483.00
11. 06-30-2004 - LOC #033250100 increased to $986,779.00
12. 05-10-2006 - LOC #033250100 increased to $1,008,779.00
13. 07-24-2007 - LOC #033250100 increased to $1,039,735.00
14. 07-15-2009 - LOC #KY06-2-H-5102-002, $2,504,400.00
15. 07-31-2009 - LOC #033250100 released.

Monitoring Conditions

GSTR0001 - Groundwater Monitoring - SWB: (Phase I monitoring wells)

Group Members: STRC0001 - Well MW-1; STRC0002 - Well MW-2; STRC0003 - Well MW-3; STRC0004 - Well MW-4

Standard Requirements:

1. The owner or operator shall satisfy the requirements of 401 KAR 45:160 for all wastes and waste constituents contained in the site or facility. [401 KAR 45:160 Section 1]

2. The permittee shall monitor for other parameters as required by the Cabinet. [401 KAR 45:160 Section 8(2)(c)]

3. The owner or operator shall monitor groundwater on the approved schedule at each approved groundwater monitoring location in accordance with 401 KAR 45:160, the permit, and the approved plans. A table summarizing the parameters to be monitored, their respective limits and monitoring frequency is included herein. [401 KAR 45:160, 401 KAR 45:140 Section 1(1)]

4. The owner or operator shall conduct statistical analysis of the groundwater data in accordance with 401 KAR 45:160 Section 6 and the approved applications. The statistical test chosen shall be conducted separately for each parameter in each well for each monitoring event. The results shall be maintained as part of the facility record throughout the operating and post-closure life of the facility. [401 KAR 45:160 Section 6, 401 KAR 45:140 Section 1(1)]

5. The groundwater analytical data and statistical analysis shall be submitted on forms provided by the Cabinet,

within sixty (60) days after sampling or 15 days of the completion of statistical analysis, whichever is sooner. [401 KAR 45:160 Section 4]

6. If the analysis of groundwater sample results indicates contamination (i.e., a statistical or MCL exceedence) as specified in 401 KAR 45:160 Section 5, the owner or operator shall notify the Cabinet within (forty-eight) 48 hours of receiving the results and shall arrange to split samples no later than ten (10) days from the receipt of the results. [401 KAR 45:160 Section 5]

7. The owner or operator shall be required to prepare and submit a groundwater contamination assessment plan if laboratory analyses of one (1) or more public or private water supplies or monitoring wells at the site shows the presence of one (1) or more parameters above the maximum contaminant level (MCL) as specified in 401 KAR 30:031 or a statistically significant increase over background levels for parameters that have no MCL. [401 KAR 45:160 Section 5]

8. The owner or operator shall provide alternate water supplies to all affected parties within twenty-four (24) hours of notification of the Cabinet that sample results indicate contamination of a drinking water supply if it has been determined that the special waste site or facility is the probable source of the contamination. [401 KAR 45:160 Section 3]

9. If required by the Cabinet, groundwater contamination assessment and corrective action shall be performed in full compliance with all provisions of 401 KAR 45:160 Section 5. [401 KAR 45:160 Section 5]

Variances, Alternate Specifications and Special Conditions:

1. Monitoring Well Purging: Monitoring wells shall be purged using low-flow sampling equipment, at flow rates between 100 and 500 milliliters per minute. Drawdown during purging shall not exceed 0.5 feet. Purge water shall be passed through a calibrated flow cell until three consecutive readings taken at three- to five-minute intervals show that: a) pH varies no more than plus or minus 0.1 Standard Units; b) conductivity varies no more than plus or minus 3%; c) temperature varies no more than plus or minus three percent; d) dissolved oxygen varies no more than plus or minus 10%, or is less than 0.5 mg/L; e) redox potential varies no more than plus or minus 10 mV; and f) turbidity varies no more than plus or minus 10%, or is less than 5 NTU. [401 KAR 45:140 Section 1, 401 KAR 45:140 Section 2]

2. Monitoring Well Purging: If, after one hour of purging, three consecutive readings taken at three- to five-minute intervals show that: a) pH varies no more than plus or minus 0.1 Standard Units; and b) conductivity varies no more than plus or minus 3%, purging may be considered complete. [401 KAR 45:140 Section 1, 401 KAR 45:140 Section 2]

3. Monitoring Well Purging: If parameters have not stabilized after five well volumes have been purged from the well casing, purging may be considered complete. [401 KAR 45:140 Section 1, 401 KAR 45:140 Section 2]

4. The permittee shall submit a potentiometric map in each semiannual report showing: 1) the locations of all monitored wells and piezometers; 2) waste disposal areas; 3) groundwater elevation in each well and piezometer in feet above mean sea level referenced to a USGS datum; and 4) potentiometric contours in feet above mean sea level referenced to a USGS datum. [401 KAR 45:140 Section 2]

5. Groundwater Assessment: The owner or operator shall submit a Groundwater Assessment Report which shall:

a) Be submitted no later than December 15, 2022;
b) Define the existence, quality, quantity, areal extent, and depth of groundwater degradation from the facility and the rate and direction of migration of contaminants in groundwater. Contaminant concentrations and groundwater flow rates and directions shall be determined empirically, in a manner sufficient to ascertain current or potential impacts of groundwater pollution from the facility upon both human and ecological receptors;
c) Empirically determine and include the point(s) and mechanism(s) of discharge of polluted groundwater from the site into surface water pursuant to 401 KAR 45:160, Section 5(4);
d) Include all new data collected, an analysis of both new and preexisting data used or obtained in the assessment investigation, and recommendations on the necessity for the abatement of groundwater pollution. Recommendations on the necessity for the abatement of groundwater pollution shall be empirically based and include an evaluation of potential impacts to both human and ecological receptors pursuant to 401 KAR 45:160 Section 5(7); and
e) Evaluate whether groundwater pollution at the facility violates (or has the potential to violate) any provision of the environmental performance standards of 401 KAR 30:031. [401 KAR 45:140 Section 2, 401 KAR 45:160]

6. Groundwater monitoring wells shall be constructed and maintained in accordance with 401 KAR 45:160 Section 3, 401 KAR 6:350, the permit, and the approved plans. [401 KAR 45:140 Section 1(1), 401 KAR 45:160 Section 3, 401 KAR 6:350]

7. No monitoring well construction, maintenance, or abandonment may be conducted without prior approval by the Division of Waste Management. [401 KAR 45:140 Section 1(1), 401 KAR 6:350 Section 12(1)]

8. Groundwater Well Construction: The owner or operator shall comply with the standards and provisions in 401 KAR Chapter 6. This includes, but not limited to, the provision each monitoring well shall be constructed, modified, or abandoned by a monitoring well driller or monitoring well driller assistant certified in accordance with KRS 223.425 and 401 KAR 6:320. [401 KAR 6:350]

9. Groundwater Well Construction: The Division of Waste Management shall be notified at least ten (10) working days prior to monitoring well construction, modification, or abandonment so that a Cabinet representative may be present at the construction, modification, or abandonment. [401 KAR 6:350 Section 12]

GSTR0002 - Groundwater Monitoring - SWB: (Phase II monitoring wells)

Group Members: STRC0031 - Well MW-5; STRC0032 - Well MW-6; STRC0033 - Well MW-8; STRC0034 - Well MW-7; STRC0036 - Well MW-10

Standard Requirements:

1. The owner or operator shall satisfy the requirements of 401 KAR 45:160 for all wastes and waste constituents contained in the site or facility. [401 KAR 45:160 Section 1]

2. The permittee shall monitor for other parameters as required by the Cabinet. [401 KAR 45:160 Section 8(2)(c)]

3. The owner or operator shall monitor groundwater on the approved schedule at each approved groundwater monitoring location in accordance with 401 KAR 45:160, the permit, and the approved plans. A table summarizing the parameters to be monitored, their respective limits and monitoring frequency is included herein.

[401 KAR 45:160, 401 KAR 45:140 Section 1(1)]

4. The owner or operator shall conduct statistical analysis of the groundwater data in accordance with 401 KAR 45:160 Section 6 and the approved applications. The statistical test chosen shall be conducted separately for each parameter in each well for each monitoring event. The results shall be maintained as part of the facility record throughout the operating and post-closure life of the facility. [401 KAR 45:160 Section 6, 401 KAR 45:140 Section 1(1)]

5. The groundwater analytical data and statistical analysis shall be submitted on forms provided by the Cabinet, within sixty (60) days after sampling or 15 days of the completion of statistical analysis, whichever is sooner. [401 KAR 45:160 Section 4]

6. If the analysis of groundwater sample results indicates contamination (i.e., a statistical or MCL exceedence) as specified in 401 KAR 45:160 Section 5, the owner or operator shall notify the Cabinet within (forty-eight) 48 hours of receiving the results and shall arrange to split samples no later than ten (10) days from the receipt of the results. [401 KAR 45:160 Section 5]

7. The owner or operator shall provide alternate water supplies to all affected parties within twenty-four (24) hours of notification of the Cabinet that sample results indicate contamination of a drinking water supply if it has been determined that the special waste site or facility is the probable source of the contamination. [401 KAR 45:160 Section 3]

Variances, Alternate Specifications and Special Conditions:

1. Monitoring Well Purging: Monitoring wells shall be purged using low-flow sampling equipment, at flow rates between 100 and 500 milliliters per minute. Drawdown during purging shall not exceed 0.5 feet. Purge water shall be passed through a calibrated flow cell until three consecutive readings taken at three- to five-minute intervals show that: a) pH varies no more than plus or minus 0.1 Standard Units; b) conductivity varies no more than plus or minus 3%; c) temperature varies no more than plus or minus three percent; d) dissolved oxygen varies no more than plus or minus 10%, or is less than 0.5 mg/L; e) redox potential varies no more than plus or minus 10 mV; and f) turbidity varies no more than plus or minus 10%, or is less than 5 NTU. [401 KAR 45:140 Section 1, 401 KAR 45:140 Section 2]

2. Monitoring Well Purging: If, after one hour of purging, three consecutive readings taken at three- to five-minute intervals show that: a) pH varies no more than plus or minus 0.1 Standard Units; and b) conductivity varies no more than plus or minus 3%, purging may be considered complete. [401 KAR 45:140 Section 1, 401 KAR 45:140 Section 2]

3. Monitoring Well Purging: If parameters have not stabilized after five well volumes have been purged from the well casing, purging may be considered complete. [401 KAR 45:140 Section 1, 401 KAR 45:140 Section 2]

4. The permittee shall submit a potentiometric map in each semiannual report showing: 1) the locations of all monitored wells and piezometers; 2) waste disposal areas; 3) groundwater elevation in each well and piezometer in feet above mean sea level referenced to a USGS datum; and 4) potentiometric contours in feet above mean sea level referenced to a USGS datum. [401 KAR 45:140 Section 2]

5. Groundwater monitoring wells shall be constructed and maintained in accordance with 401 KAR 45:160 Section 3, 401 KAR 6:350, the permit, and the approved plans. [401 KAR 45:140 Section 1(1), 401 KAR 45:160

Section 3, 401 KAR 6:350]

6. No monitoring well construction, maintenance, or abandonment may be conducted without prior approval by the Division of Waste Management. [401 KAR 45:140 Section 1(1), 401 KAR 6:350 Section 12(1)]

7. Groundwater Well Construction: The owner or operator shall comply with the standards and provisions in 401 KAR Chapter 6. This includes, but not limited to, the provision each monitoring well shall be constructed, modified, or abandoned by a monitoring well driller or monitoring well driller assistant certified in accordance with KRS 223.425 and 401 KAR 6:320. [401 KAR 6:350]

8. Groundwater Assessment: Groundwater contamination assessment and corrective action shall be performed in full compliance with all provisions of 401 KAR 45:160 Section 5; the owner or operator shall be required to prepare and submit a groundwater contamination assessment plan if laboratory analyses of one (1) or more public or private water supplies or monitoring wells at the site shows the presence of one (1) or more parameters above the maximum contaminant level (MCL) as specified in 401 KAR 30:031 or a statistically significant increase over background levels for parameters that have no MCL. The owner or operator shall comply with the provisions of this group, referenced as GSTR0002; the data gathered may be used in the groundwater assessment process in accordance with the technical provisions of 401 KAR Chapter 45. The approval of the groundwater assessment plan, referenced as AIN20140001, in no way constitutes Division of Waste Management acceptance or concurrence with any technical provision pursuant to 401 KAR Chapter 46. [401 KAR 45:140 Section 2, 401 KAR 45:160 Section 5]

9. Groundwater Well Construction: The Division of Waste Management shall be notified at least ten (10) working days prior to monitoring well construction, modification, or abandonment so that a Cabinet representative may be present at the construction, modification, or abandonment. [401 KAR 6:350 Section 12]

GSTR0003 - Groundwater Monitoring - SWB: Piezometer Monitoring Group

Group Members: STRC0035 - Well P-9; STRC0037 - Well P-11

Variances, Alternate Specifications and Special Conditions:

1. These piezometers are for monitoring static water levels for groundwater flow determination. [401 KAR 47:160]

GSTR0004 - Groundwater Monitoring - SWB: Chapter 46 Groundwater Monitoring Group

Group Members: AIOO3319 -

Variances, Alternate Specifications and Special Conditions:

1. Groundwater Monitoring: The owner or operator shall monitor groundwater and provide notifications in accordance with 401 KAR Chapter 46 and submit the results and analysis to the Division of Waste Management, Solid Waste Branch upon request. [401 KAR 45:030, 401 KAR 46:110 Section 10, 401 KAR 46:110 Section 8]

PERMIT

GSTR0005 - Groundwater Monitoring - SWB: Chapter 6 Groundwater Monitoring Group

Group Members: AIOO3319 -

Variances, Alternate Specifications and Special Conditions:

1. Groundwater Well Construction: Prior to the installation, modification, or abandonment of a monitoring well at a unit regulated by the Division of Waste Management (DWM), the permittee shall obtain DWM approval of all monitoring-well construction designs and all monitoring-well construction materials. The approval request shall be submitted to the Solid Waste Branch of the DWM. [401 KAR 6:350 Section 12]

2. Groundwater Well Construction: The Division of Waste Management shall be notified at least ten (10) working days prior to monitoring well construction, modification, or abandonment so that a Cabinet representative may be present at the construction, modification, or abandonment. [401 KAR 6:350 Section 12]

3. Groundwater Well Construction: The owner or operator shall comply with the standards and provisions in 401 KAR Chapter 6. This includes, but not limited to, the provision each monitoring well shall be constructed, modified, or abandoned by a monitoring well driller or monitoring well driller assistant certified in accordance with KRS 223.425 and 401 KAR 6:320. [401 KAR 6:350]

4. Reports and Submittals: For recordkeeping purposes and in order to verify compliance with 401 KAR Chapter 6 standards, the owner or operator shall submit a Construction Progress Report (CPR) within 45 days of the completion of any groundwater monitoring well installation, modification, or abandonment activities. [401 KAR 45:140 Section 1(8), 401 KAR 6:350]

Groundwater Monitoring Limits:

Subject Item	CAS Number	Parameter	Frequency	Lower Limit	Upper Limit	Units	Statistical Limit	Report Only
GSTR0001	7440-36-0	Antimony, Total (as Sb)	semiannually		0.006	mg/L		
GSTR0001	7440-38-2	Arsenic, Total (as As)	semiannually		0.010	mg/L		
GSTR0001	7440-39-3	Barium, Total (as Ba)	semiannually		2.0	mg/L		
GSTR0001	7440-41-7	Beryllium, Total	semiannually		0.004	mg/L		
GSTR0001	7440-42-8	Boron	semiannually			mg/L	Yes	
GSTR0001	7440-43-9	Cadmium, Total (as Cd)	semiannually		0.005	mg/L		
GSTR0001	7440-70-2	Calcium, total [as Ca]	semiannually			mg/L	Yes	
GSTR0001		Carbon, Total Organic	semiannually			mg/L	Yes	
GSTR0001		Chemical Oxygen Demand (COD)	semiannually			mg/L	Yes	
GSTR0001	16887-00-6	Chloride	semiannually			mg/L	Yes	
GSTR0001	7440-47-3	Chromium, Total (as Cr)	semiannually		0.10	mg/L		
GSTR0001	7440-48-4	Cobalt, Total	semiannually			mg/L	Yes	
GSTR0001		Fluoride, Total (as F)	semiannually		4.0	mg/L		
GSTR0001		Groundwater Elevation	semiannually			feet above mean sea level based on a USGS datum		Yes
GSTR0001	7439-89-6	Iron, Total (as Fe)	semiannually			mg/L	Yes	
GSTR0001	7439-92-1	Lead, Total (as Pb)	semiannually		0.015	mg/L		
GSTR0001		Lithium, (Total) as Li	semiannually			mg/L	Yes	
GSTR0001	7439-97-6	Mercury, Total (as Hg)	semiannually		0.002	mg/L		
GSTR0001	7439-98-7	Molybdenum, Total (as Mo)	semiannually			mg/L	Yes	
GSTR0001		Radium 226 + Radium 228, Total	semiannually		5.0	pCi/L		
GSTR0001	7782-49-2	Selenium, Total (as Se)	semiannually		0.05	mg/L		
GSTR0001	7440-23-5	Sodium, Total (as Na)	semiannually			mg/L	Yes	
GSTR0001		Solids, Total Dissolved	semiannually			mg/L	Yes	
GSTR0001		Specific Conductance	semiannually			umhos/cm	Yes	
GSTR0001	14808-79-8	Sulfate	semiannually			mg/L	Yes	
GSTR0001		Temperature, Water Deg. Fahrenheit	semiannually			degrees Fahrenheit		Yes
GSTR0001	7440-28-0	Thallium, Total	semiannually		0.002	mg/L		
GSTR0001		pH	semiannually			S.U.	Yes	
GSTR0002	7440-36-0	Antimony, Total (as Sb)	semiannually		0.006	mg/L		
GSTR0002	7440-38-2	Arsenic, Total (as As)	semiannually		0.010	mg/L		

PERMIT

Subject Item	CAS Number	Parameter	Frequency	Lower Limit	Upper Limit	Units	Statistical Limit	Report Only
GSTR0002	7440-39-3	Barium, Total (as Ba)	semiannually		2.0	mg/L		
GSTR0002	7440-41-7	Beryllium, Total	semiannually		0.004	mg/L		
GSTR0002	7440-42-8	Boron	semiannually			mg/L	Yes	
GSTR0002	7440-43-9	Cadmium, Total (as Cd)	semiannually		0.005	mg/L		
GSTR0002	7440-70-2	Calcium, total [as Ca]	semiannually			mg/L	Yes	
GSTR0002		Carbon, Total Organic	semiannually			mg/L	Yes	
GSTR0002		Chemical Oxygen Demand (COD)	semiannually			mg/L	Yes	
GSTR0002	16887-00-6	Chloride	semiannually			mg/L	Yes	
GSTR0002	7440-47-3	Chromium, Total (as Cr)	semiannually		0.10	mg/L		
GSTR0002	7440-48-4	Cobalt, Total	semiannually			mg/L	Yes	
GSTR0002		Fluoride, Total (as F)	semiannually		4.0	mg/L		
GSTR0002		Groundwater Elevation	semiannually			feet above mean sea level based on a USGS datum		Yes
GSTR0002	7439-89-6	Iron, Total (as Fe)	semiannually			mg/L	Yes	
GSTR0002	7439-92-1	Lead, Total (as Pb)	semiannually		0.015	mg/L		
GSTR0002		Lithium, (Total) as Li	semiannually			mg/L	Yes	
GSTR0002	7439-97-6	Mercury, Total (as Hg)	semiannually		0.002	mg/L		
GSTR0002	7439-98-7	Molybdenum, Total (as Mo)	semiannually			mg/L	Yes	
GSTR0002		Radium 226 + Radium 228, Total	semiannually		5.0	pCi/L		
GSTR0002	7782-49-2	Selenium, Total (as Se)	semiannually		0.05	mg/L		
GSTR0002	7440-23-5	Sodium, Total (as Na)	semiannually			mg/L	Yes	
GSTR0002		Solids, Total Dissolved	semiannually			mg/L	Yes	
GSTR0002		Specific Conductance	semiannually			umhos/cm	Yes	
GSTR0002	14808-79-8	Sulfate	semiannually			mg/L	Yes	
GSTR0002		Temperature, Water Deg. Fahrenheit	semiannually			degrees Fahrenheit		Yes
GSTR0002	7440-28-0	Thallium, Total	semiannually		0.002	mg/L		
GSTR0002		pH	semiannually			S.U.	Yes	

Big Rivers
ELECTRIC CORPORATION

D.B. Wilson Station
5663 State Route 85 West
Centertown, KY 42328
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August 4, 2021

Mr. Danny Anderson, Manager
Division of Waste Management
Solid Waste Branch, Second Floor
300 Sower Blvd.
Frankfort, KY 40601

RE: Big Rivers Electric Corporation, D.B. Wilson Station Landfill
Response to Comments
Technical Notice of Deficiency (NOD) No. 3
Closure Plan Modification, Post Closure Plan Modification,
and Additional Information
Agency Interest 3319
Application I.D. No. APE20200002
Solid Waste Permit # SW09200004

Dear Mr. Anderson:

Big Rivers Electric Corporation (BREC) maintains and operates a special waste landfill in Ohio County, Kentucky. The special waste landfill is permitted under 401 KAR 45 for disposal of special waste (utility waste such as fly ash, bottom ash, and scrubber sludge per KRS 224.50-760). These wastes are generated by the 440-megawatt D.B. Wilson Power Plant. The landfill exists in two phases, Phase I and Phase II. Attached is the DEP Form 7017 Application for a Minor Modification to a Formal Solid Waste Permit. This permit modification application is being submitted for the Phase I Landfill closure and post-closure plan under the technical requirements of 401 KAR Chapter 45 and the transition of the Phase II Landfill to the applicable requirements of 401 KAR Chapter 46. Big Rivers originally submitted this permit modification application on March 26, 2020. On behalf of BREC, AECOM Technical Services, Inc. (AECOM) prepared the following responses to comments provided by the Kentucky Department for Environmental Protection (KDEP), Division of Waste Management, Solid Waste Branch (KDWM) in their July 2, 2021 Technical Notice of Deficiency No. 3 (TNOD #3) regarding the Closure Plan Modification, Post-Closure Plan Modification, and Additional Information. As previously requested KDWM, the response to the TNOD shall be a new submittal. The information attached to this cover letter can be found in the following order:

Table of Contents

Minor Permit Modification Completed Form

Attachment 1 – Revised Closure Plan

Attachment 2 – Revised Post-Closure Plan

Attachment 3 – Transition Information

Attachment 4 – Updated Closure and Post-Closure Cost Estimates

If you have any questions or require further information, please contact Diana Merritt at (270) 844-5008.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations."

Tracy Cole
Plant Manager, D.B. Wilson Station

AECOM
500 West Jefferson Street, Suite 1600
Louisville, KY 40202, USA
www.aecom.com

August 4, 2021

Tracy Cole,
Plant Manager Big Rivers Electric Corporation
5663 KY 85 W
Centertown, Kentucky 42328

Sent Via E-mail Only

Subject: Response to Comments
Technical Notice of Deficiency #3 (NOD 3)
Closure Plan Modification, Post-Closure Plan Modification,
and Additional Information Big Rivers Electric Corp. – Wilson Station
Agency Interest No. 3319
Application I.D. No. APE20200002 Ohio County

Dear Mr. Cole,

On behalf of Big Rivers Electric Corporation (BREC) D.B. Wilson Station, AECOM Technical Services, Inc. (AECOM) prepared the following responses to comments provided by the Kentucky Department for Environmental Protection (KDEP), Division of Waste Management, Solid Waste Branch (KDWM) regarding their review of the above-referenced applications dated April 22, 2021. For ease of review, KDEP's Technical Notice of Deficiency #3 (NOD 3) comments are reprinted below in blue bold-italicized text followed by BREC's response in plain black text.

For ease and consistency of review, the response to this NOD 3 shall be a new submittal replacing the former package with following general updates:

- Attachment 1 Revised Closure Plan; Attachment E1; Updated Site Maps

1. ***Response to Tech NOD 2, Comment 2: The veneer seismic stability analysis uses a seismic coefficient (ks) equal to one-half of the crest Peak Ground Acceleration ostensibly based on recommendations provided in Seismic Design Guidance for Municipal Solid Waste Landfill Facilities (EPA/600/R-95/05). However, Section 6 of the report indicates that ks= 0.5 amax/g generally applies to embankments and slopes. Alternatively Section 4 of the report states, "The peak acceleration at the top of the landfill estimated in Step 3 may be used in seismic performance analyses of the landfill cover and surface water drainage systems and in evaluation of other facilities constructed on top of the landfill (e.g., flare station or storage tanks)." Consequently, it appears that the peak acceleration at the crest of the landfill is more appropriate for use in a veneer stability analysis unless adequate justification can be provided for retaining the current seismic coefficient value, pursuant to 401 KAR 45:110 Section 5(2)(e).***

In general, (a) the crest PGA happens at a single instant in time and (b) the ground is not rigid, therefore

motion within the ground varies spatially with peaks happening at different points in time and potentially moving in different directions [Geotechnical Earthquake Engineering (Kramer 1996)].

Specifically, (a) the veneer stability analysis considered a slope configuration typical of the proposed final cover (i.e. 3H:1V slope), (b) along the center profile of the landfill, the crest/top (which is flat) width comprises only about 1/5th of the slope areas, (c) a slope section (3H:1V) is more representative of site conditions, and (d) a flat configuration is less conservative compared to the more representative 3H:1V slope. Therefore, the recommendation in Section 6 of EPA/600/R-95/05 is more appropriate for the calculation of the seismic coefficient as indicated in the current veneer stability analysis.

Following receipt of NOD 3 and subsequent discussions with members of the Kentucky Division of Waste Management, AECOM conducted additional analysis in support of the previously submitted veneer stability analysis. Landfill peak crest acceleration and laboratory interface direct shear testing results were used to evaluate performance of the final cover system.

Interface direct shear testing was performed on representative samples of existing landfill cover soils and proposed Super Gripnet geomembrane as noted in the attached laboratory report provided to Big Rivers by WatershedGeo in a letter report dated January 26, 2021. The site-specific cover materials used in the test were nominally tamped to represent the graded, but relatively uncompacted condition of the cover materials anticipated after preparation of the final grade.

Using the full peak crest acceleration of 0.27g and assuming adhesion is zero (0), the required interface friction angle, between the ClosureTurf Super Gripnet and loose cover soils, was calculated as 33.1 degrees at a factor of safety of 1.0.

Using the laboratory test results, the peak interface friction angle and the adhesion were calculated as 33.6 degrees and 4 psf, respectively. These values were applied to the veneer stability formulations to determine the resulting factors of safety. The results are summarized below.

Table 1. Final Cover Factors of Safety Using Peak Laboratory Results

CONDITION	TARGET FACTOR OF SAFETY	RESULTS
Static (Gravitational Forces Only)	**1.50**	**5.19**
Static (Additional Seepage Forces)	**1.10**	**2.00**
Static (Equipment Loads)	**1.25**	**1.99**
Seismic (Using ½ of Crest PGA =0.135g)	**1.00**	**3.52**
Seismic (Using Full Crest PGA =0.27g)	**1.00**	**2.66**

Laboratory test results also indicated a residual interface friction angle of 31.3 degrees. Results of the residual strength are summarized below.

Table 2. Final Cover Factor of Safety Using Residual Laboratory Results

CONDITION	TARGET FACTOR OF SAFETY	RESULTS
Final Cover - Static	1.10	1.83

In addition, a deformation analysis utilizing the full crest acceleration (0.27 g) and Simplified Seismic Slope Displacement Procedures (Bray, 2007) was performed to evaluate the performance of the ClosureTurf final cover under shallow sliding conditions. Based on the analysis, the estimated displacement of the final cover system under a spectral acceleration of 0.27 g (design earthquake) is on the order of 0.3 cm or 0.12 in. This value is regarded as minimal anticipated displacement. A summary of the calculation is presented as attachment to this response.

Conclusions

The results of the preconstruction interface testing indicate that, even in a loosely compacted condition, the interface strength of the proposed Super Gripnet over the existing cover materials is adequate for long-term stability of the cover system. In addition, minimal seismic induced displacement of the cover system is anticipated at full crest acceleration, indicating that the cover system will not be affected by the maximum calculated seismic effect.

2. ***Response to Tech NOD 2, Comment 17: The Construction Quality Control Plan specifies the cap subbase/subgrade conformance testing measures in Table 3. Table 3 specifies a 6 – 8 inch compacted lift and compaction equipment to be dozer tracks, sheep foot, OR a smooth drum roller. The Veneer Stability Analysis in Attachment G was performed based on Table 1 and Table 2 parameters within the Veneer Stability Analysis report. These parameters are given as 19.2 inch soil layer, assumed 95% compaction MDD, 13.6% moisture content, and 2.7 specific gravity. The Construction Quality Control Plan (CQCP) must be consistent with the Veneer Stability Analysis. Please revise the CQCP accordingly.***

The physical properties of the cover soil (dry density, moisture content, specific gravity, etc.) given in Table 2 were provided as placeholders and in support of Figure 1 and Table 1, but do not enter directly into the stability calculations for the veneer, and are therefore not criteria for the actual installation of the Super Gripnet/liner system. The driving load for veneer stability consists only of the ClosureTurf and sand infill layer. Arbitrary reference to compaction parameters not applicable to the veneer stability analysis have been removed from the calculation package.

The purpose of the veneer stability analysis is to calculate the minimum interface strength properties between the Super Gripnet membrane layer and the underlying cover soil. Results of the analysis indicated a required minimum peak interface friction angle, between Super Gripnet and existing cover soil, of 26.5 degrees and 0 psf adhesion under gravitational forces, representing a factor of safety of 1.50.

Laboratory interface direct shear testing was performed on representative samples of the existing landfill cover soils and the proposed Super Gripnet geomembrane. The cover soil material was nominally tamped in place (to conservatively represent the material to be in a loose condition in the field) for the tests. The

lab testing resulted in a peak friction angle of 33.6 degrees and adhesion of 4 psf. Plugging the laboratory friction angle and adhesion values into the veneer stability formulas for gravitational forces results in a factor of safety of 5.19, greatly exceeding the target of 1.50.

For the vast majority of the site, topsoil will be stripped and the membrane will be placed directly on the remaining, in-place protective cover soil, which averages 19.2 inches in thickness. If, and where necessary to further prepare the subgrade surface, protective cover soil will be placed in a 6 to 8 inch loose lift and compacted by dozer tracks, sheepsfoot or smooth drum roller. Based on the laboratory interface direct shear test results, it was concluded that even in a loose condition, the existing cover soils and any cover soil placed to create the subgrade surface will provide adequate interface strength in conjunction with the proposed Super Gripnet product.

3. ***Response to Tech NOD 2, Comment 20, Attachment E2 (Site Maps 1 and 1A): Submit a legible site map that exactly matches the EPA SWMM 5.1 data entries. The applicant uses an 8.5" x 11" base image for a watershed map that has forty-six (46) subwatersheds, resulting in poor legibility of the information contained within.***

The figures have been revised. The visual quality of the figure is limited by the abilities of the software.

For completeness, the responses to the initial NOD are also included in this re-submittal package. If you have any questions or comments regarding this matter, please do not hesitate to contact us.

Yours sincerely,

AECOM Technical Services, Inc.

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June 1, 2021

Mr. Nathan Berry,
Plant Manager Big Rivers Electric Corporation
5663 KY 85 W
Centertown, Kentucky 42328

Sent Via E-mail Only

Subject: Response to Comments
Technical Notice of Deficiency #2 (NOD 2)
Closure Plan Modification, Post-Closure Plan Modification,
and Additional Information Agency Interest No. 3319
Application I.D. No. APE20200002 Ohio County

Dear Mr. Berry,

On behalf of Big Rivers Electric Corporation (BREC) D.B. Wilson Station, AECOM Technical Services, Inc. (AECOM) prepared the following responses to comments provided by the Kentucky Department for Environmental Protection (KDEP), Division of Waste Management, Solid Waste Branch (KDWM) regarding their review of the above-referenced applications dated April 22, 2021. For ease of review, KDEP's Technical Notice of Deficiency #2 (NOD 2) comments are reprinted below in blue bold-italicized text followed by BREC's response in plain black text.

For ease and consistency of review, the response to this NOD 2 shall be a new submittal replacing the former package with following general updates:

- Attachment 1 Revised Closure Plan; Attachment D Revised CQA Plan
- Attachment 1 Revised Closure Plan; Attachment E1; Updated Site Maps
- Attachment 1 Revised Closure Plan; Attachment G Revised Veneer Stability Analysis.
- Attachment 1 Revised Closure Plan; Attachment G1 Revised DSHA
  - Added Sample DEEPSOIL Output file.
- Attachment 1 Revised Closure Plan; Attachment G2; Added Abrahamson, N., Addo, K., and Silva, W., 2020, Hard-rock to soft-rock site factors for NGA-East
- Attachment 1 Revised Closure Plan; Attachment H; Updated Drawings 103, 104, 105, 106, 107, 112.

1. ***Response to Technical NOD, Comment 6: The veneer stability analysis with pore pressure contained in Attachment A, Detailed Calculations, assumes a water depth equal to 1/3 of the thickness of the Hydroturf. Show that all components of the surface drainage system, including the Hydroturf with sand infill, have sufficient capacity to maintain this depth for the design storm maximum precipitation intensity pursuant to 401 KAR 45:110 Section 5(2)(e).***

The water depth equal to 1/3 of the thickness of the sand infill was selected as a conservative representation, however the Sand Infill Hydraulics Calculations of Scenario 2, where a similar side slope configuration was considered, concluded that the drainage capacity of the underlying Super Gripnet was greater than the calculated flow rate from the design maximum storm water event. Hence, the sand infill layer is not expected to be saturated with free water or generate a hydraulic load during a storm water event, as such a more representative water depth would be zero. The veneer stability analysis (60631499_D.B. Wilson Phase I_Veneer Stability Analysis_Revised_05.26.21.pdf) has been updated to reflect zero (0) hydraulic head in the sand infill, and the revised sand infill hydraulics calculations are provided as an attachment to the Veneer Stability Analysis.

2. ***Response to Technical NOD, Comment 6: The veneer stability analysis spreadsheet contained in Attachment A, Detailed Calculations, uses a seismic coefficient of 0.201 defined as the MCE with 2% exceedance in 50 years. However, Attachment C calculates a seismic coefficient of 0.201 based on relationships contained in Figures 1 and 2. Provide additional explanation on the procedure used to calculate the seismic coefficient for the veneer stability analysis pursuant to 401 KAR 45:110 Section 5(2)(e).***

A semi-empirical procedure was used for determining the coefficient of 0.201g. Details and explanation of the procedure used for determining were included as an Attachment C to the Veneer Stability Analysis. In response to this comment, AECOM has re-evaluated the veneer stability analysis for the site-specific hazard analysis and using the EPA guidance presented in Publication EPA/600/R-95/05 (Richardson, et al., 1995) titled "RCRA Subtitle D (258) Seismic Design Guidance for Municipal Solid Waste Landfill Facilities" to limit permanent seismic deformations to less than 1-foot. Per this guidance, a seismic coefficient of ½ the crest PGA from SHA can be used. As such, the re-evaluation has resulted in a seismic coefficient of 0.135g (i.e., landfill crest PGA from SHA divided by 2 – 0.27g/2) which is less than the conservative 0.201g obtained from the semi-empirical approach. Though the coefficient using the EPA approach is lower, it is considered more representative, and the veneer stability analysis has been updated using a seismic coefficient of 0.135g.

3. ***Response to Technical NOD, Comment 6: Attachment C apparently calculates a seismic coefficient for a sliding mass depth equal to the height of the structure. Provide justification for applying this seismic coefficient to a veneer stability analysis or provide a revised stability analysis pursuant to 401 KAR 45:110 Section 5(2)(e).***

Per the semi-empirical approach, the analysis was conducted on a typical slope geometry of 3H:1V slope and height of 30 feet and assumed failure of that slope configuration in a design seismic event. As explained above in point 2, this approach yielded a more conservative seismic coefficient compared to the EPA Publication EPA/600/R-95/05 approach. Though the coefficient using the EPA approach is lower, it is considered more representative, and the veneer stability analysis has been updated using a seismic

coefficient of 0.135g.

4. ***Response to Technical NOD, Comment 7: The site-specific seismic hazard analysis (6.3 Analysis Results) generated peak ground acceleration (PGA) values of 0.27g at the crest, 0.31g at the base of the crest, and 0.34g at the toe of the fill. Attachment C (Seismic Coefficient) determined a PGA at the crest of approximately 0.59g. Provide additional explanation for the different PGA values for the crest determined in the seismic analysis and Attachment C pursuant to 401 KAR 45:110 Section 5(2)(e).***

The veneer stability analysis has been revised with the updated seismic coefficient. The selected seismic coefficient was based on one half of the crest PGA, as determined from the site hazard analysis, in accordance with the guidance presented in the EPA Publication EPA/600/R-95/05 (Richardson, et al., 1995) titled "RCRA Subtitle D (258) Seismic Design Guidance for Municipal Solid Waste Landfill Facilities" to limit permanent seismic deformations to less than 1-foot. The revised veneer stability analysis is attached.

5. ***Response to Technical NOD, Comment 7: Section 3.2 of the site-specific seismic hazard analysis (Ground Motion Prediction Models) does not provide sufficient information on implementing the ground motion models. Provide additional explanation on implementation of the NGA-East ground motion models, including any databases or software used pursuant to 401 KAR 45:110 Section 5(2)(e).***

As presented in Section 4 of the revised Site-Specific Seismic Hazard Analysis Report, calculations were made using the NGA-East ground-motion characterization tool developed by The B. John Garrick Institute for the Risk Sciences, UCLA Engineering, Natural Hazards Risk and Resiliency Research Center, a link to the tool is provided: https://www.risksciences.ucla.edu/nhr3/gmtools. The weighted average ergodic sigma model was used in calculating the 84th percentile (median plus one sigma).

6. ***Response to Technical NOD, Comment 7: In Attachment G1 (4.0 DSHA Results) include PGA values in Table 2 (5%-Damped Horizontal Spectra). Add a footnote or other appropriate designation indicating the spectral accelerations are for a site shear wave velocity, Vs30 = 855 m/s, pursuant to 401 KAR 45:110 Section 5(2)(e).***

The title of Table 3 in the revised Site-Specific Seismic Hazard Analysis Report (DBWilson_SHA-05112021.pdf) indicates the spectral accelerations are for a Vs30 = 855 m/s.

7. ***Response to Technical NOD, Comment 7: In Attachment G1 (4.0 DSHA Results) add a table to the seismic analysis giving the 5%-damped horizontal spectra and PGA at the NGA-East base shear wave velocity Vs30 = 3000 m/s for the median, minus one standard deviation, and plus one standard deviation, pursuant to 401 KAR 45:110 Section 5(2)(e).***

Table 2 was added to Section 4 in the revised Site-Specific Seismic Hazard Analysis Report providing the 5%-damped horizontal spectra for a Vs30 = 3000 m/s for the median, minus one standard deviation, and plus one standard deviation for the three sources considered.

8. ***Response to Technical NOD, Comment 7: In Attachment G1 (6.2 Dynamic Material Properties), references for G/Gmax and damping were given, but the values were not included. Include G/Gmax and damping values in the application either in tabular or graphical format pursuant to 401 KAR 45:110 Section 5(2)(e).***

The Modulus Reduction and Damping curves used were added as Figure 22 and referenced in Section 6.2 in the revised Site-Specific Seismic Hazard Analysis Report

9. ***Response to Technical NOD, Comment 7: In Attachment G1 (6.3 Analysis Results) a printout for the program DEEPSOIL was not found. Provide a representative printout for the dynamic site response analysis program DEEPSOIL pursuant to 401 KAR 45:110 Section 5(2)(e).***

Appendix A has been added to the revised Site-Specific Seismic Hazard Analysis Report to add the input files which are referenced in Section 6.3. Additionally, a sample of the output for one representative case and motion was added to the DSHA (Sample DEEPSOIL Output.pdf) for reference.

10. ***Response to Technical NOD, Comment 7: Under Attachment G1 (8.0 References) provide a copy of the paper: Abrahamson, N., Addo, K., and Silva, W., 2020, Hard-rock to soft-rock site factors for NGA-East: in preparation, pursuant to 401 KAR 45:110 Section 5(2)(e).***

A pre-print copy of the paper: Abrahamson, N., Addo, K., and Silva, W., 2020, Hard-rock to soft rock site factors for NGA-East is provided (Abrahamson 2020.pdf). (Note: It is AECOM's understanding the paper is currently in review to be published in Seismological Research Letters).

11. ***Response to Technical NOD, Comment 16: In the CQA Plan, 8.1.2 References, the title for GRI-GM17 does not agree with the listed Geosynthetic Research Institute title. Please correct the title.***

The title has been corrected in the revised CQA Plan to match the GRI title.

12. ***Response to Technical NOD, Comment 16: Table 4 in the CQA Plan specifies 60 mil LLDPE, and Table 5 lists 50 mil textured LLDPE. Drawing detail 2/300 on Drawing Sheet BGR-WCP-300 shows 50 mil HDPE or LLDPE. The veneer stability analysis, Sheet 2 of 12 Figure 1 shows 50 mil HDPE. Please provide consistency in the FML specifications.***

The title of Table 4 has been corrected to 50-mil, labels and call outs have been corrected and made consistent. Detail 2/300 on Drawing Sheet BGR-WCP-300 is correct. AGRU 50-mil LLDPE has been submitted for and approved for the Closure Turf geomembrane component.

13. ***Response to Technical NOD, Comment No. 16: In the Construction Quality Control Plan, please state that field deviations or alterations have been approved. DWM approval must be sought and obtained prior to commencing of the deviation or alteration work per 401 KAR 45:110 Sections 2 and 5. The Construction Progress Report may not be found acceptable if this action is not completed. Please make note field deviations shall be specified in the Construction Progress Report.***

The statement has been added in the revised CQA Plan, see section 3.5.2.1.

14. ***Response to Technical NOD, Comment No. 16: In the Construction Quality Control Plan, please state the Construction Progress Report will contain all necessary conformance testing for each type of synthetic utilized per 401 KAR 45:110 Sections 2 and 5. This is to ensure the synthetic material used met project specifications.***

The statement has been added in the revised CQA Plan, see section 3.5.1.

15. ***Response to Technical NOD, Comment No. 16: In the Construction Quality Control Plan, please state that any failed area, where test results demonstrate that the area does not meet project specifications or regulatory requirements, must be reworked or repaired until the area passes per 401 KAR 45:110 Sections 2 and 5.***

The statement has been added in the revised CQA Plan see section 3.6.

16. ***Response to Technical NOD, Comment No. 16: In the Construction Quality Control Plan, please remove the Submittals (3.9, 3.9.1, and 3.9.2) and Request for Information (3.10) sections as these sections do not involve DWM and should not be included in the permit application.***

The noted items have been removed in the revised CQA Plan.

17. ***Response to Technical NOD, Comment No. 16: In the Construction Quality Control Plan, please provide a conformance testing measure for the cap subbase per 401 KAR 45:110 Section 1(10).***

Conformance testing for the sand and subbase have been added, see Table 3 in the CQA Plan. Also, subgrade preparation requirements have been added to Table 3.

18. ***Response to Technical NOD, Comment No. 16: In the Construction Quality Control Plan, please state DWM will be contacted when each cap component is completed so that a DWM representative may inspect the cap component prior to the next component being installed per 401 KAR 45:110 Section 5. Please provide DWM a minimum of a two (2) working day notice for the inspection to be scheduled.***

The statement has been added in the revised CQA Plan, see section 3.5.

19. ***Response to Technical NOD, Comment No. 20: The Closure Cost Estimate for Phase 1 was submitted, however the Closure Cost Estimate for Phase II was not found. Please submit an itemized Closure Cost Estimate for Phase II as required by 401 KAR 46:110 Section 9.***

The Phase II cost estimate was included in the previous NOD (Jan. 2020) submittal (pg. 804 of the PDF), attached again here for reference. Bookmarks have been added for easier searching.

20. ***Attachment E2: Submit a legible site map that exactly matches the EPA SWMM 5.1 data entries.***

The site map has been updated to more clearly match the data entries.

21. Attachment H (Wilson Phase I Landfill Closure Plan): The axis labels on fill cross sections are largely illegible due to overlapping lettering. Please adjust the font and or graph size to make the axis labels legible.

The Attachment H drawings have been updated to improve legibility.

For completeness, the responses to the initial NOD are also included in this re-submittal package.

If you have any questions or comments regarding this matter, please do not hesitate to contact us.

Yours sincerely,

AECOM Technical Services, Inc.

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AECOM
500 West Jefferson Street, Suite 1600
Louisville, KY 40202, USA
www.aecom.com
502.569.2301 te

January 28, 2021

Mr. Nathan Berry,
Plant Manager Big Rivers Electric Corporation
5663 KY 85 W
Centertown, Kentucky 42328

Sent Via E-mail Only

Subject: Response to Comments
Technical Notice of Deficiency (NOD)
Closure Plan Modification, Post-Closure Plan Modification,
and Additional Information Agency Interest No. 3319
Application I.D. No. APE20200002 Ohio County

Dear Mr. Berry,

On behalf of Big Rivers Electric Corporation (BREC) D.B. Wilson Station, AECOM Technical Services, Inc. (AECOM) prepared the following responses to comments provided by the Kentucky Department for Environmental Protection, Division of Waste Management, Solid Waste Branch (KDWM) regarding their review of the above-referenced applications dated August 31, 2020. For ease of review, KDEP's Technical Notice of Deficiency (NOD) comments are reprinted below in bold-italicized text followed by BREC's response in plain text:

1. General Comment: For ease and consistency of review, the response to this NOD shall be a new submittal replacing the previous information in its entirety and be in the following order:

- ***a) Cover letter;***
- ***b) Table of contents;***
- ***c) Completed form;***
- ***d) Attachment 1 – the revised closure plan, with sub-attachments, appendixes, sections, etc. as needed;***
- ***e) Attachment 2 – the revised post-closure plan, with sub-attachments, etc. as needed;***
- ***f) Attachment 3 – transition information in accordance with 401 KAR Chapter 46 technical requirements; and***
- ***g) Attachment 4 – Updated Closure and Post-Closure Cost Estimates, incorporating new Chapter 46 provisions.***

1. As requested, the response to this NOD is in the form of a new submittal replacing the previous information in its entirety using the prescribed order. BREC anticipates that the listed closure and post closure plan items pertain specifically to Phase I of the landfill and not to Phase II, with the exception of the cost estimates being provided for the purpose of financial assurance.

DWM has the following comments, grouped in the 3 submitted parts: Closure Plan Modification; received on February 28, 2020

2) ***General Comment: A closure plan modification application is a separate permitting action from actions specific to groundwater monitoring, groundwater assessment, and groundwater remedial measures. This action should not include any groundwater remedial actions or be combined with a groundwater remedial action plan; please submit any groundwater monitoring, assessment, and remedial measures actions separately.***

2) BREC understood from our November 8, 2019 meeting in Frankfort that it was KDWM's strong recommendation that the efforts should be combined. BREC will separate groundwater issues from the Closure Plan modification.

3) ***General Comment: All drawings and maps must be sealed, signed, and dated by a licensed Professional Engineer in the Commonwealth of Kentucky pursuant to KRS Chapter 322.***

3) Any drawings and maps that were not sealed, signed, and dated by a licensed Professional Engineer in the Commonwealth of Kentucky is rectified in this re-submittal.

4) General Comment: The section entitled "Statement of Qualification and Limitations" is an agreement between the consultant and permittee for the work performed and is therefore superfluous and should not be included in the application. Please do not include this section.

4) "Statement of Qualification and Limitations" has been removed from the revised closure plan.

5) Section 2.3, Waste Estimates Amount: Please add a footnote to clarify the reason for not including 2011-2019 data in Table 1.

5) Wilson Phase I Landfill stopped receiving waste in 2010. A footnote to that effect has been added below Table 1.

6) Section 5.3, Veneer Stability Analysis: The narrative states, "prior to installation of the cap, direct shear testing will be conducted to confirm the factor of safety against sliding" for critical interfaces. Although providing confirmation testing prior to installation is acceptable, the application does not contain an interface stability analysis that can be used for determining if interface friction angles are adequate. In a separate sub-attachment within the closure plan, provide a cap membrane static and seismic stability analysis including a static analysis incorporating the additional load generated by the design 25- year, 24-hour storm event. Specifications for submitting the cap interface confirmation testing should be included in the construction quality control plan, further discussed in Comment 16, pursuant to 401 KAR 45:110 Section 5(2)(e).

6) For a final closure cap (including ClosureTurf), veneer stability analysis has been conducted for both static (including considering additional load generated by the design 25-year 24-hour storm event) and seismic conditions. Static and seismic stability conditions were analyzed for the two critical interfaces consisting of woven geotextile over geomembrane and geomembrane over existing cover soil.

Based on the veneer stability analysis results on the proposed final cover system, the factor of safety for the seismic loading condition controls the interface friction between the geomembrane and existing cover soil utilizing peak strengths. Results of the stability analysis are included in Attachment G. This factor of safety will be confirmed by conducting interface direct shear testing per ASTM D5321 prior to commencing cap construction.

7) ***<u>Section 5.3, Veneer Stability Analysis</u>: Acceleration for the seismic stability analysis should be developed using a site-specific, scenario-based deterministic seismic hazard analysis pursuant to 401 KAR 45:110 Section 5(2)(e).***

7) Borings were completed at the toe and crest of landfill to investigate subsurface materials including landfill CCR, mine spoil, and top of bedrock. Bedrock was encountered within the toe boring at approximate depth of 38.5 feet below existing grade. Bedrock consisted of shale, partly interbedded with limestone.

Multichannel analysis of surface waves (MASW) investigation was performed at the DB Wilson Phase I site to determine shear wave velocities (Vs) of onsite bedrock. MASW data were collected at the toe and crest of the landfill and centered on the previously completed test borings. Results of the MASW was used to determine the Vs of the upper 100 feet at the toe and crest of the landfill.

Deterministic seismic hazard analysis (DSHA) was performed for the bedrock underlying the DB Wilson Phase I landfill site. Three earthquake sources were considered in the DSHA, namely the Wabash Valley Seismic Zone; the New Madrid Seismic Zone; and a background(random) earthquake, for determination of time histories (84th percentile 5%-damped acceleration response spectra).

Results indicate the Wabash Valley seismic zone gives the highest spectral accelerations for periods less than 0.1 sec, while the New Madrid seismic zone gives highest spectral acceleration for periods greater than 0.1 sec. Subsequently, a site response analysis was completed to develop ground surface response for both landfill base and crest. Information utilized for the development of site-specific response spectra included time histories, borings, laboratory testing data, bedrock Vs data from MASW, dynamic material properties, and published data.

The peak ground acceleration at the base of the landfill was utilized for the determination of the pseudo-static coefficient, which is used in the seismic condition of the veneer stability analysis.

Results of the stability analysis are included as Attachment G to the revised closure plan. The DSHA is included as Attachment G1.

8) ***<u>Attachment B, Laboratory Testing (Appendix A)</u>: Table 1 only contains half of the Description column. If applicable to the response, please correct this issue.***

8) Unfortunately, this truncation of the table dates back to a copy made from a fax from a previous consulting firm sent in 1993, and the original table is not available in BREC records. However, based on the partial content and the expected terms, AECOM offers that the Description column should read:

- Filter cake batch number
- Composition (FA/FC)
- Lime added (bag)
- Free lime (fly ash)
- Total lime
- Sample age
- % Solids (molding)
- % moisture content % at molding
- Liner testing
- Density (wet)
- Density (dry)
- Unconfined strength (psi)
- Permeability (cm/sec x $10^{-5)}$
- Leak test
- Consolidation

- Triaxial shear

A newly constructed page with this information is included in Attachment B.

9) Attachment E, Hydrology Evaluation: Please enclose the EPA-SWMM input/output data files, in a table format if available. Please ensure that the modeling characteristics/properties matches the ClosureTurf's. The modeling must match the sub- catchment map's flow paths.

9) The EPA-SWWM input/output data can be found in Attachment E2.

10) Attachment E, Hydrology Evaluation: Provide a detailed printout for the EPA-SWMM analysis including drainage area, method and parameters for determining rainfall excess, method and parameters for overland flow routing, method and parameters for channel routing, and a watershed and channel connectivity map. The analysis should also include reservoir routings for the two detention ponds used in the design per 401 KAR 45:110 Section 5(2)(e).

10) The detailed printout of the EPA-SWMM analysis can be found in Attachment E2. The following is a list of key notes and assumptions made in completing the H&H analysis:

- The rainfall depths for Island, Kentucky of 5.90 inches for the 24-hour, 25-year storm was obtained from NOAA Atlas 14 and can be found in Attachment E1.
- Swales along the benches were designed based on the worst-case velocity and depth among the selected candidates in order to be conservative.
- The complete hydrology and hydraulics evaluation can be found in Attachment E: H&H Design.

11) Attachment E, Hydrology Evaluation: Provide drawings for the detention ponds used in the design per 401 KAR 45:110 Section 5(2)(e).

11) Detention Pond drawings can be found in Attachment E3.

12) Attachment E, Hydrology Evaluation: Provide a design for the benches/benches demonstrating adequate capacity to convey flow to the flumes that carry stormwater off the landfill per 401 KAR 45:110 Section 5(2)(e).

12) The benches properly control and convey the water volume generated by the 24-hour, 25-year storm such that the average flow depth stays safely below the impounding side slopes. Design values for each hydraulic conveyance feature are summarized in Attachment E Tables 1-5. A channel lining of KYTC No. 57 was chosen for all benches. Design values for each hydraulic conveyance feature are provided in Attachment E2, in the section labeled *Erosion Check*.

13) Attachment E, Hydrology Evaluation: Provide a design for the stormwater flumes at bench crossings including hydraulics and a drawing detail with profile pursuant to 401 KAR 45:110 Section 5(2)(e).

The flumes properly control and convey the water volume generated by the 24-hour, 25-year storm such that the average flow depth stays safely below the impounding side. A channel lining of ClosureTurf (HydroBinder) is proposed for all stormwater flumes. ClosureTurf with HydroBinder has a maximum design flow velocity of 29 ft/sec and maximum design shear stress of 8.8 psf as stated on the manufacturer's product data sheet (see Table 4 in Attachment D). Rock check dams will be installed across the flume at each bench landing to minimize hydraulic jump issues during

high flow rain events. A profile and section of the landings where the flumes intersect the benches (Sections A-A and B-B on Sheet 303. Design values for each hydraulic conveyance feature are summarized in Attachment E Tables 1-5. Design values for each hydraulic conveyance feature are provided in Attachment E2, in the section labeled *Erosion Check*.

14) Attachment E, Hydrology Evaluation: Provide a channel lining erosion design for the stormwater flumes and perimeter ditches per 401 KAR 45:110 Section 5(2)(e).

14) The perimeter ditches will collect landfill run-off which is conveyed to the sediment basins. A channel lining of ClosureTurf (HydroBinder) is proposed for all stormwater flumes and perimeter ditches as the peak velocity and the actual shear are less than the performance limits of ClosureTurf with HydroBinder, as stated in the manufacturer's product data sheet found in Attachment D. The results of the channel lining erosion design can be found in Attachment E, Tables 1-5.

15) Attachment E, Hydrology Evaluation: Provide an erosion analysis for the ClosureTurf sand infill for site conditions at the design 25-year, 24-hour storm event per 401 KAR 45:110 Section 5(2)(e).

15) Calculations utilizing site specific parameters to estimate hydraulic shear from rainfall runoff and its impact on hydraulic stability of the sand infill are provided in Attachment E4. The purpose of the calculations is to evaluate whether the calculated maximum hydraulic shear stress in the sand infill of ClosureTurf exceeds the critical hydraulic shear stress. Three drainage scenarios are evaluated in the following calculations. The calculation results are summarized in Table 1 below. The calculated maximum hydraulic shear stress in the sand infill is less than the critical hydraulic shear stress, indicating minimal sand infill mobilization is expected to occur.

Table 1. Summary of Hydraulic Calculation Results

Analysis Scenario	Calculated Max. Hydraulic Shear Stress using Super Gripnet® on Top Deck (psf)	Calculated Max. Hydraulic Shear Stress using Super Gripnet® on Side Slope (psf)	Suggested Critical Hydraulic Shear Stress (psf)	Hydraulic Shear Stress (Pass or Fail)
Scenario 1: 55 ft of top deck at 5% slope and 68 ft of side slope at 3.25H:1V	0.0 (Total flow on the top deck is less than the internal drainage capacity of Super Gripnet)	0.0 (Total flow on the slope is less than the internal drainage capacity of Super Gripnet)	0.8	Pass
Scenario 2: 156 ft of side slope at 3.4H:1V	-	0.0 (Total flow on the slope is less than the internal drainage capacity of Super Gripnet)		Pass

Scenario 3: 365 ft of side slope at 6H:1V	-	0.26		Pass

16) ***<u>General Comment</u>: Provide a complete construction quality control plan including, but not limited to, specifications for the geosynthetics soil base placement, material properties and installation for all geosynthetics, material properties and installation for all other construction elements such as channel linings, a preconstruction meeting, and preparation of a final construction progress report per 401 KAR 45:110 Section 2. The construction quality control plan should also provide two (2) day notice to DWM for conducting inspections at critical phases of construction including, but not limited to, the geosynthetics soil base placement, geomembrane installation, ClosureTurf installation, and final inspection.***

16) The Construction Quality Assurance (CQA) plan is included as Attachment D, and incorporates the notice to KDWM for inspections at all critical phases.

17) ***<u>Closure Plan Narrative</u>: For leachate, mill spray, and sediment from ponds and ditches; the quantities are not listed, nor are the characteristics clear.***

17) Sections 3.1 and 3.2 of the Closure Plan are updated to include the best available understanding of quantities and characteristics of listed materials. The available data do not suggest any particular area of Phase I as requiring focused attention or a different corrective action.

<u>Post-Closure Modification; received on February 28, 2020</u>

18) ***<u>General Comment:</u> The narrative states, "Under competition of the implementation of an approved closure plan…"; DWM believes this should be "completion".***

18) KDWM is correct. The typographical error has been corrected. The revised post closure plan for Phase I is included as Attachment 2.

<u>Additional Information; received March 27, 2020</u>

19) ***<u>General Comment</u>: In accordance with the new technical requirements of 401 KAR Chapter 46, it is appropriate to include professional certifications associated with the fugitive dust control plan; the run-on and run-off control system plan; and the groundwater monitoring system and statistical methods. Do not include any of the supporting documentation and/or demonstration documents in the submittal; only include the single or two (2) page professional certification(s).***

19) The various certifications required by Chapter 46 are included in Attachment 3.

20) ***<u>Closure and Post-Closure Cost Estimate – the following should be included in the Closure and Post-Closure Estimate submitted in the future Attachment 4</u>:***

- ***a) Please provide the site-wide closure amount for all activities;***
- ***b) Please provide the site-wide post-closure amount for all activities;***
- ***c) Estimates should be itemized and containing unit prices for each component of closure and post-closure;***

d) Estimates shall be sealed, signed, and dated by a licensed Professional Engineer in the Commonwealth of Kentucky pursuant to KRS Chapter 322;

e) The Phase I landfill in accordance with 401 KAR Chapter 45 technical requirements has a minimum five (5) year Post-Closure period, and the Phase II landfill in accordance with 401 KAR Chapter 46 technical requirements has a minimum thirty (30) year Post-Closure period.

20) Revised closure and post closure cost estimates for both phases of the landfill are included in Attachment 4.

If you have any questions or comments regarding this matter, please do not hesitate to contact me.

Yours sincerely,
AECOM Technical Services, Inc.

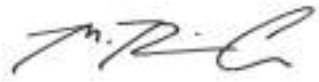

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Table of Contents

D.B. WILSON CLOSURE PLAN

MINOR PERMIT MODIFICATION COMPLETED FORM
ATTACHMENT 1 – REVISED CLOSURE PLAN
ATTACHMENT 2 – REVISED POST-CLOSURE PLAN
ATTACHMENT 3 – TRANSITION INFORMATION
ATTACHMENT 4 – UPDATED CLOSURE AND POST-CLOSURE COST ESTIMATES

ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
200 FAIR OAKS LANE, SECOND FLOOR
FRANKFORT, KY 40601
TELEPHONE NUMBER 502-564-6716

Application for a Minor Modification To a Formal Solid Waste Permit Form DEP 7017 (6/10)

Statutes and regulations may be viewed online at the following website address: http://www.lrc.ky.gov/search.htm

Solid waste application forms are available at the following website address: http://www.waste.ky.gov

DWM OFFICAL USE ONLY

AI#: _____ **Application #:** _____

GENERAL INSTRUCTIONS

1. **APPLICABILITY – This form must be completed and submitted to the Cabinet by persons who propose to apply for a minor modification of a formal permit.**

2. **ASSISTANCE – Questions regarding this form may be directed in writing to the Division of Waste Management (DWM), Solid Waste Branch at the address listed above, or by calling 502-564-6716.**

3. **SUBMISSION – Please type or print legibly in permanent ink. Submit the original and two (2) copies of the completed form to the DWM at the address listed above. If an item is not applicable, write "N/A" in the space provided.**

4. **FEES - Applicants must submit the appropriate filing fee at the time of application submittal in accordance with 401 KAR 47:090, Section 2.**

5. **LAWS AND REGULATIONS – Applicants are expected to understand and comply with all laws and regulations applicable to the facility.**

To assist you in the submittal of a complete and accurate application, the Division has identified the most common errors found during the review process. These errors are listed below for your convenience.

1. **Failure to provide the appropriate fee. See 401 KAR 47:090, Section 2. (6)(a).**

2. **Failure to complete the application.**

3. **Failure to comply with public notice requirements. See KRS 224.40-310 and 401 KAR 47:140, Section 7 for more information.**

4. **Failure to comply with Financial Assurance requirements. If the existing financial assurance is insufficient to fully cover current closure and post-closure costs, updates will be required.**

5. **Failure to properly sign and notarize the application. An individual with signature authority for the applicant as defined by KRS 224.01-010(44) and 401 KAR 47:160 must sign and notarize the appropriate signature sections of the application.**

6. **Failure to provide appropriate, fully completed attachments. Maps, drawings, narratives or any attachments that lack sufficient detail or drawings that are not signed, dated and sealed by a professional engineer or geologist may cause delays in the review and approval of the application.**

Warning! Due to the potential for identity theft, do not provide social security numbers to the DWM as part of this application. If this information is required during the normal course of review of the application, a cabinet representative will contact the appropriate individual to acquire this information in a secure format.

Application for a Minor Modification to a Formal Solid Waste Permit

General Information

1. Agency Interest #: 3319 **2.** Permit #: 092 - 00004

3. Fee submitted: **$** 500.00 **4.** Check or Money Order #:

5. Method of payment:
- ☒ Check
- ☐ Money Order
- ☐ Cash
- ☐ Exempt (Publicly Owned Facility)

Applicant Information

6. Permittee Name: Big Rivers Electric Corporation

(This refers to the corporation, LLC, business, person, government agency, etc., that owns or operates the facility.)

7. Permittee Mailing Address: 201 Third Street

8. City: Henderson **9.** State: KY **10.** Zip Code: 42420

11. Contact Person: Tracy Cole **12.** Title: Plant Manager

13. E-mail Address: Tracy.Cole@bigrivers.com

14. Phone #: 270 - 844 - 5009 ext.

15. Cell #: 270 - 314 - 2223 **16.** Fax #: 270 - 844 - 5044

Facility Information

17. Facility Name: D B Wilson Station **18.** County: Ohio

19. Facility Location: 5663 KY 85 W
(Provide the street or physical location. Do not use P. O. Box #'s, etc.)

20. City: Centertown **21.** Zip Code: 42328

22. Facility Contact: Tracy Cole **23.** Title: Plant Manager

24. E-mail Address: Tracy.Cole@bigrivers.com

25. Phone #: 270 - 844 - 5009 ext.

26. Fax #: 270 - 844 - 5044 **27.** Cell #: 270 - 314 - 2223

Preparer Information

(Complete items 28 – 37 if the following information concerning the person preparing this application is different from the contact persons named in items 11 and 22.)

28. Preparers Name: Diana Merritt **29.** Company: Big Rivers Electric Corporation

30. Mailing Address: 5663 KY 85 W

31. City: Centertown **32.** State: KY **33.** Zip Code: 42328

34. E-mail Address: Diana.Merritt@bigrivers.com

35. Phone #: 270 - 844 - 5008 ext.

36. Cell #: 270 - 748 - 0565 **37.** Fax #: 270 - 844 - 5044

Attachments and Descriptions

38. Type of modification you are seeking:

- ☐ A vertical expansion of less than two (2) years
- ☐ A Groundwater Assessment Plan
- ☐ A Groundwater Corrective Action Plan
- ☐ A modification to the Groundwater or Surface Water Monitoring Plan
- ☐ A modification to the sediment pond design
- ☐ A modification to the alternate daily cover
- ☐ A modification to the leachate collection system
- ☐ A modification to the Closure Plan
- ☐ A modification to change the name of the owner or facility
- ☐ A modification to change the closure or post closure cost estimate
- ☐ A modification to change the permit boundary other than waste boundary
- ☒ Other (describe): Permit modification for the closure and post-closure plan for the Phase I Landfill under the technical requirements of 401 KAR Chapter 45 and transition of the Phase II Landfill to the applicable requirements of 401 KAR Chapter 46.

39. Provide, as **Attachment 1,** a detailed description of the permitting action you are seeking.

40. Provide, as **Attachment 2,** appropriate drawings, calculations, maps, cross-sections, etc.

Certification

41. Pursuant to 401 KAR 47:160, Section 6, a person with signature authority such as a sole proprietor, owner, partner, corporate officer, plant manager, LLC member, mayor, county judge executive or other authorized official must sign this certification statement.

NOTE: Consultants may not sign the following certification statement.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations."

Name of Person Signing (type or print): Tracy Cole

Title of Person Signing: Plant Manager Date: 6 - 2 - 2021

Signature per 401 KAR 47:160: Tracy Cole

Subscribed and sworn to before me this 2nd day of June, Year 2021

Notary Public Signature: Jney Fulks

State of KY County of Ohio My commission expires: 11-8-2024

Jney Fulks
Notary Public, ID KYNP17627
State at Large, Kentucky
My Commission Expires on Nov. 8, 2024

Kentucky
UNBRIDLED SPIRIT

Attachment 1

Big Rivers Electric Corporation (BREC) maintains and operates a special waste landfill (AI 3319, Solid Waste Permit # SW09200004) in Ohio County, Kentucky. The special waste landfill is permitted under 401 KAR 45 for disposal of special waste (utility waste such as fly ash, bottom ash, and scrubber sludge per KRS 224.50-760). These wastes are generated by the 440-megawatt D.B. Wilson Power Plant. The landfill exists in two phases, Phase I and Phase II. The application for a permit modification is being submitted for the Phase I Landfill closure and post-closure plan under the technical requirements of 401 KAR Chapter 45 and the transition of the Phase II Landfill to the applicable requirements of 401 KAR Chapter 46. Attached is the $500 permit modification fee required under 401 KAR 45:250 (Attachment 1a).

The Phase I landfill is subject to the standards of 401 KAR Chapter 45. Phase I is constructed with a liner and a cap meeting the specifications of a special waste landfill subject to 401 KAR Chapter 45. Phase I landfill acreage has varied in historical permits but recent mapping by Associated Engineers, Inc. has determined the area to be 94.29 acres (Attachment 1b). The Phase I acreage, as determined by Associated Engineers, includes portions of extended cover and run-off ditches along the eastern boundary of the landfill. Phase I landfill ceased receiving waste and began closure in 2012. The closure plan identifies 103 acres to be covered with an engineered synthetic turf cap and geomembrane. The closure plan area includes lining of the landfill perimeter ditches and extended cover in the northeast and southwest.

The Phase II landfill is identified within the special waste permit as applicable to 401 KAR Chapter 45. This application for permit modification is additionally intended to transition the Phase II landfill to the applicable requirements of 401 KAR Chapter 46. Phase II was constructed with a liner and cap meeting the specifications of a special waste landfill subject to 401 KAR Chapter 45. The Phase II Landfill began receiving waste and the entire footprint of the landfill received waste prior to the October 19, 2015 effective date of 40 CFR 257 (CCR rule). Associated Engineers, Inc. has determined the Phase II area to be 91.83 acres (Attachment 1b). Phase II continues to receive waste from the Wilson Station and is subject to the applicability of 401 KAR Chapter 46. Capping of the Phase II landfill has met the standards of 401 KAR Chapter 46 since the effective date and closure capping will meet the standards of 401 KAR Chapter 46. The closure plan cost estimate identifies 101 acres to be covered which includes lining of the landfill perimeter ditches. The closure and post closure cost estimates for both landfill phases is attached (NOD Response Attachment 4 – Updated Closure and Post-Closure Cost Estimates).

Established in the applicability of 401 KAR 46, 40 CFR 257.107 of the CCR rule requires a publicly accessible internet site containing the information specified by the CCR rule. Big Rivers Electric Corporation maintains the CCR rule compliance and data information website at http://www.bigrivers.com/environmental-services/big-rivers-electric-corporation-ccr-rule-compliance-and-data-information/. CCR landfill required plans with Professional Engineer certifications are located on the website. Attached are certified copies of the 40 CFR 257.91 Groundwater Monitoring System and 40 CFR 257.93 Statistical Method, 40 CFR 257.80 Fugitive

Dust Control Plan and 40 CFR 257.81 Landfill Run-on and Run-off Control Plan (NOD Response Attachment 3 – Transition Information).

A map of the facility's waste boundary and bonded areas determined by R. W. Beck and Associates as submitted in permit application #81-63 to the Division on March 16, 1984 is attached (Attachment 1c). The facility landfill boundary is the permitted 700 acre area as summarized in the permit and identified in the attached maps by R. W. Beck and Associated Engineers. Only bond area 1, Phase I, and bond area 2 of Phase II depicted in the R. W. Beck map are current activities for the special waste permit The remaining 251.46 acres of Phase II may have been present in past permits but is not present in the current permit. Any future expansion activity of the remaining area of Phase II will be applied for at that time.

Attachment 1a

Permit Modification Fee

ENDORSEMENT OF ATTACHED CHECK WILL ACKNOWLEDGE PAYMENT IN FULL OF ITEMS SET FORTH BELOW

VENDOR NO.
15166

Big Rivers Electric
P.O. Box 24
201 Third Street

NO. 614957
DATE 26-Mar-20

DATE	INVOICE NUMBER	DESCRIPTION	GROSS AMOUNT	DISCOUNT	NET AMOUNT
24-Mar-20	20410	SPECIAL WASTE PERMIT MINOR MOD	500.00	0.00	500.00
TOTALS			500.00	0.00	500.00

REMOVE DOCUMENT ALONG THIS PERFORATION

THIS DOCUMENT IS PRINTED IN TWO COLORS. DO NOT ACCEPT UNLESS BLUE AND BURGUNDY ARE PRESENT

Big Rivers Electric
P.O. Box 24
201 Third Street
Henderson,KY 42420

Fifth Third Bank
38 NW Third St.
Evansville , IN 47708

VOID AFTER 6 MONTHS AFTER THIS DATE

71-4
883

NO. 614957

DATE	NET AMOUNT
26-Mar-20	$********500.00

PAY Five Hundred Dollars And Zero Cents*****

TO THE ORDER OF
KENTUCKY STATE TREASURER
DIVISION OF WASTE MANAGEMENT
HAZARDOUS WASTE BRANCH
300 SOWER BLVD.
FRANKFORT,KY 40601

Robert W Berry
SIGNATURE

Paul Smith
SIGNATURE

⑈614957⑈ ⑆086300046⑆ 7693286457⑈

Big Rivers Electric
P.O. Box 24
201 Third Street
Henderson,KY 42420

KENTUCKY STATE TREASURER
DIVISION OF WASTE MANAGEMENT
HAZARDOUS WASTE BRANCH
300 SOWER BLVD.
FRANKFORT,KY 40601
United States

SEE REVERSE SIDE FOR OPENING INSTRUCTIONS

SEE REVERSE SIDE FOR OPENING INSTRUCTIONS

Attachment 1b

Facility Map by Associated Engineers, Inc.

DO NOT SCALE DRAWINGS

USE GIVEN DIMENSIONS ONLY. IF DIMENSION IS NOT SHOWN, VERIFY AND DOCUMENT CORRECT DIMENSION WITH THE ENGINEER. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE.

For Buried Line/Cable Locations

Kentucky 811

CALL 48 HOURS IN ADVANCE OF DIGGING.

ASSOCIATED ENGINEERS, INC.
ENGINEERS • GEOLOGISTS • SURVEYORS
EST. 1981 | Owensboro, KY 42301
2780 North Main Street • P.O. Box 10426 • Phone: (270) 684-9456 • Fax: (270) 684-6449
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COMMONWEALTH OF KENTUCKY
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17822
LICENSED PROFESSIONAL ENGINEER

JOB NO.	15-0017
DRAWN BY	M.G.C.
CHECKED BY	D.A.L.
DATE	03-23-2020

D. B. WILSON GENERATING STATION
CCR LANDFILL
CENTERTOWN, KY

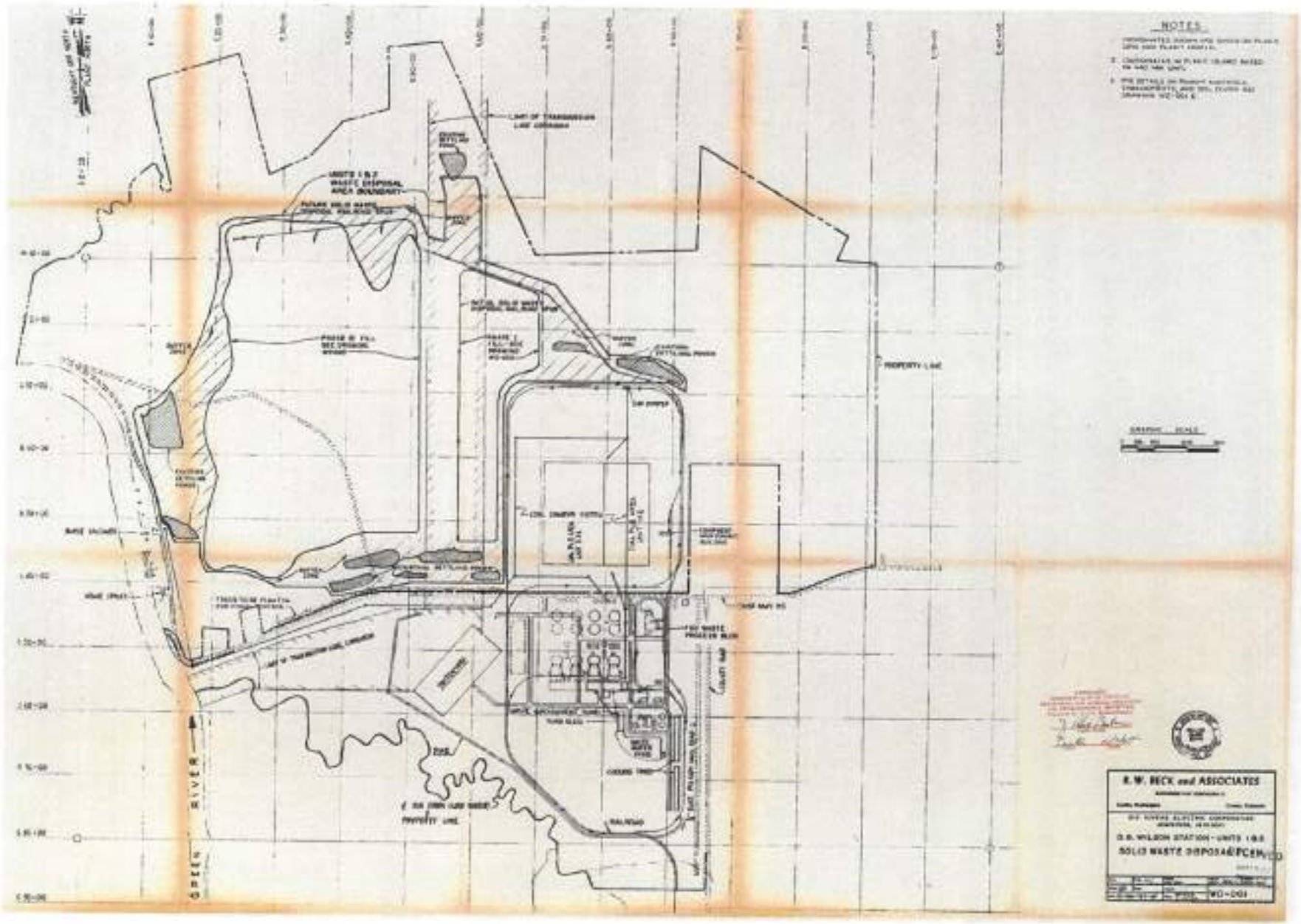
CCR LANDIFILL EXHIBIT

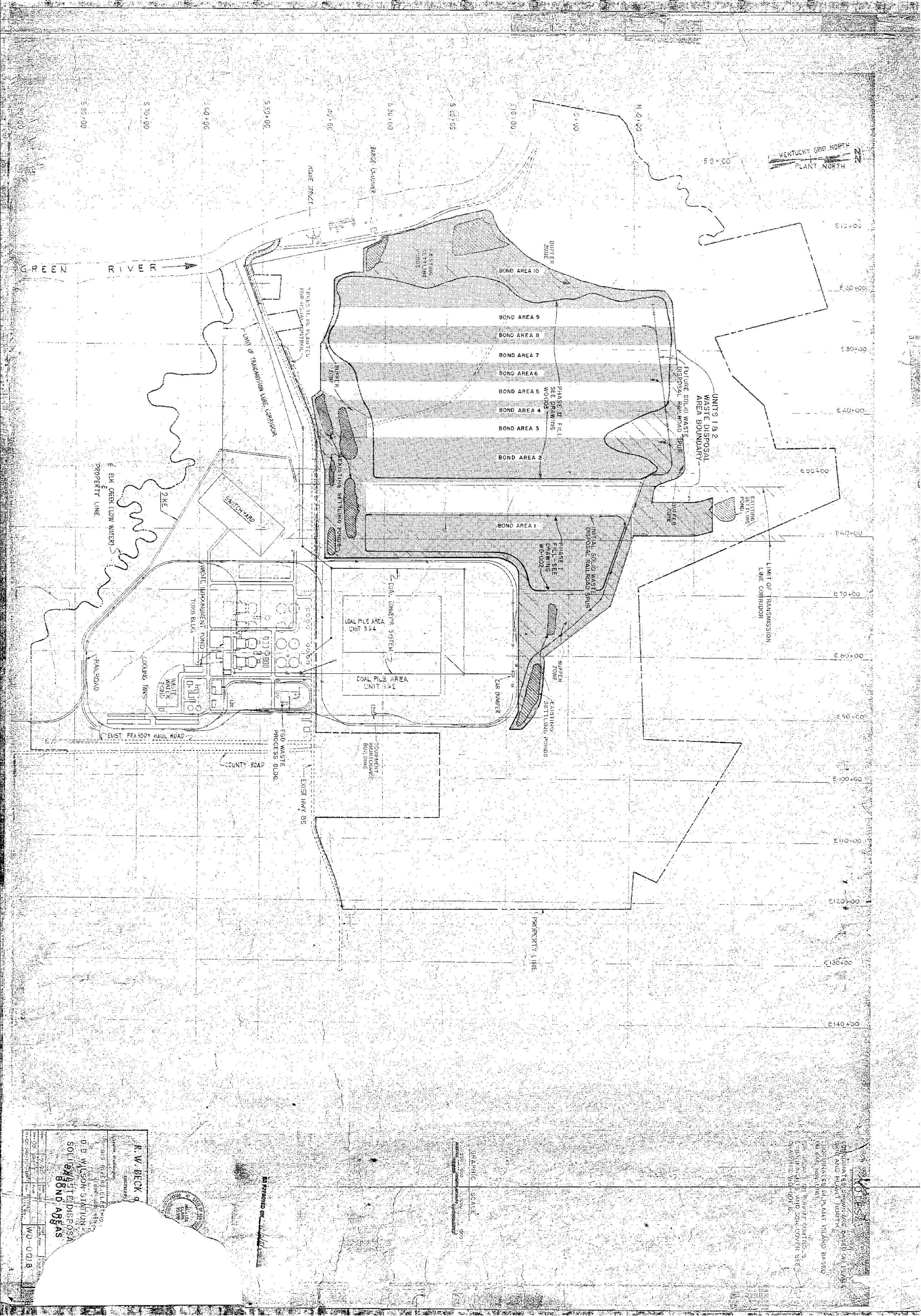
SHEET NUMBER

2

Attachment 1c

Facility Map by R. W. Beck and Associates


NOTES
UNITS 1 & 2 WASTE DISPOSAL AREA BOUNDARY
PROPERTY LINE
GREEN RIVER
R.W. BECK and ASSOCIATES
SOLID WASTE DISPOSAL



NOTES:

1. COORDINATES SHOWN ARE BASED ON KENTUCKY GRID AND PLANT NORTH.
2. ELEVATIONS IN PLANT ISLAND BASED ON MSL DATUM, (NAD 1983).
3. FOR FINAL GRADING, DRAINAGE AND EROSION CONTROL, SEE DRAWING WD-003.
4. FOR FINAL CAP AND COVER SEE DRAWING WD-004.

GRAPHIC SCALE
0 200 400 600
1 INCH = 200 FEET

R. W. BECK & ASSOCIATES
ENGINEERS
Seattle, Washington
Phone: (206) 728-2999

BIG RIVERS ELECTRIC CORPORATION
D. B. WILSON STATION UNIT 1
SOLID WASTE DISPOSAL
BOND AREAS

Date	By	Description
Dwn. 02/97		
Des.		
Chk.		
Appd.		
Date		

Scale: 1" = 200'
Project No. 97-001.16
Drawing No. WD-001B

AS APPROVED ON 2/27/97

ATTACHMENT 1 - REVISED CLOSURE PLAN

AECOM Imagine it. Delivered.

Big Rivers ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

DB Wilson Station Phase I

Special Waste Landfill Closure Plan

Agency Interest ID: 3319

Activity: AIN20140001

January 20 2021

Prepared for:

Big Rivers Electric Corporation
5663 State Route 85 W
Centertown, KY 42328

Prepared by:

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1. Introduction

Big Rivers Electric Corporation (BREC) operated a special waste landfill in Ohio County, Kentucky. The special waste landfill was used for the disposal of fly ash, bottom ash and stabilized scrubber wastes. These wastes met the definition of “coal combustion by-products” given in 401 KAR 45:010 and “special waste” given in KRS 224.50-760(1) (a). These wastes are generated by the 440-megawatt D.B. Wilson Power Plant. The landfill is separated into two phases, Phase 1 and Phase 2. Both phases of the special waste landfill are situated on a reclaimed surface mine. It is the intention of BREC to close Phase 1 of the D.B. Wilson Station Special Waste Landfill with the submission of this Closure Plan.

The purpose of this Closure Plan is to meet the requirements given in 401 KAR 45:110. These regulations set certain criteria for the closure of a special waste landfill. This Closure Plan addresses these closure criteria performed by BREC to ensure no adverse effects occur to human health and the environment. The scope of the plan will include:

- Type and amount of waste in the facility;
- Mobility and expected rates of migration of the waste or leachate constituents;
- Site location, topography, surrounding land use and final use;
- Climate conditions in the area;
- Characteristics of the cover material and final cap design
- Geology and soil profiles and surface and subsurface hydrology of the site;
- Closure plan conformance.

2. CCR Waste

The bulk of the waste stream that was placed in Phase 1 of the landfill is known as Poz-o-tec. The D.B. Wilson Station is a scrubbed unit. Flue Gas Desulphurization (FGD) waste is removed as slurry which is then dewatered by vacuum filters to produce a wet filter cake. The filter cake is stabilized (fixed) by mixing the material with lime and fly ash. The unit has a limestone system which is enhanced with dibasic acid and sodium bisulfite. The end product is a material called Poz-o-tec, which can “set up” under the right conditions, similar to a lowgrade concrete.

The fixated material called Poz-o-tec was placed in the landfill. As the material was placed in the landfill it was spread and compacted in 18 to 36-inch layers. In areas that are unenhanced, material was placed in eight- foot lifts. This process insures the low permeability and high compressive strength.

Technical Information:

Moisture	15-30%
Permeability	1 x 10^{-5}cm/sec to 5 x 10^{-6}cm/sec
Unconfined Compressive Strength	2000 pounds per square foot
TCLP Tests	Attachment A
Engineering properties	Attachment B

2.1 Waste Material

See **Attachment A**: Wilson Station POZ-O-TEC Chemical Laboratory Analysis

2.2 Waste Material Characteristics

See **Attachment B**: Waste Constituents Soils Laboratory Testing

2.3 Waste Estimates Amount (data unavailable prior to 2000)

Total Permit Boundary Area	700 acres	
Waste Disposal Area	103 acres	
Annual Quantities Generated	657,741 tons/yr.	544,60 cu.yds./yr.
	1,792 ton/day	1,492 cu.yds./day
Lifespan Estimate	17,101,300 tons	14,159,600 cu. /yds.

Phase 1 Special Waste Landfill Volume			
Year	**Jan. - June**	**July - Dec.**	**Yearly Total**
2000	257,855	292,541	**550,396**
2001	267,704	321,755	**589,458**
2002	290,193	222,311	**512,505**
2003	178,689	300,343	**479,032**
2004	285,747	278,882	**564,629**
2005	419,265	423,459	**842,724**
2006	539,830	539,063	**1,078,893**
2007	368,476	379,300	**747,776**
2008	357,234	356,269	**713,502**
2009	318,240	179,621	**497,861**
2010	311,925	346,448	**658,373**
Total Tons			**7,235,150.65**

Notes:

(1) The current Wilson Phase I Landfill (the Unit) footprint is approximately 103 acres. The Wilson Phase I Landfill began receiving waste approximately in 1984 and stopped receiving waste in approximately 2010. The Wilson Phase II Landfill is currently active.

3. Non CCR Waste

3.1 Waste Material

Phase 1 also contains a variety of non CCR contaminant sources. These materials include:

- Blasting grit;
- Cooling tower packing material;
- Asbestos containing material;
- Mill spray oil;
- Leachate;
- Oil impacted soil;
- Sediment from ponds and ditches, and;
- Construction and demolition debris.

3.2 Waste Characteristics

The characteristics, compositions, volumes, and locations of these materials were evaluated through review of landfill records obtained by open file requests under the Kentucky Open Records Act (KORA) program. A summary of the observations noted in the available files is provided in **D.B. Wilson 2020 Groundwater Assessment Plan.** Chemical analysis of various landfilled materials can be found in **Attachment A**. Overall, the file review observations indicate the following non-CCR wastes were disposed in the Unit:

- 5,605-cubic yards of spent sand-blasting grit:
  - Permitted for placement two to four times per month in 1992 and 1993.
  - No specific disposal location was mentioned.
  - The material is characterized as “Black Beauty” sand-blasting grit, which is a by-product of certain boiler systems. It was reported to have been used for cleaning of a clarifier, FGD system outlet ducts, and the barge unloader conveyor system, resulting in mixing with non-lead paint and coal tar epoxy.
- Cooling tower packing material (quantity records not located nor required at the time):
  - Location not specified.
  - Records only indicate that cooling tower packing material was one of the additional waste streams accepted by the facility.
  - This material consisted primarily of plastic trays.
- 5,005 barrels of asbestos-containing materials:
  - Placed between October 1990 and June 1993.
  - Most of the material was generated at BREC Coleman Station, but some was generated at Wilson.

- Mill spray oil (quantity records not located nor required at the time):
  - Location not specified.
  - Records only indicate that mill spray oil was one of the additional waste streams accepted by the facility. Anecdotally, mill spray oil is a mineral-based oil sprayed in the coal grinding mill to control dust.

- Leachate (quantity records not located nor required at the time):
  - Location not specified.
  - The character of leachate is presumably similar to that currently generated by the landfill.

- Sediment from Ponds and ditches (quantity records not located nor required at the time):
  - Various locations are possible, though pond and ditch sediment may not have been a significant waste stream during operation of Phase I.
  - The character of such sediments is likely to be dominated by that of the disposed material (ash and FGD materials) and cover soils.

- Miscellaneous construction debris (300 cubic yards/year was anticipated in the 1982 permit, but reportedly the material was only placed early in the plant history).
  - Generated and placed during plant construction.
  - Permitted to include “waste wood, metal, scraps, cardboard and similar materials”, but elsewhere described as “wood, metal scraps, brick (not chemically contaminated), and broken concrete”.

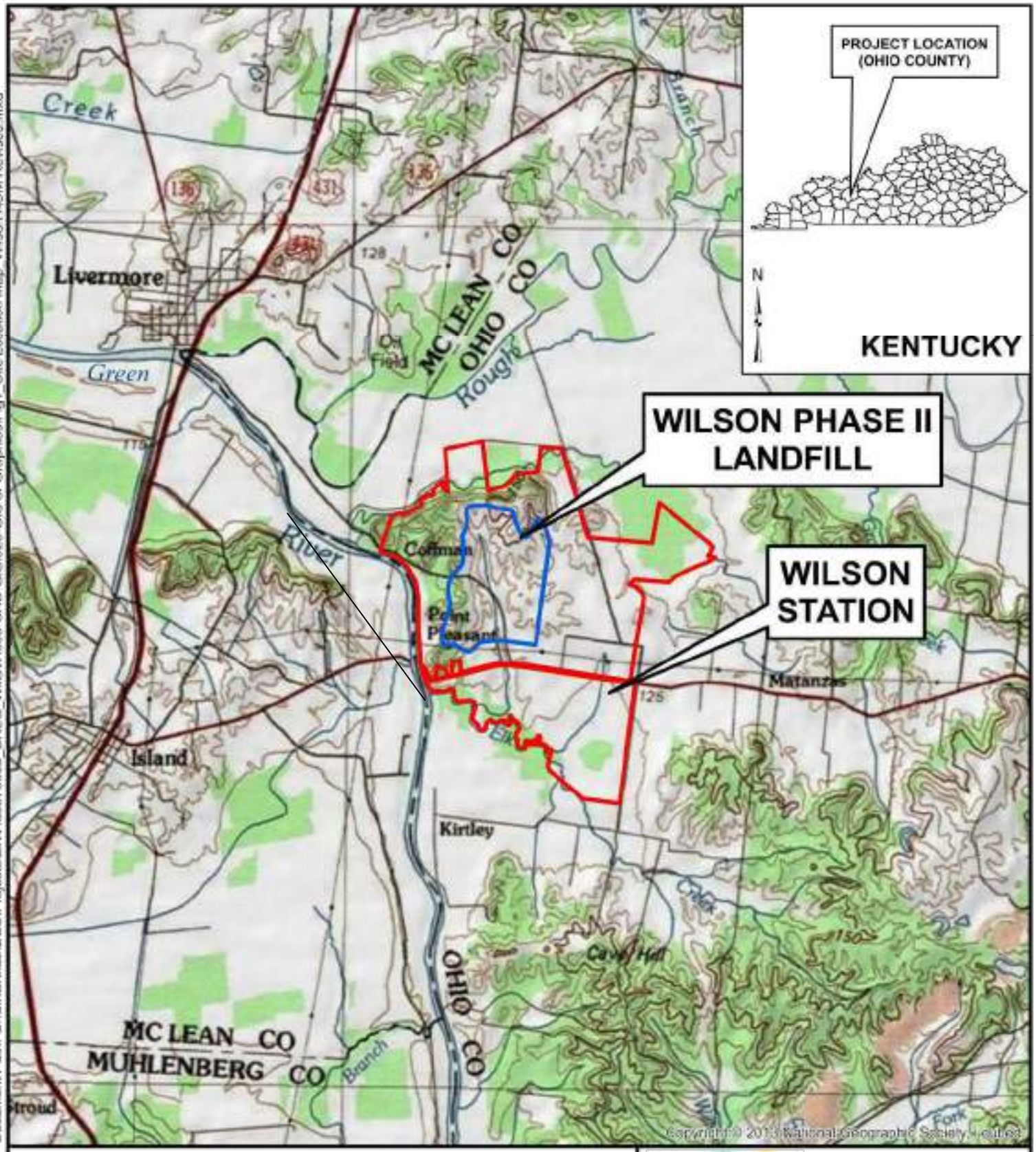
4. Background

4.1 Site Location

The site is located in western Ohio County, Kentucky. The landfill is north of Kentucky Route 85 and east of the Green River, which serves as the Ohio County – McLean County boundary. Phase 1 portion of the special waste landfill is a 103-acre area, which is part of the larger 700 acre permitted landfill. The location is depicted on the topographic map in Figure 1. The Phase I is the furthest eastern portion of the entire permitted landfill. As indicated in Figure 1, the vast majority of the landfill is situated on reclaimed surface mine.

4.2 Topography

The site lies in the Western Kentucky coalfields physiographic province. This area is characterized by extensive bottomlands and low hills. In the vicinity of the site, the natural topographic relief is on the order of 100 feet. The elevation in this area ranges from 310 to 410 feet above sea level. At the site, the natural topography has been considerably altered by surface mining and reclamation that occurred prior to the current special waste landfill. Prior to 1983, the site had been surfaced mined down to the No. 9 coal seam. Surface drainage at the site is to the south to an unnamed tributary to Elk Creek which drains to the west to the Green River.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

EQUALITY QUADRANGLE
(https://viewer.nationalmap.gov/basic/)

0 3,000 6,000 Feet

N

STATE OF KENTUCKY
MICHAEL BRIAN GOLE
28170
LICENSED PROFESSIONAL ENGINEER
1/29/2021

Big Rivers ELECTRIC CORPORATION

Wilson Station
Ohio County, Kentucky

FIGURE 1
TOPOGRAPHIC MAP OF
D.B. WILSON

DATE: 02/20/2020	SCALE: 1IN = 1,500 FEET
CREATED BY: ALW	
JOB NO. 60620035	

4.3 Surrounding Land Use

The D.B. Wilson Landfill is located in a largely rural area of the county. This particular area is dominated by two types of land uses; agriculture and mining. According to 2009 U.S. Census data, 6.3% of establishments in Ohio County are agriculture or mining related. Based on the same data, 46 establishments in the county are agriculture and 33 establishments are mining. The average farm size is 166 acres. The types of farming include corn, soybean, wheat, tobacco, hay, and livestock farming. The area supports both underground and surface coal mining. Mining can contribute to sedimentation and acidic runoff to streams. Like the Wilson Landfill site, much of the area is dotted with reclaimed and un- reclaimed mine lands. The nearest urban area is the City of Island in McLean County west of the landfill, with a population 435 according U.S. Census data.

4.4 Climate

The climate in this area is temperate with moderately cold winters and warm humid summers. Temperatures in this area can range from 23°F to 91°F. This area has a relatively long period of frost- f r e e days, 175-200. Precipitation can range from 44-50 inch within a year. Soil temperatures in this area are considered Mesic. Mesic soil temperatures range from 46°F to 59°F. The table below summarizes climate data in the area of the Wilson Station Landfill. The tables depict temperature and precipitation data gather by NOAA at the Calhoun Lock 2. Calhoun is located approximately 10 miles northwest of the Wilson Landfill.

Climate Summary

Average annual temperature	57.1° F
Coldest month (average Temperature)	January (33.6° F)
Warmest month (average Temperature)	July (77.7° F)
Last freeze (average)	May 5th
First freeze (average)	October 3rd
Growing season (average)	188
Annual rainfall (average)	49.03 in.
Driest month (average rainfall)	October (3.14 in.)
Wettest month (average rainfall)	May (5.17 in.)

All of the data was obtained from:
http://mcc.sws.uiuc.edu/climate_midwest/mwclimate_data_summaries.htm#

NOWData - NOAA Online Weather Data

Monthly Mean Precipitation for CALHOUN LOCK 2, KY

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2009	M	M	0.07	M	0.07	0.07	M	0.09	0.07	0.19	0.03	0.07	0.08
2010	0.08	M	0.11	0.12	0.11	M	M	M	0	0.04	0.18	0.06	0.09
2011	M	0.15	0.14	0.36	M	0.13	M	M	M	M	M	M	0.2
2012	M	M	M	M	0.17	0.03	M	0.12	0.19	M	0.04	0.22	0.13
2013	0.16	0.15	0.2	0.14	0.15	0.21	0.14	0.04	0.1	M	0.08	M	0.14
2014	M	M	M	M	M	M	M	M	M	0.08	0.06	0.14	0.09
2015	M	0.16	M	M	M	M	0.26	0.09	0.04	0.2	M	0.2	0.16
2016	0.21	0.12	0.13	0.16	M	0.09	0.34	0.12	0.08	0.02	M	0.21	0.15
2017	0.12	M	0.12	0.09	M	M	0.08	0.07	0.16	0.22	M	M	0.12
2018	M	M	M	M	M	M	M	M	M	M	M	M	M
2019	0.17	M	M	0.16	0.09	M	M	0.07	0	0.09	M	M	0.1
Mean	0.15	0.15	0.13	0.17	0.12	0.11	0.2	0.08	0.08	0.12	0.08	0.15	0.12
Max	0.21 2016	0.16 2015	0.2 2013	0.36 2011	0.17 2012	0.21 2013	0.34 2016	0.12 2012	0.19 2012	0.22 2017	0.18 2010	0.22 2012	0.2
Min	0.08 2010	0.12 2016	0.07 2009	0.09 2017	0.07 2009	0.03 2012	0.08 2017	0.04 2013	0 2019	0.02 2016	0.03 2009	0.06 2010	0.08

NOAA Online Weather Data

Monthly Mean Avg Temperature for CALHOUN LOCK 2, KY

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2009	29.4	37.5	48.2	55.3	65.9	75.9	73.2	74.7	70.5	55	51.3	36.3	56.1
2010	M	30.8	47.9	61.7	68.1	M	M	80.6	M	59.7	47.6	31	53.4
2011	30	39.2	48.3	61.3	M	77.1	81.8	M	67.5	57.6	50.5	40.4	55.4
2012	39.1	41.4	59	59.8	71.2	74.6	81.6	76.3	68.8	56.1	44.9	43.9	59.7
2013	38	38.9	40.8	57	66.4	74.4	74.5	75.6	71.2	58.6	43.2	M	58.1
2014	M	M	M	M	70	M	73.3	77.3	69.8	59.6	40.1	40.1	61.5
2015	33.3	26.9	46.3	59.5	M	76.7	78.4	73.7	71.6	59.1	51.4	47.7	56.8
2016	34.9	39.7	52.4	58.3	64.2	76.8	79.1	79.3	73.2	65.3	M	37.5	60.1
2017	41	47.7	49	63	66.4	73.6	77.2	73.9	70.7	60.5	47.6	37.5	59
2018	29.8	44.2	M	M	M	M	M	M	M	M	M	M	37
2019	34.6	40	M	56.1	67.1	M	M	75.9	77.2	60	M	M	58.7
Mean	34.5	38.6	49	59.1	67.4	75.6	77.4	76.4	71.1	59.1	47.1	39.3	56
Max	41 2017	47.7 2017	59 2012	63 2017	71.2 2012	77.1 2011	81.8 2011	80.6 2010	77.2 2019	65.3 2016	51.4 2015	47.7 2015	61.5
Min	29.4 2009	26.9 2015	40.8 2013	55.3 2009	64.2 2016	73.6 2017	73.2 2009	73.7 2015	67.5 2011	55 2009	40.1 2014	31 2010	37

All of the data was obtained from:
https://w2.weather.gov/climate/xmacis.php?wfo=pah

4.5 Final Site Use

Land use in the vicinity of the site is a mix of agricultural and mining. Corps planted in this area consists of corn, soybean & tobacco. According to the National Agricultural Statistics Service census, in 2007 Ohio County had 168,602 acres in farms. 62,713 were in harvested cropland. The area also supports a large number of poultry farms with around 150 chicken houses. The Phase 1 portion of the landfill is part of a multi-phase landfill, permitted for 700 acres located on previously surface mined land. The remainder of the permitted area remains as undeveloped reclaimed mine land. After the landfill is closed it is anticipated that Phase I will be maintained as a closed landfill. For the first five-year period after closure is completed, the facility will comply with the requirements of the post closure plan as approved by KDEP.

5. Characteristic of Cover Material

5.1 Cover Material

As groundwater corrective action for the D.B. Wilson Phase 1 CCR Landfill, an engineered synthetic turf cap with a geomembrane will be installed over the existing soil cover. This includes the removal of the current vegetation, installation of a geomembrane, and the placement of the synthetic turf with sand infill. In addition, the downspout pipes that are in place will be replaced with open channel flumes. Prior to geomembrane deployment, the cap surface will have the vegetation removed and be substantially smooth and substantially free of sharp objects and other deleterious material.

Mobility and rates of migration of the waste leachate constituents have placed the special waste landfill in groundwater assessment. Therefore, this cap has been selected as a form of groundwater corrective action to minimize infiltration and groundwater impact.

5.2 ClosureTurf®

ClosureTurf®, an alternative landfill closure system produced by Watershed Geosynthetics, Inc., and Agru America, Inc. is proposed for the D.B. Wilson Landfill closure. This material has been approved for use as an alternative cap in 13 states, with agency approval pending in several other states. Some of the installations have been in place since 2009. Several case studies are included in **Attachment F**. As outlined in the product overview information contained in **Attachment F**, the primary advantages of this product over a traditional composite capping system include:

- Improved quality of stormwater runoff and reduced long-term erosion issues.
  - Please note that the design drawings incorporate gravel drain ways and Hydro binder along the flow lines of the benches, flumes and perimeter ditches in order to minimize erosion of the sand infill. The extent of this is based on the projected “backwater” during peak flow during design storm events, as demonstrated by the hydrology evaluation, contained in **Attachment E.**

- Conservation of soil and topsoil, which is a vanishing commodity in many areas, particularly where strip mining has occurred
- Accelerated schedule (completing the closure within a year's time, rather than the 5 years previously contemplated).
- Carbon footprint reduction (significantly fewer truck trips required for cap construction)
- The future prospect of installing PowerCap™ solar panels on the landfill slopes, which has been successfully producing solar power at a site in Georgia for 18 months.
  - Due to erosional concerns, such an installation would make little sense on a traditional soil cap

The use of this product can also avoid the significant risk of geomembrane damage that could occur while placing a soil layer above it, particularly along the numerous benches. The primary driver for selecting the product at this strip-mined site is the lack of adequate soil in the quality and quantity necessary to complete a traditional soil cap. Importing native soil from an undisturbed borrow area would require a significant number of trucks to travel significant distance on the highway, posing an additional danger to the public.

The ClosureTurf® material has been tested for wind and rainfall erosion resistance, fire resistance, and aerodynamic uplift properties. Through testing at Georgia Tech, FIU, and elsewhere, the product has been assessed to withstand wind conditions at 118 mph with the test results also deducing that higher velocities actually produce less lift and require less infill material. Accelerated UV and tensile strength testing on the product has yielded a projected lifespan of over 100 years which exceeds the current post-closure regulatory period of 5 years specified in 401 KAR 45:110 Section 5.

Manufacturer data on the various testing, overview of the ClosureTurf® product, data regarding the projected lifespan of the product, and confirmation regarding the product's adherence to the closure cap criteria under Section 257.102(d) of the federal CCR Rule are provided in **Attachment F**. Although the CCR Rule does not apply to this inactive CCR landfill, it is an industry standard for the sake of comparison. The infiltration equivalency analysis contained in Attachment F shows that the projected infiltration through a ClosureTurf® is 3 to 43 times less than that of a traditional Subtitle D cap, depending on the method of calculation. This reduction in infiltration will significantly reduce the mobility and migration of leachate constituents. Groundwater levels at the site are below the CCR material, as indicated by various wells and piezometers installed around the unit.

5.3 Veneer Stability Analysis

Prior to installation of the cap, direct shear testing will be conducted to confirm the factor of safety against sliding for the following interfaces, in accordance with ASTM D 5321:

- Geomembrane vs Existing Soil Cover
- Engineered Synthetic Turf vs Geomembrane

The shear testing will be conducted prior to construction and compared to the veneer stability analysis (VSA) results to confirm an adequate factor of safety for the maximum credible earthquake. The VSA is based on site-specific data, a site response, and a deterministic hazard seismic analysis (DSHA). The VSA can be found in **Attachment G.** The DSHA can be found in **Attachment G1.**

6. Geology, Soil Profiles, & Site Hydrogeology

6.1 Physical Setting

The Phase I Landfill at Wilson Station is located on a ridge to the east of the Green River at an elevation of approximately 420 ft., amsl, with a maximum elevation of 520 ft. amsl. Precipitation falling on the Phase I Landfill is directed to ponds in the south and east sides of the unit and then to Elk Creek or the Rough River under Kentucky Pollution Discharge and Elimination System permit. Elk Creek is a primary tributary to the Green River, and it flows westward to the Green River.

6.2 Site Geology

Phase I lies in the Western Kentucky Coalfields section, characterized by rolling uplands underlain by coal-bearing bedrock of the Pennsylvanian Period. The geology underlying the landfill consists of unconsolidated materials, including loess, alluvial deposits and mine spoil, underlain by Upper to Middle Pennsylvanian-age clastic and carbonate bedrock consisting primarily of sandstone and shale.

The geologic quadrangle (Geologic map of the Equality quadrangle, Ohio County, Kentucky, 1969) for the Site vicinity published by the United States Geological Survey shows the surficial material to be unconsolidated Quaternary alluvium and Upper Pennsylvanian coal deposits, however, north of State Route 85 these materials were removed as part of historic strip-mining operations. Where present, the alluvium consists of silty clay and clayey silt, which ranges in thickness from 6 feet (MW-104) to 36 feet (MW-102). Within close proximity to the landfill, and north of State Route 85, mine spoils range in thickness from 33 feet (MW-1) to over 86 feet (MW-4D).

The unconsolidated materials are shown to be underlain by bedrock of the Middle Pennsylvanian Carbondale Formation. The Carbondale Formation consists of cyclic sequences of sandstones, shales, siltstones, and coals. The Carbondale sediments were deposited in a fluvial-deltaic system. As a result of this depositional environment, the sandstone units of the Carbondale tend to be lenticular bodies rather than continuous sheetlike strata. Gradational and abrupt horizontal changes in lithology are often encountered.

6.3 Hydrogeology

The unconsolidated mine spoil is considered to be the uppermost aquifer underlying the Landfill. The uppermost aquifer is unconfined and first encountered at an elevation of

approximately 400 ft., amsl at the north end of the Phase II Landfill and 395 ft. amsl at the south end. Flow direction beneath the Landfill is typically to the south and southeast. The mine spoil is bounded on the south (i.e., downgradient) by a headwall of undisturbed Carbondale Formation.

Slug tests were performed on April 23, 2019 at monitoring wells MW-4, MW-4D, and MW-10 to assess the hydraulic characteristics of the uppermost aquifer. The estimated hydraulic conductivity of the monitoring wells tested were 8.03 x10-2 centimeters per second (cm/sec) in MW-4, 9.30 x10-2 cm/sec in MW-4D, and 2.91 x10-2 cm/sec in MW-10. Hydraulic conductivity for the Carbondale Formation is estimated from literature, and for the purposes of this ACM, a range for sandstone of 1 x10-4 cm/sec to 1 x10-5 cm/sec is used. Groundwater flow downgradient of the mine spoil beneath the II Landfill is therefore rate-limited by the lower permeability in the Carbondale Formation.

The soil, geologic, and hydrogeologic conditions are provided in the different attachments.

See **Attachment C:** Geological Cross-sections and Groundwater Elevations.

6.4 Hydrology

The hydrologic evaluation for the landfill is found in **Attachment E**, and the flume, perimeter channel, and bench details can be found in **Attachment H.**

TABLES

Table 1. Selected Sites where ClosureTurf® has been Installed.

Select ClosureTurf® Installations				
Installation	**Type**	**Acres**	**State**	**Year**
Progressive - Weatherford	Public – MSW	8.5	Texas	2010
Progressive - Timberland	Public - MSW	4	Louisiana	2011
Crazy Horse (Salinas SWA – Monterey)	City – MSW	65	California	2012
Saufley Landfill (Escambia)	Public – C&D	22.5	Florida	2012
Georgia Pacific	Independent	70	Georgia	2013
Berkeley County Landfill	City - MSW	12	South Carolina	2013
Lanchester Landfill (Chester)	City - MSW	7	Pennsylvania	2013
Tangipahoa Parish	City – MSW	22	Louisiana	2013
Sandtown – (Berkeley County)	City – MSW	4	Delaware	2013
Si-County Landfill	EPA – Region 6	5	Texas	2014
Holcim Cement Landfill (Kiln Dust)	Independent	46	New York	2015

Table 2. HDPE Grass Blade Upper Bound Half-Life Calculations (Geosyntec)

Month	UV Lamp On[1] (hrs/day)	Peak Turf Temp[2] (C)	Peak Turf Temp (K)	Peak Turf Temp (1/K)	Reaction Rate[3]	Lab Half-Life[4] (lamp hrs)	Field Equivalent[5] (days)	Field Equivalent[6] (months)	Half Life Loss per Month[7]
January	4.00	27.99	301.14	0.0033	-15.67	6385286	1596322	51494	1.94196E-05
February	4.94	27.96	301.11	0.0033	-15.67	6401982	1296604	46307	2.15949E-05
March	6.13	33.94	307.09	0.0033	-15.11	3632197	593012	19129	5.22755E-05
April	6.94	40.58	313.73	0.0032	-14.50	1983742	285945	9531	0.000104915
May	7.25	51.21	324.36	0.0031	-13.58	792646	109330	3527	0.000283544
June	7.31	61.52	334.67	0.0030	-12.75	344593	47124	1571	0.00063662
July	6.94	66.82	339.97	0.0029	-12.34	228887	32993	1064	0.000939599
August	7.00	64.80	337.95	0.0030	-12.50	267230	38176	1273	0.000785841
September	6.94	59.43	332.58	0.0030	-12.91	406208	58553	1889	0.000529439
October	5.88	47.74	320.89	0.0031	-13.88	1062504	180852	5834	0.000171411
November	4.56	36.38	309.53	0.0032	-14.88	2899472	635501	21183	4.72069E-05
December	3.69	24.68	297.83	0.0034	-15.99	8826208	2393548	77211	1.29515E-05
Lab	20							**Yearly Half-life Loss[8]**	0.003604818
								Half-life[9] (years)	277.41

Notes:

(1) UV Lamp On (hours per day) is given in Richgels (2015a, 2015b).
(2) Peak Turf Temps for New River, AZ given in Richgels (2015a, 2015b).
(3) Reaction Rate is calculated from the regression curve shown in Figure 4 for the upper bound (logarithmic) case.
(4) Lab half-life in hours is equal to 1/e^(Reaction Rate).
(5) Field equivalent (days) is calculated by dividing the lab half-life in hours by the UV lamp on hours per day.
(6) Field equivalent in days is converted to months using the given days in that particular month.
(7) Half-life loss per month is the inverse of the corresponding field equivalent in months.
(8) The yearly half-life loss is the sum of each individual months half-life loss.
(9) The half-life in years is the inverse of the yearly half-life loss.

Table 3. HDPE Grass Blade Lower Bound Half-Life Calculations (Geosyntec)

Month	UV Lamp On[(1)] (hours/day)	Months @ 80 C[(2)]	Months @ 70 C[(2)]	Months @ 60 C[(2)]	Peak Turf Temp[(3)] (C.)	Half-life Months (from Regression)	Half-life Loss per month
January	4.00	692	1507	3078	27.99	6948	0.000143933
February	4.94	620	1352	2761	27.96	6256	0.000159849
March	6.13	452	984	2010	33.94	4059	0.00024637
April	6.94	412	898	1834	40.58	3213	0.000311281
May	7.25	382	832	1698	51.21	2248	0.000444747
June	7.31	391	852	1740	61.52	1580	0.000633027
July	6.94	399	869	1775	66.82	1237	0.00080834
August	7.00	395	861	1759	64.80	1371	0.000729293
September	6.94	412	898	1834	59.43	1826	0.000547629
October	5.88	471	1026	2095	47.74	3070	0.000325779
November	4.56	627	1365	2788	36.38	5321	0.000187929
December	3.69	750	1635	3339	24.68	7945	0.000125871
Lab	20					**Yearly Half-life Loss**	0.00466405
						Half-life (years)	214.41

Notes:

(1) UV Lamp On (hours per day) is given in Richgels (2015a, 2015b).

(2) The months required at each temperature is calculated using the regressions from Figure 4 for each temperature, projected down to half-life, then dividing the lamp-hours at half-life by the UV lamp on hours per day for a given month. Once this calculation is done for 80, 70 and 60 C, a linear regression (as shown in Figure 5) is used to obtain the half-life months at the corresponding peak turf temp.

(3) Peak turf temperatures given in Richgels (2015a, 2015b).

FIGURES

Note: The sand ballast infill is not shown in the sample photo on the left, but is shown in a field application photo on the right.

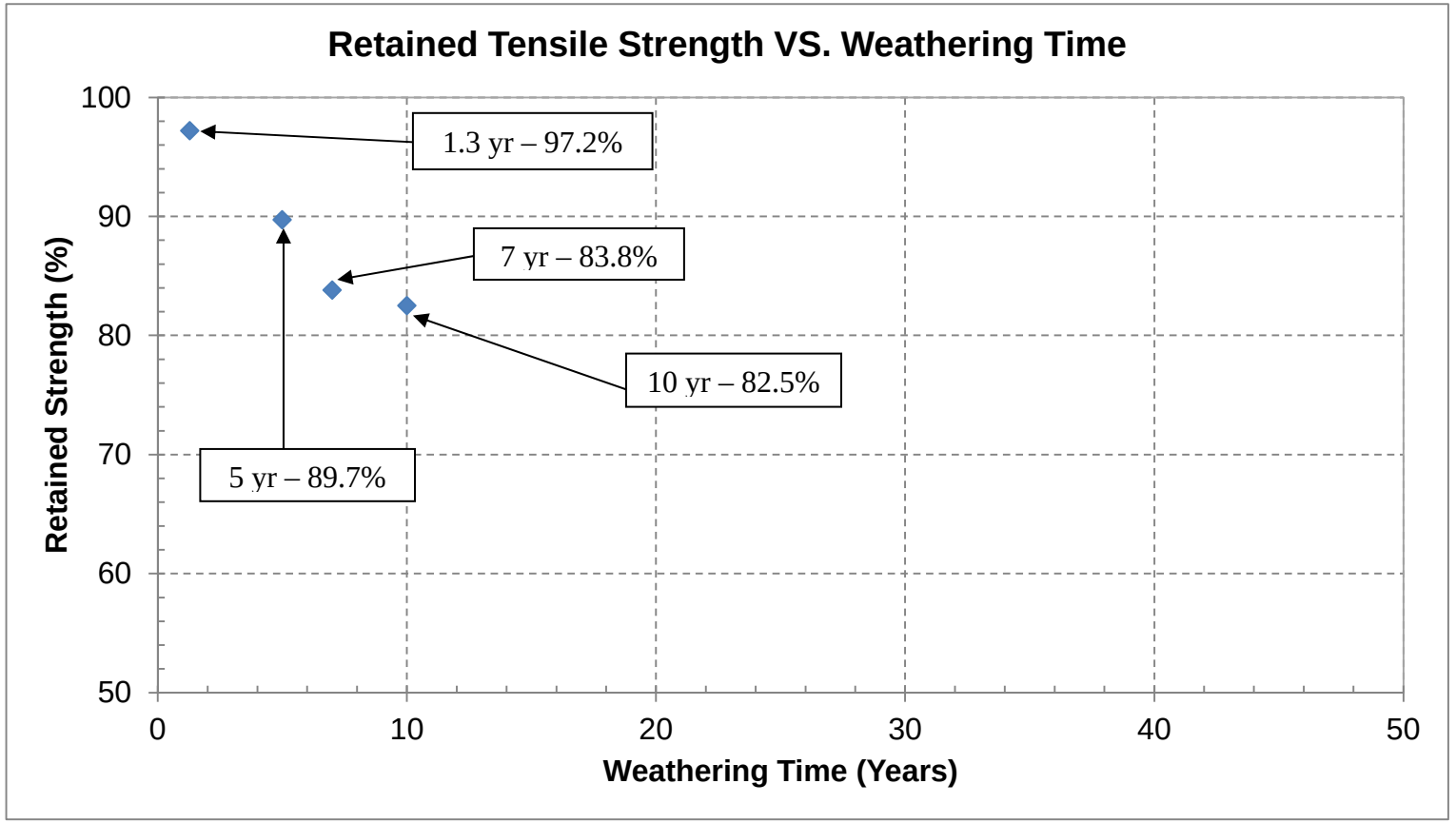
ClosureTurf®Components

Watershed Geosynthetics – ClosureTurf® UV Assessment

Geosyntec consultants

Kennesaw, GA | 23-April-2015

Figure **1**



Field Test Data (Watershed, 2014)
New River, AZ Atlas Testing Facility
Watershed Geosynthetics – ClosureTurf® UV Assessment

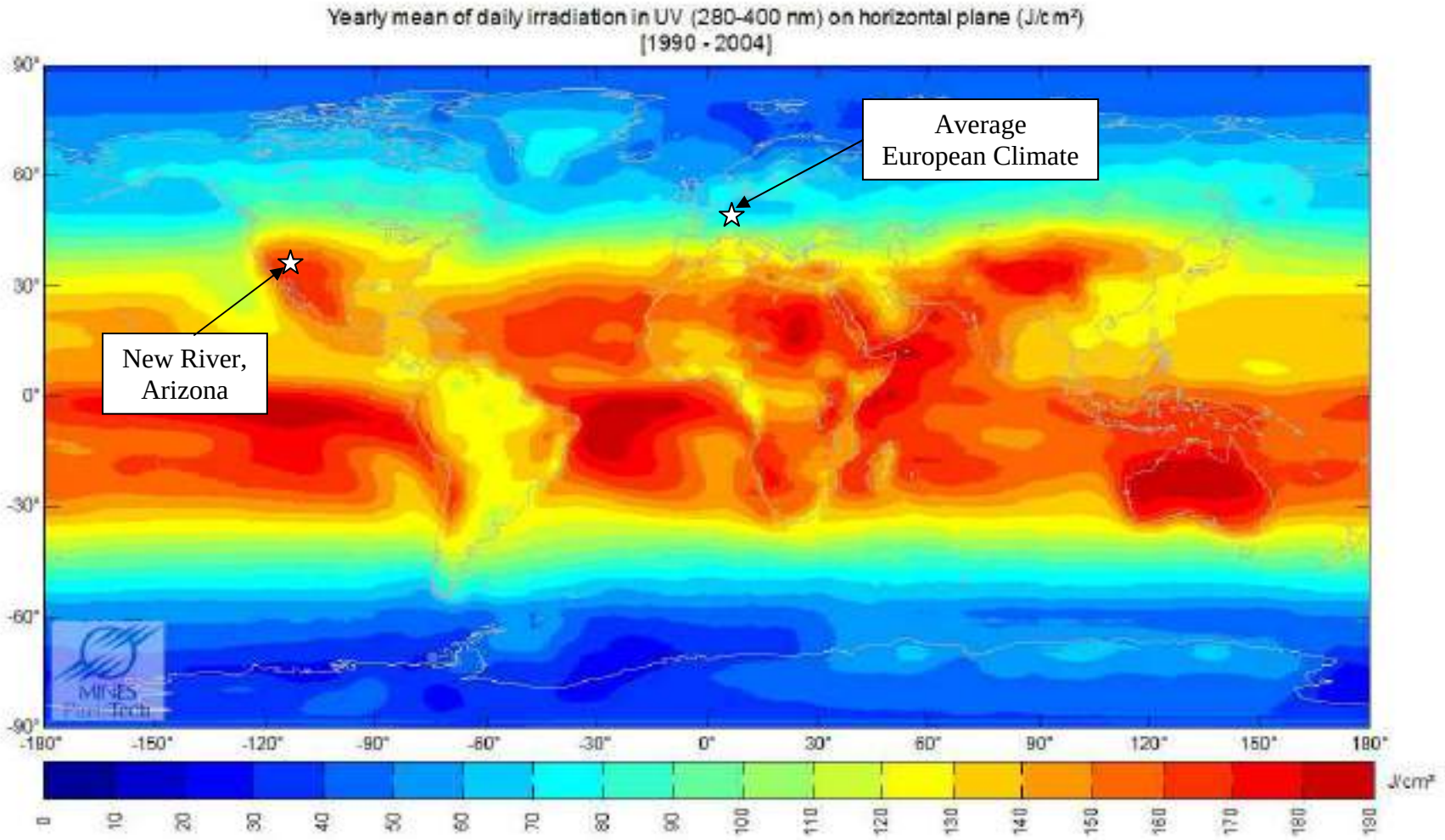
Geosyntec consultants

Kennesaw, GA | 25-April-2015

Figure **2**

Notes:

1. The first data point at Weathering Time of 1.3 years is considered to be within the initial stage of UV degradation (i.e., anti-oxidant depletion), rather than polymer oxidation which is represented by the final three data points.
2. Each data point represents the average result of 20 tensile break tests.



1 J/cm^2 = 4.755 ft-lbs/in^2

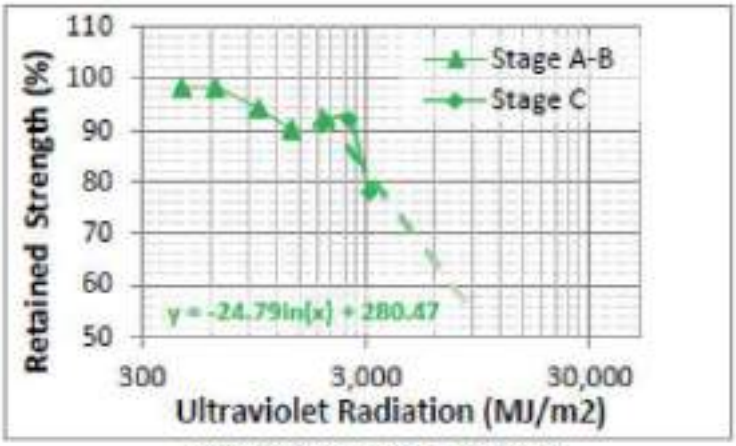
Yearly Irradiation in the Ultraviolet Range

Watershed Geosynthetics – ClosureTurf® UV Assessment

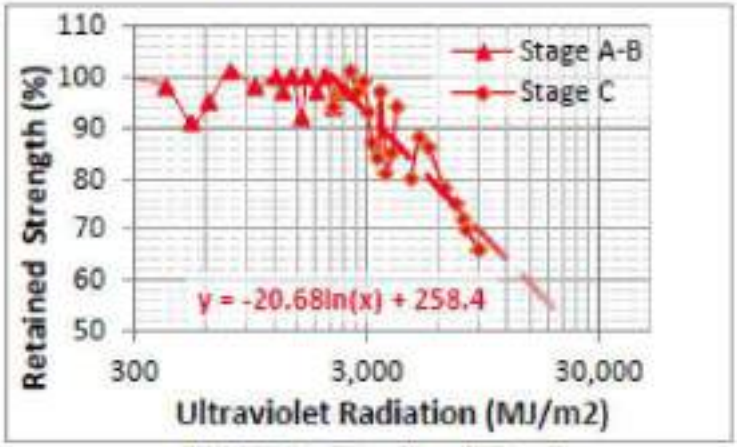
Geosyntec consultants

Figure 3

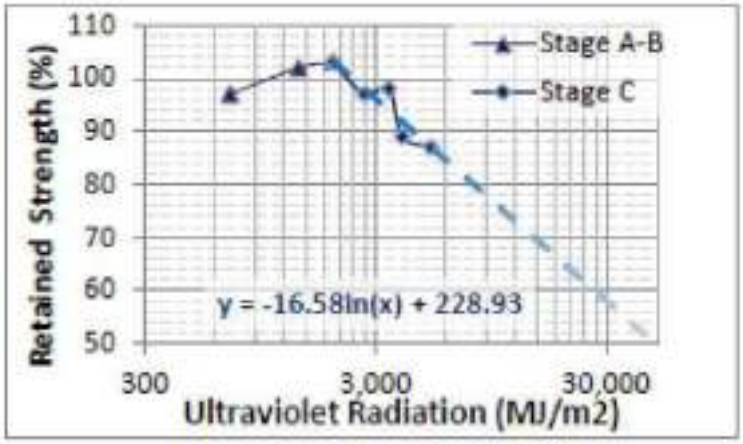
Kennesaw, GA | 23-April-2015



a) 80°C Temperature Dataset



b) 70°C Temperature Dataset



c) 60°C Temperature Dataset

GSI Data Release - Three Stage Oxidation of HDPE for Different Temperatures

Watershed Geosynthetics – ClosureTurf® UV Assessment

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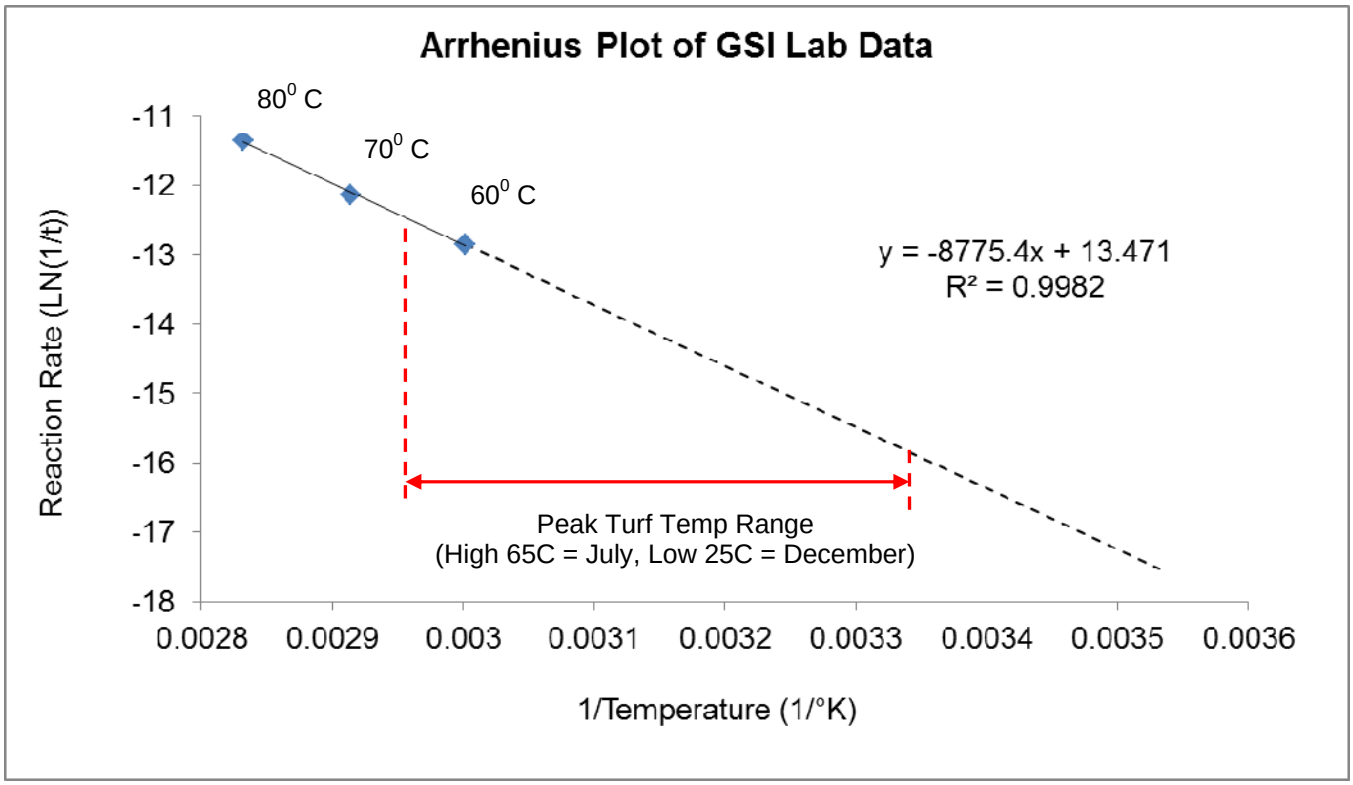
Figure 4

Kennesaw, GA | 23-April-2015



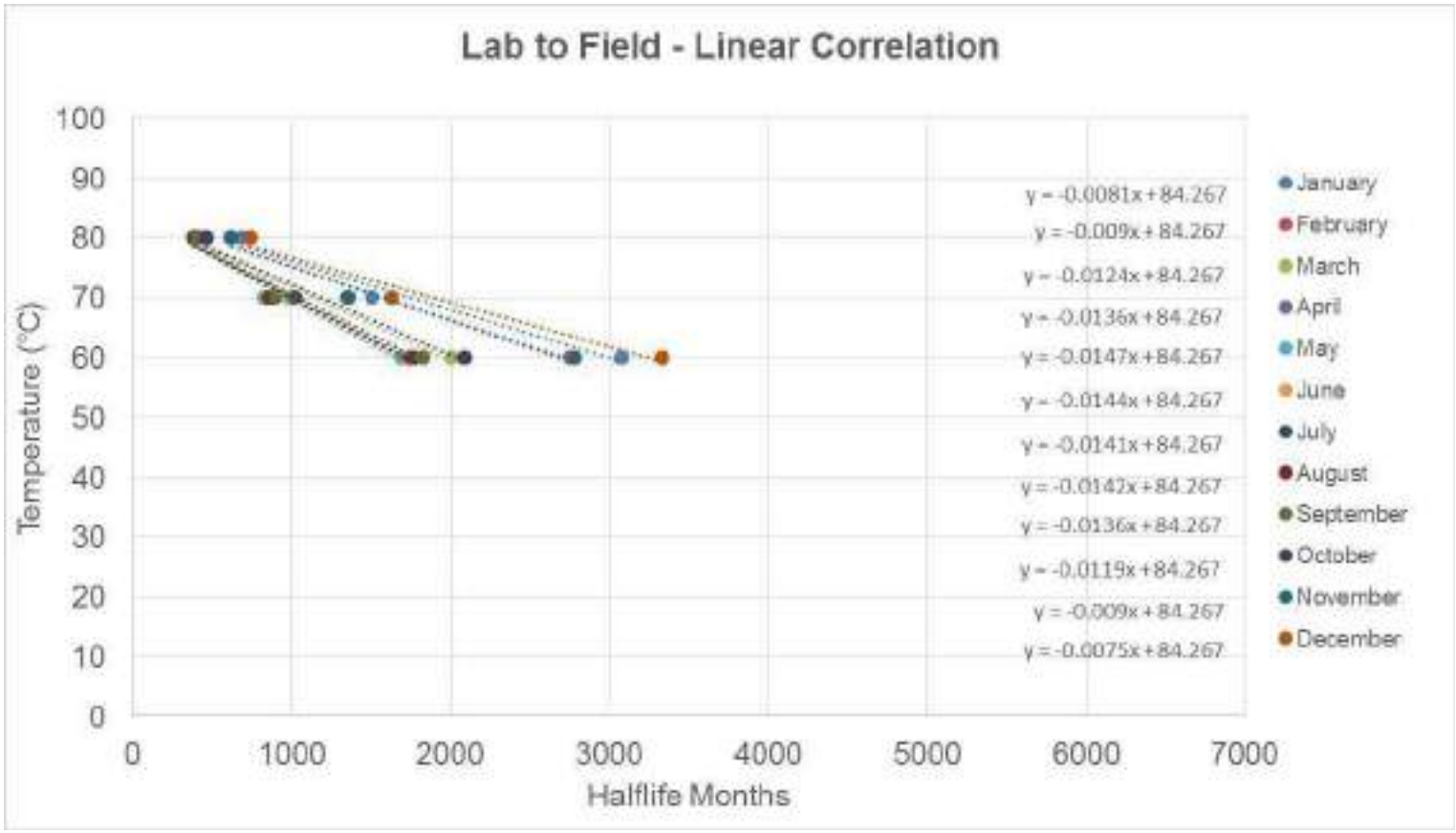
Note: Richgels (2015b) mentions that the use of peak turf temperature is conservative since it only occurs for approximately one hour per day.

Arrhenius Plot of Lab Data
Watershed Geosynthetics – ClosureTurf® UV Assessment

Geosyntec consultants

Figure 5

Kennesaw, GA | 23-April-2015



Note: Each month was projected down to the peak turf temperature given in Table 3 to get the half-life months. The inverse of half-life months is half-life loss per month. The sum of all the half-life losses for each month in a year is the yearly half-life loss, the inverse of which is the half-life.

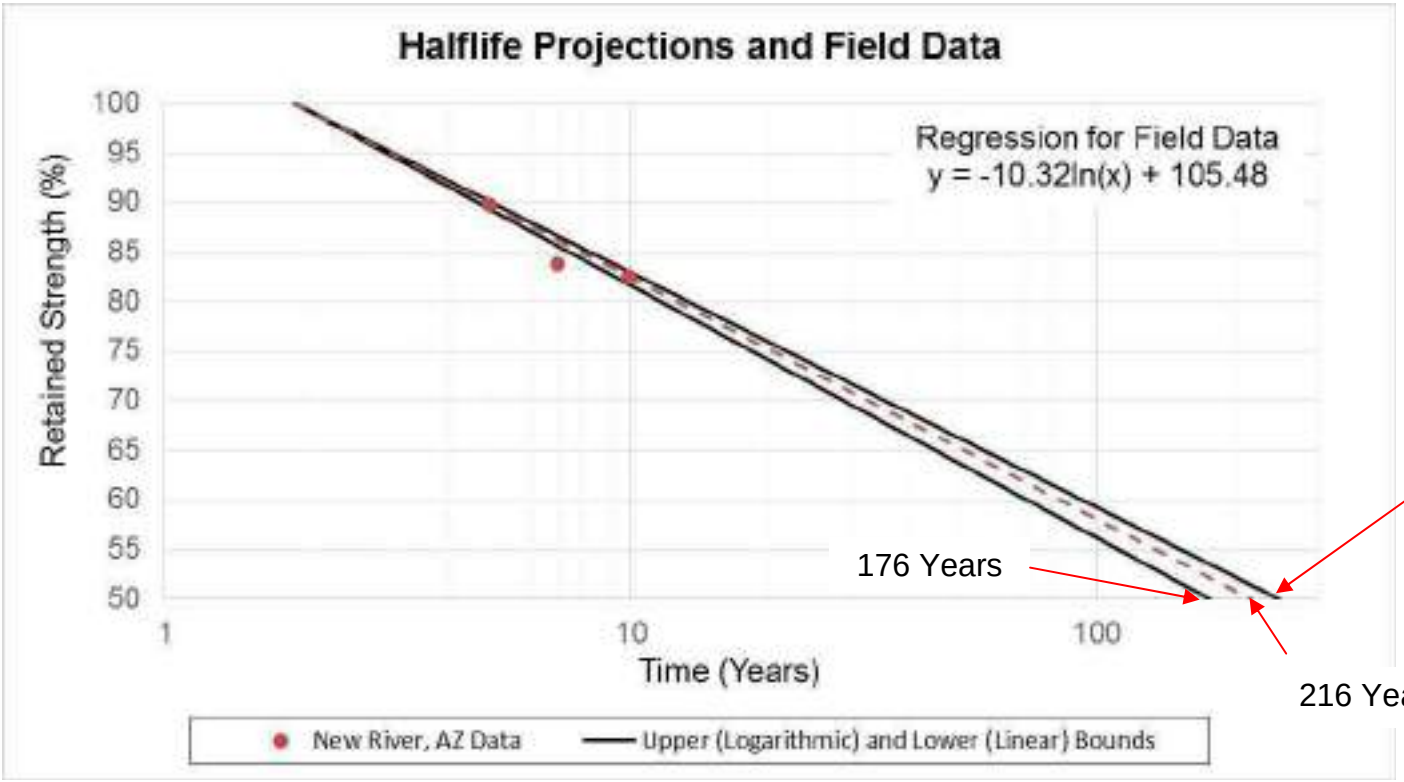
Linear Extrapolations for Half-life Months

Watershed Geosythetics – ClosureTurf® UV Assessment

Geosyntec consultants

Figure **6**

Kennesaw, GA	23-April-2015



Note: Geosyntec calculated an upper bound half-life of 277 years and a lower bound half-life of 214 years using the same data and method. Difference between Geosyntec and Richgels calculations are attributed to rounding.

Halflife Projections (Richgels, 2015a, 2015b)
Upper and Lower Bound Estimates
Watershed Geosythetics – ClosureTurf® UV Assessment

Geosyntec consultants

Figure **7**

Kennesaw, GA | 23-March-2015

Attachment A:

Wilson Station Waste Chemical Laboratory Analysis

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy Inc.
P. O. Box 907
85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7375

Lexington, Ky. 606/233-7774
Louisville, Ky. 502/429-5777
Madisonville, Ky. 502/821-7375
Paducah, Ky. 502/444-6547
Pikeville, Ky. 606/432-3104
Evansville, In. 812/425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 08/10/90
Date Reported: 09/25/90
Order #: 90-08-130-03
Date Sampled: 08/09/90
Location: WILSON ST. POZ-O-TEC

P.O. #: OPEN BLANKET ORDER

Work ID: TCLP ANALYSIS

Test Description	Results	Units	Analyzed	By
Test: TCLP METALS		Extracted: 08/28/90	Analyst: ET	
Method: 1311				
ARSENIC	0.091	MG/L	09/06/90	RWF
BARIUM	0.039	MG/L	09/06/90	RWF
CADMIUM	0.019	MG/L	09/06/90	RWF
CHROMIUM	0.059	MG/L	09/06/90	RWF
LEAD	0.414	MG/L	09/06/90	RWF
MERCURY	0.0007	MG/L	09/05/90	TN
SELENIUM	0.029	MG/L	09/06/90	TN
SILVER	0.022	MG/L	09/06/90	RWF
Test: TCLP PESTICIDES		Extracted: 08/25/90	Analyst: DN	
Method: 8080				
CHLORDANE	0.010 U	MG/L	09/18/90	DN
ENDRIN	0.010 U	MG/L	09/18/90	DN
HEPTACHLOR	0.005 U	MG/L	09/18/90	DN
LINDANE	0.010 U	MG/L	09/18/90	DN
METHOXYCHLOR	0.010 U	MG/L	09/18/90	DN
TOXAPHENE	0.020 U	MG/L	09/18/90	DN
HEPTACHLOR EPOXIDE	0.005 U	MG/L	09/18/90	DN
Test: TCLP VOLATILES		Extracted: 09/21/90	Analyst:	
Method: 8240				
BENZENE	0.050 U	MG/L	09/21/90	MRB
CARBON TETRACHLORIDE	0.050 U	MG/L	09/21/90	MRB
CHLOROFORM	0.050 U	MG/L	09/21/90	MRB
1,2 DICHLOROETHANE	0.050 U	MG/L	09/21/90	MRB

Submitted by

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy Inc.
P. O. Box 907
85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7375

Lexington, Ky. 606/233-7774
Louisville, Ky. 502/429-5777
Madisonville, Ky. 502/821-7375
Paducah, Ky. 502/444-6547
Pikeville, Ky. 606/432-3104
Evansville, In. 812/425-9288

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Date Reported: 09/25/90
Order #: 90-08-130-03
Date Sampled: 08/09/90
Location: WILSON ST. POZ-O-TEC

P.O. #: OPEN BLANKET ORDER
Work ID: TCLP ANALYSIS

Test Description	Results	Units	Analyzed	By
Test: TCLP ACIDS		Extracted: 08/28/90	Analyst:	
Method: 8270				
O-CRESOL	0.010 U	MG/L	09/22/90	ET
M-CRESOL	0.010 U	MG/L	09/22/90	ET
P-CRESOL	0.010 U	MG/L	09/22/90	ET
CRESOL	0.010 U	MG/L	09/22/90	ET
PENTACHLOROPHENOL	0.050 U	MG/L	09/22/90	ET
2,4,5 TRICHLOROPHENOL	0.050 U	MG/L	09/22/90	ET
2,4,6 TRICHLOROPHENOL	0.010 U	MG/L	09/22/90	ET
Test: TCLP BASE NEUTRALS		Extracted: 08/28/90	Analyst: ET	
Method: 8270				
1,4-DICHLOROBENZENE	0.010 U	MG/L	09/22/90	DHM
2,4-DINITROTOLUENE	0.010 U	MG/L	09/22/90	DHM
HEXACHLOROBENZENE	0.010 U	MG/L	09/22/90	DHM
HEXACHLOROBUTADIENE	0.010 U	MG/L	09/22/90	DHM
HEXACHLOROETHANE	0.010 U	MG/L	09/22/90	DHM
NITROBENZENE	0.010 U	MG/L	09/22/90	DHM
PYRIDINE	0.010 U	MG/L	09/22/90	DHM
Test: TCLP HERBICIDES		Extracted: 08/31/90	Analyst: RE	
Method: 509 B				
2,4-D	0.010 U	MG/L	09/19/90	DN
2,4,5-TP (SILVEX)	0.010 U	MG/L	09/19/90	DN

Submitted by

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a subsidiary of McCoy & McCoy Inc.
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85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7375

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Louisville, Ky. 502/429-5777
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Order #: 90-08-130-03
Date Sampled: 08/09/90
Location: WILSON ST. POZ-O-TEC

P.O. #: OPEN BLANKET ORDER
Work ID: TCLP ANALYSIS

Test Description	Results	Units	Analyzed	By
1,1-DICHLOROTHYLENE	0.050 U	MG/L	09/21/90	MRB
METHYL ETHYL KETONE (MEK)	0.050 U	MG/L	09/21/90	MRB
TETRACHLOROETHYLENE	0.050 U	MG/L	09/21/90	MRB
TRICHLOROETHYLENE	0.050 U	MG/L	09/21/90	MRB
VINYL CHLORIDE	0.050 U	MG/L	09/21/90	MRB
CHLOROBENZENE	0.050 U	MG/L	09/21/90	MRB

Submitted by

01-335 / Allen

FOR INTERNAL USE ONLY:
Date Logged: 6-26-91
Receipt Number:
Date Approved/Denied:
County: Ohio

RECEIVED
JUN 24 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

☐ NEW
☐ UPDA

(Prepare an individual application for each waste stream)

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Big Rivers Electric Corp. Wilson Station
2. Mailing Address: PO Box 24 42328
3. Address Where Waste Generated: PO Box 547 Rt 85 Centertown, KY.
4. Contact Person: Tom Shaw 5. Telephone: (502) 827-2561

B. WASTE DESCRIPTION:

1. Waste Name: Black Beauty Abrasive contaminated with Low lead base Paint
   Describe source of the waste including industrial process: Sandblasting steel to remove old paint
2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☒ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions?
   Regulatory Cite.
4. Waste Condition Upon Generation: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other
5. Waste Treatment Description:
6. Disposal Site Name: Big Rivers Electric Corp D.B. Wilson Station 7. Permit # C92-04
8. Waste Condition Upon Disposal: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other
9. Waste Amount: _____ 55-gal. drums or 1400 Cubic Yards (Note: 1 cubic yard = 202 gallons)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE *(See Instructions)*:

☐ Paper bag ☐ Fiber drum or cardboard box ☐ Metal or plastic drum
☐ Plastic bag ☐ Double bagged in container ☐ Other *(specify)*
☒ Bulk ☐ Mixed with plant trash

D. FEE: Check payable to "KENTUCKY STATE TREASURER." *MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)*

Check for $50.00 # 138484

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous waste under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 40. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-5691, as amended.

Signature of Authorized Agent: Joe L. Craig Date: 6-05-91

Name of Authorized Agent (typed or printed): Joe L. Craig Title: Vice General Manager

of Environmental Aff.
Public, and Informati
Services

GENERATOR: Big Rivers Electric Corp Wilson Station PAGE 2

WASTE NAME: Black Beauty abrasive contaminated with (residual base) paint DATE: 6-14-91

II. LABORATORY INFORMATION

A. LABORATORY IDENTIFICATION:

1. Laboratory Name: N/A
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

B. SAMPLE COLLECTION:

1. Sampler Name: _____
2. Company: _____

C. SAMPLE CONTAINER:

1. Container Type: ☐ Glass ☐ Plastic ☐ Other (explain) _____
2. Sample Type: ☐ Composite ☐ Grab ☐ Other (explain) _____
3. Size of Container: _____
4. Preservative: _____

D. WASTE CHARACTERISTICS:

1. Does the waste exhibit the characteristic of a hazardous waste as described in 401 KAR 31:030:

CHARACTERISTICS	YES	NO	ANALYSIS
Ignitability	☐	☐	Flashpoint _____ °F
Corrosivity	☐	☐	pH _____
Reactivity	☐	☒	_____ mg/kg ☐ H_2S ☐ HCN
EP Toxicity	☐	☐	Contaminant(s) _____ _____ mg/l

2. Is the waste characteristically hazardous? ☐ Yes ☐ No
3. Waste passed paint filter test? ☒ Yes ☐ No 4. Solids Content 100 %

E. LABORATORY CERTIFICATION:

I certify the above results are true and correct and analyses were conducted in accordance with EPA publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Signature of Laboratory Analyst: _____ Date: _____

ATTACH LABORATORY RESULTS

F. MATERIAL SAFETY DATA SHEET:

1. Attached ☒ Yes ☐ No

III. TRANSPORTER INFORMATION

A. HAULER IDENTIFICATION:

1. Hauler Name: Big Rivers Electric Corp
2. Mailing Address: P.O. 24 Henderson KY
3. Contact Person: Tom Shaw 4. Telephone: (502) 827-2561

B. SECONDARY HAULER IDENTIFICATION:

1. Hauler Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

GENERATOR: _____ PAGE 3 O

WASTE NAME: _____ DATE: _____

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Big Rivers Electric Corp D.B. Wilson Permit #: 092-04
2. Mailing Address: P.O. Box
3. Contact Person: Tom Shaw 5. Telephone: (502) 827-2561

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: 7:30 to 5:00
2. Special handling requirements: material will be covered with poz-o-tec (Scrubber Sludge)
3. Comments: _____

C. DISPOSAL METHOD:

☐ Bury in container ☐ Co-mix with garbage ☐ Bury at bottom of lift ☐ Per EPA asbestos procedure

☒ Other Cover with poz-o-tec

D. LANDFILL CERTIFICATION:

I certify that I ☐ will not or ☑ if approved, will accept the waste described in Section I at the landfill named in Section IV.A. I propose to use the method of disposal described in Section IV. C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill: _____ Date: 7-2-92

Name of Authorized Agent (Typed or Printed): Stanley Mays, Plant Superintendent Title: _____

Big River - Electric Corporation
Wilson Island
Paint to be removed
No 6040 White

Kalsors

technical data for:

*AUGUST, 1982

No. 13

METAL PRIMERS	TRI-POLAR PRIMERS NO. 6040 WHITE NO. 6060 LT. GRAY NO. 6051 GRAY	TRI-POLAR FERRITE PRIMER NO. 6000	SUB-MARINE PRIMERS NO. 7230 WHITE NO. 4300 RED	KOLOR-POXY PRIMERS NO. 3200 WHITE NO. 4279 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids By Volume (± 3%)	61%	55%	53%	65%
Solids By Weight (± 3%)	80%	76%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Barium Metaborate	Calcium Borosilicate (No. 4279 Only)
COST DATA				
Theoretical Square Feet/Gallon	366	366	565	350
Dry Film Thickness at Theoretical Sq. Ft./Gal. (mils)	2.5	2.5	1.4	3.0
*Cost per mil Sq. Ft. (List Price)	$.018	$.020	$.025	$.039
Gallons per Ton of Structural Steel	1.0	1.0	1.0	1.0
TYPICAL DATA				
Weight/Gallon (pounds)	12.3 ± .5	12.3 ± .5	14.2 ± .5	12.1 ± .5
Drying Time at 72°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Handle	4 hrs.	4 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs.	24 hrs.
Flash Point Pensky-Martens (±2°F.)	100°F	100°F	85°F	85°F
Shelf Life	2 yrs.	2 yrs.	1 yr.	2 yrs.
Pot Life at 72°F.	---	---	---	2 hrs.
Curing Time at 72°F.	---	---	---	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	350°F
Viscosity at 77°F. in Krebs Units	90 ± 5	92 ± 5	98 ± 5	75 ± 5
Gloss (60° meter)	15 ± 5	15 ± 5	10 ± 5	6 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA				
Wet Film Thickness Range (mils)	4.0 - 6.0	3.6 - 5.5	3.0 - 5.0	3.9 - 9.1
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 6.0
Temperature Range (°F.)	45-90	45-90	45-90	50-120
Humidity (Dew Point - DP) (Relative Humidity - RH)	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH
Induction Time at 72°F	---	---	---	1 hr.
Surface Preparation (SSPC)	SP-1, 6, 7	SP-1, 6, 7	SP-6	SP-6
Application Methods at 72°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.055-.073	.055-.073
Pressure (psig)	50 - 60	50 - 60	40 - 60	50 - 60
Viscosity (KU)	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.019	.011-.017	.015-.019
Pressure (psig)	2500	2500	2500	3500
Viscosity (KU)	88 ± 3	88 ± 3	92 ± 3	81 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	82 ± 3	78 ± 3	85 ± 3
Flow Coating Viscosity (Spark Cup)	21	20	20	---
Recommended Thinner	No. 1030	No. 1030	No. 1030	No. [illegible]

Big Kicker Etc Zinc Primer
Low Stress
Primer Color Matrix
T-Series

technical data for:

May, 1983
No. 12

SILICONE-ALKYD PAINTS	No. 9500 POLY-SILICONE GRAY PRIMER	No. 8250 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	P-SERIES POLY-SILICONE ENAMEL	P-2-SERIES POLY-SILICONE STAINLESS STEEL	T-SERIES TRI-POLAR SILICONE ENAMEL	T-2-SERIES TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	30% Silicone Alkyd	15% Silicone Alkyd	20-30% Silicone Alkyd	15-25% Silicone Alkyd	10-15% Modified Silicone Alkyd	10% Modified Silicone Alkyd
Solids by Volume (±3%)	48%	54%	53%	54%	55%	54%
Solids by Weight (±3%)	63%	72%	66%	71%	66%	71%
Corrosion Inhibitor	Calcium Borosilicate	Barium Meta-borate	—	—	—	—
COST DATA:						
Theoretical Sq. Ft./Gal. Dry Film Thickness of	$10	430	425	450	340	345
Theoretical Sq. Ft./Gal.	4.5	2.0	2.0	2.0	2.5	2.5
Cost per Gal Sq. Ft. @ 1 mil Primer	$.031	$.037	$.036	$.034	$.042	$.040
Gallons per Ton of Structural Steel	1.0	1.0	1.0	1.0	1.0	1.0
PHYSICAL DATA:						
Lbs per Gallon (Pounds)	9.2 ± .3	10.5 ± .3	9.0 ± .3	10.4 ± .3	9.0 ± .3	10.4 ± .3
Dry Time at 72°F (Hours)						
—To Touch	2	2	2	2	2	2
—To Handle	4	4	4	4	4	4
—To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens)	102°F	101°F	101°F	101°F	104°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°	—	—	—	—	—	—
Curing Time at 72°F	—	—	—	—	—	—
Temperature Resistance	600°F	450°F	450°F	450°F	250°F	250°F
Viscosity at 77°F (In Krebs Units)	80 ± 3	85 ± 3	81 ± 3	82 ± 3	80 ± 3	82 ± 3
Flow (60° Garner)	30 ± 5	35 ± 10	85 ± 5	40 ± 10	85 ± 5	40 ± 10
Color	Gray	Gray	Gray	Limited	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (mils)	2.5 - 3.5	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (mils)	1.2 - 1.6	1.8 - 2.3	1.8 - 2.3	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7
Temperature Range (°F)	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F
Humidity Range (Dew Pt. - DP)	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F
Induction Time	—	—	—	—	—	—
Surface Preparation (SSPC)	SP-6, 10	Primed	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.055	.055	.053	.055	.055	.055
Pressure (PSIG)	40 - 50	40 - 50	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (KU)	72 ± 2	72 ± 2	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015 - .019	.015 - .019	.013 - .017	.013 - .017	.013 - .017	.013 - .017
Pressure (PSIG)	2000	2000	2500	2500	2500	2500
Viscosity (KU)	70 ± 2	82 ± 3	82 ± 3	82 ± 3	82 ± 3	82 ± 3
Use of Spatter Viscosity (KU)	78 ± 2	78 ± 2	80 ± 3	80 ± 3	80 ± 3	80 ± 3
Ford Cup Viscosity (Seconds Cup #)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 1558	No. 1558	No. 639	No. 1039	No. 1558	No. 1558

This information is presented as accurate and correct to the best of our knowledge ...

REED MINERALS

MATERIAL SAFETY DATA SHEET

(Complies with 29 CFR 1910.1200)

SECTION I - GENERAL

Reed Minerals
A Division of Harsco Corporation
8149 C Kennedy Avenue
Highland, IN 46322
Emergency Telephone Number:
(219) 923-4200

Product Name: Black Beauty®
Abrasives
CAS Number : 68476-96-0
Particulates not otherwise regulated.
Common Name : Boiler Slag
Date : April 15, 1987
Revised : August 1, 1988
2nd Revision: September 1, 1989

SECTION II - INGREDIENTS

	OSHA *PEL	ACGIH *TLV
Boiler Slag 100% (Typically as an amorphous mixture of Fe,Al,Ca silicates)		
Nuisance Dust		
Total Dust :	15	10
Respirable Dust :	5	5

*Values Expressed as mg/M^3

SECTION III - PHYSICAL DATA

Physical Form	: Solid (angular granules)
Boiling Temperature	: N/A
Melting Temperature	: greater than 2300°F
Vapor Pressure/Density	: N/A
Evaporation Rate	: N/A
Specific Gravity	: 2.7 g/cc (typical)
Water Solubility	: Negligible
Color	: Black
Odor	: None

SECTION IV - FIRE AND EXPLOSION DATA

Product is non-flammable and non-explosive.

SECTION V - REACTIVITY DATA

Product is stable under normal conditions of use, storage, and transportation.

Glass Med. 2

SECTION VI - HEALTH HAZARD DATA

Low health risk by inhalation. Treat as a nuisance dust. Typical free silica less than 0.1%. Human toxic response has not been demonstrated for any route of entry. Mechanical irritation may occur to eyes, skin, or respiratory tract. Pre-existing health conditions may be aggravated.

Carcinogenicity: NTP - No
IARC Monographs - No
OSHA Regulated - No

FIRST AID

In case of:

1. Eye contact - Immediately flush eyes thoroughly with water.

2. Skin contact - Wash skin with soap and water if irritation occurs.

3. Inhalation - Remove affected person(s) to fresh air source.

4. Oral Intake - Rinse mouth out with water.

If symptoms persist, contact a physician or other medical personnel.

SECTION VII - SPILL, LEAK, AND DISPOSAL PROCEDURES

No special procedures required for clean-up. Wetting with water will reduce airborne dust. Uncontaminated product does not exhibit characteristic EP Toxicity and may be disposed of as inert material in an appropriate solid waste landfill according to applicable Federal, State, and Local regulations.

SECTION VIII - CONTROL MEASURES

Use appropriate NIOSH certified respiratory protection when exposure limits may be exceeded. Maintain sufficient ventilation to allow visual contact with work surfaces. Appropriate abrasive blaster's protective equipment is required, which may also include gloves, hood with protective lens, safety glasses, and hearing protection.

SECTION IX - SPECIAL PRECAUTIONS

Keep product dry and free of all contamination to assure free flow. Use an appropriate safety screen over fill hatch of blasting pot. Respirable dusts may be generated during pressure abrasive cleaning operations.

- N O T E -

The opinions expressed herein are those of qualified experts within Harsco Corporation. Harsco believes that the information contained herein is current and accurate for the normal and intended use of this product as of the date of this Material Safety Data Sheet. Since the use of this information and of those opinions or the conditions of use of the product are not within the control of Harsco Corporation, it is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations.

Big Rivers Electric Corporation
Wilson Station
Paint to be removed
No Gray White

Kolors

technical data for:

*AUGUST, 1982

No. 15

METAL PRIMERS	TRI-POLAR PRIMERS *NO. GRAY WHITE NO. 6060 LT. GRAY NO. 6065 GRAY	TRI-POLAR *PERMIT PRIMER NO. 6000	SUB-MARINE PRIMERS NO. 7230 WHITE NO. 4300 RED	KOLOR-POXY PRIMERS NO. 3200 WHITE NO. 4279 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids By Volume [± 3%]	61%	55%	53%	65%
Solids By Weight [± 3%]	80%	78%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Barium Metaborate	Calcium Borosilicate (No. 4279 Only)
COST DATA				
Theoretical Square Feet/Gallon	390	350	564	350
Dry Film Thickness at Theoretical Sq. Ft./Gal (Mils)	2.5	2.5	1.8	3.0
*Cost per Mil Sq. Ft. (List Price)	$.018	$.020	$.028	$.019
Gallons per Ton of Structural Steel	1.0	1.0	1.0	1.0
SPECIAL DATA				
Weight/Gallon (pounds)	12.1 ± .5	12.2 ± .5	14.0 ± .5	13.1 ± .5
Drying Time at 72°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Handle	4 hrs.	4 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs.	24 hrs.
Flash Point Pensky-Martens (±2°F.)	100°F	100°F	85°F	85°F
Shelf Life	2 yrs.	2 yrs.	1 yr.	2 yrs.
Pot Life at 72°F.	—	—	—	7 hrs.
Curing Time at 72°F.	—	—	—	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	350°F
Viscosity at 77°F. in Krebs Units	92 ± 5	92 ± 5	78 ± 5	75 ± 5
Gloss (60° meter)	15 ± 5	15 ± 5	10 ± 5	6 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA	—			
Wet Film Thickness Range (mils)	4.0 - 6.0	3.6 - 5.5	3.0 - 5.0	3.8 - 9.1
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 6.0
Temperature Range (°F.)	65-90	65-90	65-90	50-120
Humidity (Dew Point = DP) (Relative Humidity = RH)	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH
Induction Time at 72°F	—	—	—	1 hr.
Surface Preparation (SSPC)	SP-3, 6, 7	SP-3, 6, 7	SP-6	SP-6
Application Methods at 72°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.055-.073	.055-.073
Pressure (psig)	50 - 60	50 - 60	40 - 60	50 - 60
Viscosity (KU)	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.019	.013-.017	.015-.019
Pressure (psig)	2500	2500	2500	2500
Viscosity (KU)	68 ± 3	68 ± 3	82 ± 3	81 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	82 ± 3	78 ± 3	85 ± 3
Flow Control Viscosity (Sears Cup)	21	20	20	—
Reference Thinner	No. 1134	No. 1019	—	—

Kolors Electric Corporation
Low Stress
Primer to be used on
T-Series

KOLORS

technical data for:

May, 1983
No. 12

SILICONE-ALKYD PAINTS	No. 9554 POLY-SILICONE GRAY PRIMER	No. 8250 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	P-SERIES POLY-SILICONE ENAMEL	P-Z-SERIES S POLY-SILICONE STAINLESS STEEL	T-SERIES TRI-POLAR SILICONE ENAMEL	T-Z-SERIES S TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	50% Si-alkyd	15% Si-alkyd	20-50% Si-alkyd	15-25% Si-alkyd	10-15% Modified Si-alkyd	40% Modified Si-alkyd
Solids by Volume (ASTM)	44%	96%	33%	54%	33%	34%
Solids by Weight (ASTM)	63%	72%	60%	71%	66%	71%
Corrosion Inhibitor	Calcium Borosilicate	Barium Metaborate	—	—	—	—
COST DATA:						
Theoretical Sq. Ft./Gals.	540	450	425	450	340	340
Dry Film Thickness of Theoretical Sq. Ft./Gals.	1.5	2.0	3.0	3.0	2.5	2.5
Cost per Mil Sq. Ft. (List Price)	$.031	$.039	$.028	$.034	$.032	$.030
Gallon per Ton of Structural Steel	1.0	1.0	1.0	1.0	1.0	1.0
PHYSICAL DATA:						
Lbs. per Gallon (Pounds)	9.2 ± .3	10.6 ± .3	9.0 ± .3	10.4 ± .3	9.0 ± .3	10.4 ± .3
Drying Time at 70°F (Hours)						
—To Touch	2	2	1	2	2	2
—To Handle	6	4	4	4	4	4
—To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens) (ASTM)	105°F	101°F	101°F	101°F	101°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°F	—	—	—	—	—	—
Curing Time at 72°F	—	—	—	—	—	—
Temperature Resistance	600°F	450°F	450°F	450°F	250°F	250°F
Viscosity at 77°F in Krebs Units	80 ± 3	82 ± 3	82 ± 3	82 ± 3	81 ± 3	80 ± 3
Gloss (60° meter)	81 ± 5	75 ± 10	85 ± 5	60 ± 10	85 ± 5	40 ± 10
Color	Gray	Gray	All	Colored	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (mils)	2.5 - 3.5	3.5 - 5.0	3.0 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (mils)	1.2 - 1.6	1.6 - 2.7	1.6 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7
Temperature Range (°F)	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F
Humidity Range (Dew Pt. - °F)	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F
Induction Time	—	—	—	—	—	—
Surface Preparation (SSPC)	SP-6, 10	Primed	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.055	.055	.055	.055	.055	.055
Pressure (PSIG)	40 - 60	40 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (Sec)	32 ± 2	72 ± 2	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015 - .019	.015 - .019	.015 - .017	.015 - .017	.015 - .017	.015 - .017
Pressure (PSIG)	2000	2000	2500	2500	2500	2500
Viscosity (Sec)	28 ± 2	62 ± 3	62 ± 3	62 ± 3	62 ± 3	62 ± 3
Roll or Roller Viscosity (Sec)	28 ± 2	76 ± 2	80 ± 3	80 ± 3	80 ± 3	80 ± 3
Flow Cup Viscosity (Seconds Cup)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 650	No. 653	No. 1230	No. 1234	No. 1555	No. 1556

*This data is for reference only and is not to be used for specification purposes.

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Paducah, Ky. 502 444-8547
Pikeville, Ky. 606-432-3104
Evansville, In 812/425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

P.O. #: REL. #0005388

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-305
Date Sampled:
Location: Barge Unloader

Work ID: WILSON PAINT GRIT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01A	WILSON BARGE UNLOADER	02A	WILSON FDC
03A	WILSON #1 CLARIFIER		

U: Concentration is below the given detection limit.
B: Analyte found in the blank as well as the sample.
C: Confirmation of pesticides by gc/ms.
J: Estimated value based on the known detection limit.

Submitted by

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Paducah, Ky 502-442-6547
Pikeville, Ky. 606-432-3104
Evansville, In. 812-425-9788

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-01
Date Sampled: 10/30/91
Location: WILSON BARGE UNLOADER

P.O. #: REL. #005389

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP ACIDS	Extracted: 11/12/91	Analyst: TC		
Method: 8270				
O-CRESOL	0.01 U	MG/L	11/19/91	RBN
M-CRESOL	0.01 U	MG/L	11/19/91	RBN
P-CRESOL	0.01 U	MG/L	11/19/91	RBN
TOTAL CRESOL	0.01 U	MG/L	11/19/91	RBN
PENTACHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,5 TRICHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,6 TRICHLOROPHENOL	0.01 U	MG/L	11/19/91	RBN
Test: TCLP BASE NEUTRALS	Extracted: 11/12/91	Analyst: TC		
Method: 8270				
1,4-DICHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
2,4-DINITROTOLUENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBUTADIENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROETHANE	0.01 U	MG/L	11/19/91	RBN
NITROBENZENE	0.01 U	MG/L	11/19/91	RBN
PYRIDINE	0.01 U	MG/L	11/19/91	RBN
Test: TCLP HERBICIDES	Extracted: 11/08/91	Analyst: RE		
Method: 8150				
2,4-D	0.10 U	MG/L	11/19/91	CT
2,4,5-TP (SILVEX)	0.01 U	MG/L	11/19/91	CT

Submitted by _____

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Paducah, Ky. 502 444-6547
Pikeville, Ky. 606 432-3704
Evansville, In. 812 425-9268

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-01
Date Sampled: 10/30/91
Location: WILSON BARGE UNLOADER

P.O. #: REL. #005388

Work ID: WILSON PAINT CRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP METALS		Extracted: 11/04/91	Analyst: ET	
Method: 1311				
ARSENIC	0.2	MG/L	11/12/91	RWF
BARIUM	2.1	MG/L	11/12/91	RWF
CADMIUM	0.03	MG/L	11/12/91	RWF
CHROMIUM	0.06	MG/L	11/12/91	RWF
LEAD	0.37	MG/L	11/12/91	RWF
MERCURY	0.0002 U	MG/L	11/12/91	KD
SELENIUM	0.26	MG/L	11/12/91	RWF
SILVER	0.04	MG/L	11/12/91	RWF
Test: TCLP PESTICIDES		Extracted: 11/07/91	Analyst: TC	
Method: 8080				
CHLORDANE	0.01 U	MG/L	11/12/91	CT
ENDRIN	0.01 U	MG/L	11/12/91	CT
HEPTACHLOR	0.005 U	MG/L	11/12/91	CT
LINDANE	0.01 U	MG/L	11/12/91	CT
METHOXYCHLOR	0.01 U	MG/L	11/12/91	CT
TOXAPHENE	0.040 U	MG/L	11/12/91	CT
HEPTACHLOR EPOXIDE	0.005 U	MG/L	11/12/91	CT
Test: TCLP VOLATILES		Extracted: 11/05/91	Analyst: ET	
Method: 8240				
BENZENE	0.050 U	MG/L	11/19/91	JEB
CARBON TETRACHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROFORM	0.050 U	MG/L	11/19/91	JEB
1,2 DICHLOROETHANE	0.050 U	MG/L	11/19/91	JEB

Submitted by _____

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Paducah, Ky. 502 444-6547
Pikeville, Ky. 606 432-3101
Evansville, In. 812-426-9289

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-01
Date Sampled: 10/30/91
Location: WILSON BARGE UNLOADER

P.O. #: REL. #0053BB

Work ID: WILSON PAINT CRIT

Test Description	Results	Units	Analyzed	By
1,1-DICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
METHYL ETHYL KETONE (MEK)	0.050 U	MG/L	11/19/91	JEB
TETRACHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
TRICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
VINYL CHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROBENZENE	0.050 U	MG/L	11/19/91	JEB

Submitted by

Big Rivers
Electric Corporation

INTEROFFICE MEMO

October 31, 1991

TO: TOM SHAW

FROM: MIKE WELLS (MW)

SUBJECT: PAINT FILTER LIQUID TEST

A Paint Filter Liquid Test was performed according to EPA Method 9095 on the following sample with results as shown:

CL #	DESCRIPTION	RESULTS
16504	Wilson Barge Unloader Blasting Grit	Passed*

*Deemed to be free of liquids for purposes of 40 CFR 264.314 and 265.314. No material passed through filter during designated period.

crg

LOG NUMBER 91-325

GENERATOR: Big Rivers Electric Corp. PAGE 4 OF 5

WASTE NAME: Abrasive contaminated with paint DATE: 1/12/92

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name: Big Rivers Electric Corp. 2. County: Ohio

3. Landfill Permit #: 92-04 4. Expires: 6/30/92

B. APPROVAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: JAN 22 1992

George F. Gilbert, Jr.

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

C. DENIAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, rejects this application for the reason(s) stated below:

Date: _____

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

SOLID WASTE BRANCH ONLY:
RECEIVED
AUG 26 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

Best Available Copy

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Bryant
FOR INTERNAL USE ONLY:
Date Logged: 01-447
Receipt Number: 2734
Date Approved/Denied: _____
County: _____

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

☑ NEW
☐ UPDA

(Prepare an individual application for each waste stream)

RECEIVED
DEC 05 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Big Rivers Electric Corp D.B. Wilson Station this C
2. Mailing Address: P.O. Box 24 Henderson KY 4242 ATT. Tom Shaw
3. Address Where Waste Generated: P.O. Box 547 Centertown KY 42328
4. Contact Person: Tom Shaw 5. Telephone: 502 827-2561

B. WASTE DESCRIPTION:

1. Waste Name: Abrasive blasting grid contaminated with non lead-base paint.
   Describe source of the waste including industrial process: Abrasive blasting with Black Beauty grit the ~~elastif~~ clarifier
2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☒ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions? ☐ Yes ☒ No
   Regulatory Cite: _____

RECEIVED
JAN 10 1992
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

4. Waste Condition Upon Generation: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other _____
5. Waste Treatment Description: None
6. Disposal Site Name: Big Rivers Electric Corp D.B. Wilson Station 7. Permit # 092.04
8. Waste Condition Upon Disposal: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other _____
9. Waste Amount: _____ 55-gal. drums or 680 Cubic Yards (Note: 1 cubic yard = 202 gallons)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE *(See Instructions)*:

☐ Paper bag _____ ☐ Fiber drum or cardboard box _____ ☐ Metal or plastic drum _____
☐ Plastic bag _____ ☐ Double bagged in container _____ ☐ Other *(specify)* _____
☒ Bulk _____ ☐ Mixed with plant trash _____

D. FEE: Check payable to "KENTUCKY STATE TREASURER." *(MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)*

Check for $50.00 # 140032

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous waste under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 40. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-580), as amended.

Signature of Authorized Agent: Joe L Craig Date: 7/29/91

Name of Authorized Agent *(typed or printed)*: Joe L. Craig Title: Vice General Manager of Fuels, Environment Affairs, and Informat Systems

GENERATOR: Big Rivers Electr. Corp. D.B. Wilson Station PAGE 2 O

WASTE NAME: Abrasive blasting grit contaminated with non lead base paint DATE: 7-29-91

II. LABORATORY INFORMATION ATTACH

A. LABORATORY IDENTIFICATION:

1. Laboratory Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

B. SAMPLE COLLECTION:

1. Sampler Name: _____
2. Company: _____

C. SAMPLE CONTAINER:

1. Container Type: ☐ Glass ☐ Plastic ☐ Other (explain) _____
2. Sample Type: ☐ Composite ☐ Grab ☐ Other (explain) _____
3. Size ofContainer: _____
4. Preservative: _____

D. WASTE CHARACTERISTICS:

1. Does the waste exhibit the characteristic of a hazardous waste as described in 401 KAR 31:030.

CHARACTERISTICS	YES	NO	ANALYSIS
Ignitability	☐	☐	Flashpoint _____ °F
Corrosivity	☐	☐	pH _____
Reactivity	☐	☐	_____ mg/kg ☐ H_2S ☐ HCN
EP Toxicity	☐	☐	Contaminant(s) _____ mg/l

2. Is the waste characteristically hazardous? ☐ Yes ☐ No
3. Waste passed paint filter test? ☐ Yes ☐ No 4. Solids Content _____

E. LABORATORY CERTIFICATION:

I certify the above results are true and correct and analyses were conducted in accordance with EPA publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Signature of Laboratory Analyst: _____ Date: _____

ATTACH LABORATORY RESULTS

F. MATERIAL SAFETY DATA SHEET:

1. Attached ☑ Yes ☐ No

III. TRANSPORTER INFORMATION

A. HAULER IDENTIFICATION:

1. Hauler Name: Big Rivers Electric Corp. D.B. Wilson Station
2. Mailing Address: _____
3. Contact Person: Tom Shaw 4. Telephone: (502) 827-2561

B. SECONDARY HAULER IDENTIFICATION:

1. Hauler Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

GENERATOR: Big Rivers Electr. Corp D.B. Wilson Station PAGE 3

WASTE NAME: Abrasive blasting grit contaminated with lead-base paint DATE: 7-29-91

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Big Rivers Electric Corp D.B. Wilson 2. Permit #: 0204
3. Mailing Address: PO Box 517 Centertown KY 42328 Att. Tom Shaw
4. Contact Person: Tom Shaw 5. Telephone:

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: 7:30 a.m. to 3:30 p.m.
2. Special handling requirements: Cover with poz-o-tec.

3. Comments:

C. DISPOSAL METHOD:

☐ Bury in container ☐ Co-mix with garbage ☑ Bury at bottom of lift ☐ Per EPA asbestos procedure

☐ Other

D. LANDFILL CERTIFICATION:

I certify that I ☐ will not or ☐ if approved, will accept the waste described in Section I at the landfill named in Section IV.A. I propose to use the methods of disposal described in Section IV. C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill: [signature] Date: 7-29-91

Name of Authorized Agent (*Typed or Printed*): Stephen Moss, Plant Superintendent Title:

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy Inc.
P.O. Box 917
Pollard Vue Avenue
Madisonville, Kentucky 42431
Telephone 502-821-7375

Lexington, Ky. 606-299-7775
Louisville, Ky. 502-429-5777
Madisonville, Ky. 502-821-7375
Paducah, Ky. 502-444-6547
Pikeville, Ky. 606-432-3104
Evansville, In. 812-425-8288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAN
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 06/21/91
Date Reported: 07/22/91
Order #: 91-06-297-02
Date Sampled: 06/20/91
Location: ST. #1 OUTSIDE SURFACE (w/Soil)

P.O. #: NOT AVAILABLE
Work ID: TCLP METALS & FLASHPOINT

Test Description	Results	Units	Analyzed	By
FLASHPOINT	NON-FLAME	DEGREES F	07/18/91	ET

Test: TCLP METALS
Method: 1311
Extracted: 07/16/91 Analyst: ET

ARSENIC	NA	MG/L		
BARIUM	NA	MG/L		
CADMIUM	NA	MG/L		
CHROMIUM	NA	MG/L		
LEAD	0.10	MG/L	07/19/91	RWF
MERCURY	NA	MG/L		
SELENIUM	NA	MG/L		
SILVER	NA	MG/L		

Submitted by _____

THE DATA CONTAINED HEREIN RELATES ONLY TO THE MEMBERS OF BODIES FOR YOUR INSPECTION

McCoy & McCoy Laboratories, Inc.
A Subsidiary of McCoy & McCoy, Inc.
P.O. Box 907
Mt. Vernon Square
Madisonville, Kentucky 42431
Telephone 502 821-7375

Lexington, Ky. 606 299-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502 821-7375
Pegueen, Ky. 502 444-6547
Pikeville, Ky. 606 432-3104
Evansville, In. 812 425-9298

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

P.O. #: NOT AVAILABLE

Date Received: 06/21/91
Date Reported: 07/22/91
Order #: 91-06-297-01
Date Sampled: 06/20/91
Location: ST #1, INSIDE SURFACE
Wilson Station
Work ID: TCLP METALS & FLASHPOINT

Test Description	Results	Units	Analyzed	By
FLASHPOINT	NON-FLAME	DEGREES F	07/18/91	ET
Test: TCLP METALS Method: 1311		Extracted: 07/16/91	Analyst: ET	
ARSENIC	NA	MG/L		
BARIUM	NA	MG/L		
CADMIUM	NA	MG/L		
CHROMIUM	NA	MG/L		
LEAD	0.03 U	MG/L	07/19/91	RWF
MERCURY	NA	MG/L		
SELENIUM	NA	MG/L		
SILVER	NA	MG/L		

Submitted by _____

THIS REPORT HAS BEEN PRINTED ON RECYCLED PAPER FOR YOUR PROTECTION

REED MINERALS

MATERIAL SAFETY DATA SHEET

(Complies with 29 CFR 1910.1200)

SECTION I - GENERAL

Reed Minerals
A Division of Harsco Corporation
8149 C Kennedy Avenue
Highland, IN 46322
Emergency Telephone Number:
(219) 923-4200

Product Name: Black Beauty®
Abrasives
CAS Number : 68476-86-8
Particulates not
otherwise regulated.
Common Name : Boiler Slag
Date : April 15, 1987
Revised : August 1, 1988
2nd Revision: September 1, 1989

SECTION II - INGREDIENTS

		OSHA *PEL	ACGIH *TLV
Boiler Slag 100% (Typically as an amorphous mixture of Fe,Al,Ca silicates)	Nuisance Dust		
	Total Dust :	15	10
	Respirable Dust :	5	5

*Values Expressed as mg/M^3

SECTION III - PHYSICAL DATA

Physical Form	:	Solid (angular granules)
Boiling Temperature	:	N/A
Melting Temperature	:	greater than 2300°F
Vapor Pressure/Density	:	N/A
Evaporation Rate	:	N/A
Specific Gravity	:	2.7 g/cc (typical)
Water Solubility	:	Negligible
Color	:	Black
Odor	:	None

SECTION IV - FIRE AND EXPLOSION DATA

Product is non-flammable and non-explosive.

SECTION V - REACTIVITY DATA

Product is stable under normal conditions of use, storage, and transportation.

Blast Medium

SECTION VI - HEALTH HAZARD DATA

Low health risk by inhalation. Treat as a nuisance dust. Typical free silica less than 0.1%. Human toxic response has not been demonstrated for any route of entry. Mechanical irritation may occur to eyes, skin, or respiratory tract. Pre-existing health conditions may be aggravated.

Carcinogenicity: NTP - No
IARC Monographs - No
OSHA Regulated - No

FIRST AID

In case of:

1. Eye contact - immediately flush eyes thoroughly with water.
2. Skin contact - Wash skin with soap and water if irritation occurs.
3. Inhalation - Remove affected person(s) to fresh air source.
4. Oral Intake - Rinse mouth out with water.

If symptoms persist, contact a physician or other medical personnel.

SECTION VII - SPILL, LEAK, AND DISPOSAL PROCEDURES

No special procedures required for clean-up. Wetting with water will reduce airborne dust. Uncontaminated product does not exhibit characteristic EP Toxicity and may be disposed of as inert material in an appropriate solid waste landfill according to applicable Federal, State, and Local regulations.

SECTION VIII - CONTROL MEASURES

Use appropriate NIOSH certified respiratory protection when exposure limits may be exceeded. Maintain sufficient ventilation to allow visual contact with work surfaces. Appropriate abrasive blaster's protective equipment is required, which may also include gloves, hood with protective lens, safety glasses, and hearing protection.

SECTION IX - SPECIAL PRECAUTIONS

Keep product dry and free of all contamination to assure free flow. Use an appropriate safety screen over fill hatch of blasting pot. Respirable dusts may be generated during pressure abrasive cleaning operations.

- N O T E -

The opinions expressed herein are those of qualified experts within Harsco Corporation. Harsco believes that the information contained herein is current and accurate for the normal and intended use of this product as of the date of this Material Safety Data Sheet. Since the use of this information and of these opinions or the conditions of use of the product are not within the control of Harsco Corporation, it is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations.

Big Rivers Electric Corporation
(Henderson Station
Primer to be removed for
T-Series

technical data for:

*May, 1983
No. 12

SILICONE-ALKYD PAINTS	No. 9584 POLY-SILICONE GRAY PRIMER	No. R250 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	P-SERIES POLY-SILICONE ENAMEL	P-1-SERIES S POLY-SILICONE STAINLESS STEEL	T-SERIES TRI-POLAR SILICONE ENAMEL	T-2-SERIES S TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	30% Silicone	15% Silicone	20-30% Silicone	55-25% Silicone	10-15% Modified Silicone	10% Modified Silicone
Solids by Volume (ISO)	48%	54%	53%	54%	53%	54%
Solids by Weight (ISO)	65%	72%	66%	71%	66%	71%
Corrosion Inhibitor	Calcium Borosilicate	Barium Metaborate	—	—	—	—
COST DATA:						
Theoretical Sq. Ft./Gal.	510	430	425	430	340	345
Dry Film Thickness @ Theoretical Sq. Ft./Gal.	1.5	2.0	2.0	2.0	2.5	2.5
Cost per Inst Sq. Ft. (List Price)	$.031	$.051	$.026	$.034	$.022	$.030
Gallon per Ton of Structural Steel	1.0	1.0	1.0	1.0	1.0	1.0
PHYSICAL DATA:						
Lbs per Gallon (Pounds)	9.2 ± .3	10.6 ± .3	9.0 ± .3	10.4 ± .3	9.5 ± .3	10.4 ± .3
Drying Time at 72°F (Hours)						
—To Touch	2	2	2	2	2	2
—To Handle	4	4	4	4	4	4
—To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens) (82°F)	105°F	101°F	101°F	104°F	101°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°F	—	—	—	—	—	—
Curing Time at 72°F	—	—	—	—	—	—
Temperature Resistance	600°F	450°F	450°F	450°F	250°F	250°F
Viscosity at 77°F (in Krebs Units)	80 ± 5	82 ± 5	82 ± 3	82 ± 5	82 ± 5	82 ± 5
Gloss (60° meter)	85 ± 5	75 ± 10	85 ± 5	40 ± 10	85 ± 5	60 ± 10
Color	Gray	Gray	Aff	Limited	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (mils)	2.5 - 3.5	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (mils)	1.2 - 1.6	1.6 - 2.3	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7
Temperature Range (°F)	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F
Humidity Range (Dew Pt. - 3°)	0°F + 5°F	0°F + 5°F	0°F + 5°F	0°F + 5°F	0°F + 5°F	0°F + 5°F
Induction Time	—	—	—	—	—	—
Surface Preparation (SSPC)	SP-6, 10	Primed	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.055	.055	.055	.055	.055	.055
Pressure (PSIG)	40 - 60	40 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (KU)	77 ± 2	77 ± 3	77 ± 3	77 ± 3	77 ± 3	77 ± 3
Airless Spray - Nozzle Size	.015 - .019	.015 - .019	.013 - .017	.013 - .017	.013 - .017	.013 - .017
Pressure (PSIG)	2000	2000	2500	2500	2500	2500
Viscosity (KU)	78 ± 2	82 ± 3	82 ± 3	82 ± 3	82 ± 3	82 ± 3
Wash of Cutter Viscosity (KU)	78 ± 2	78 ± 2	80 ± 3	80 ± 3	80 ± 3	80 ± 3
Flow Cup Viscosity (Seconds Cup)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 1838	No. 838	No. 1838	No. 1833	No. 1838	No. 1833

Data information is presented as accurate and dependable as known at the time of publication. However, no guarantee is expressed or implied regarding the performance of the product based on this information because the manner of use is beyond our control. No suggestion for use is intended as a recommendation to infringe any patent or violate any law or regulation. Buyer should determine the suitability of the product for his intended use and assume all risk and liability whatsoever in connection therewith. Seller shall not be liable for any loss or damage arising from the use of the product, whether special, direct, indirect or consequential.

Big Rivers Electric Corporation
Wilson Station
Paint to be removed
No Coat White

Kalors

technical data for:

*AUGUST, 19[illegible]

No. 13

METAL PRIMERS	TRI-POLAR PRIMERS* NO. 6040 WHITE NO. 6060 LT. GRAY NO. 6065 GRAY	TRI-POLAR* FERRITE PRIMER NO. 6000	SUB-MARINE PRIMERS NO. 7230 WHITE NO. 4300 RED	HIGH-POXY PRIMERS NO. 3100 WHITE NO. 4279 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids By Volume (± 1%)	61%	55%	55%	65%
Solids By Weight (± 1%)	80%	76%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Barium Metaborate	Calcium Borosilicate (No. 4279 Only)
COST DATA				
Theoretical Square Feet/Gallon	390	350	565	350
Dry Film Thickness at Theoretical Sq. Ft./Gal. (mils)	2.5	2.5	1.5	3.0
*Cost per mil Sq. Ft. (List Price)	$.018	$.020	$.028	$.019
Gallons per Ton of Structural Steel	1.0	1.0	1.0	1.0
SPEC DATA				
Weight/Gallon (pounds)	12.3 ± .5	12.3 ± .5	14.0 ± .5	13.2 ± .5
Drying Time at 72°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Recoat	4 hrs.	4 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs.	24 hrs.
Flash Point Pensky-Martens (±2°F.)	100°F	100°F	85°F	85°F
Shelf Life	2 yrs.	2 yrs.	1 yr.	2 yrs.
Pot Life at 72°F.	---	---	---	1 hrs.
Curing time at 72°F.	---	---	---	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	350°F
Viscosity at 77°F. in Krebs Units	92 ± 5	92 ± 5	78 ± 5	75 ± 5
Gloss (60° Meter)	15 ± 5	15 ± 5	10 ± 5	6 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA				
Wet Film Thickness Range (mils)	4.0 - 6.0	3.8 - 5.5	1.0 - 5.0	3.8 - 9.3
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 6.0
Temperature Range (°F.)	45-90	45-90	45-90	50-120
Humidity (Dew Point - DP) (Relative Humidity - RH)	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH
Induction Time at 72°F	---	---	---	1 hr.
Surface Preparation (SSPC)	SP-1, 6, 7	SP-1, 6, 7	SP-6	SP-6
Application Methods at 72°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.055-.073	.055-.071
Pressure (psig)	50 - 60	50 - 60	40 - 60	50 - 60
Viscosity (KU)	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.018	.013-.017	.015-.019
Pressure (psig)	2500	2500	2500	2500
Viscosity (KU)	88 ± 3	88 ± 3	82 ± 3	87 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	82 ± 3	78 ± 3	85 ± 3
Flow Coating Viscosity (Seats Cup)	21	20	20	---
Recommended Thinner	No. 1038	No. 1038	No. 1033	[illegible]

McCoy & McCoy Laboratories, Inc.
A Subsidiary of McCoy & McCoy, P.S.C.
P.O. Box 307
85 East Hoe Avenue
Madisonville, Kentucky 42431
Telephone 502-821-7375

Lexington, Ky. 606-299-7775
Louisville, Ky. 502-439-5777
Madisonville, Ky. 502-821-7375
Paducah, Ky. 502-444-6547
Pikeville, Ky. 606-432-3104
Evansville, In. 812-425-0288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385
Date Sampled:
Location: C/A-Fly

P.O. #: REL. #0005388

Work ID: WILSON PAINT GRIT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01A	WILSON BARGE UNLOADER	02A	WILSON FDG
03A	WILSON #1 CLARIFIER		

U: Concentration is below the given detection limit.
B: Analyte found in the blank as well as the sample.
C: Confirmation of pesticides by gc/ms.
J: Estimated value based on the known detection limit.

Submitted by

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy Inc
P.O. Box 907
85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502-821-7375

Lexington, Ky. 606 299-7775
Louisville, Ky. 502 423-5777
Madisonville, Ky. 502 821-7375
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Evansville, In. 812 425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-03
Date Sampled: 10/30/91
Location: WILSON #1 CLARIFIER

P.O. #: REL. #005388

Work ID: WILSON PAINT CRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP ACIDS		Extracted: 11/12/91	Analyst: TC	
Method: 8270				
O-CRESOL	0.01 U	MG/L	11/19/91	RBN
M-CRESOL	0.01 U	MG/L	11/19/91	RBN
P-CRESOL	0.01 U	MG/L	11/19/91	RBN
TOTAL CRESOL	0.02 U	MG/L	11/19/91	RBN
PENTACHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,5 TRICHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,6 TRICHLOROPHENOL	0.01 U	MG/L	11/19/91	RBN
Test: TCLP BASE NEUTRALS		Extracted: 11/12/91	Analyst: TC	
Method: 8270				
1,4-DICHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
2,4-DINITROTOLUENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBUTADIENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROETHANE	0.01 U	MG/L	11/19/91	RBN
NITROBENZENE	0.01 U	MG/L	11/19/91	RBN
PYRIDINE	0.01 U	MG/L	11/19/91	RBN
Test: TCLP HERBICIDES		Extracted: 11/08/91	Analyst: RE	
Method: 8150				
2,4-D	0.10 U	MG/L	11/19/91	CT
2,4,5-TP (SILVEX)	0.01 U	MG/L	11/19/91	CT

Submitted by

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy, Inc.
P.O. Box 307
65 East Nile Avenue
Madisonville, Kentucky 42431
Telephone 502 821-7375

Lexington, Ky. 606 269-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502 821-7375
Paducah, Ky. 502 444-8547
Pikeville, Ky. 606 432-3104
Evansville, In 812-425-8288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-03
Date Sampled: 10/30/91
Location: WILSON #1 CLARIFIER

P.O. #: REL. #0005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP METALS		Extracted: 11/04/91	Analyst: ET	
Method: 1311				
ARSENIC	0.03 U	MG/L	11/12/91	RWF
BARIUM	0.08	MG/L	11/12/91	RWF
CADMIUM	0.002	MG/L	11/12/91	RWF
CHROMIUM	0.02	MG/L	11/12/91	RWF
LEAD	0.03 U	MG/L	11/12/91	RWF
MERCURY	0.0002 U	MG/L	11/12/91	KD
SELENIUM	0.15 U	MG/L	11/12/91	RWF
SILVER	0.003 U	MG/L	11/12/91	RWF
Test: TCLP PESTICIDES		Extracted: 11/07/91	Analyst: TC	
Method: 8080				
CHLORDANE	0.01 U	MG/L	11/12/91	CT
ENDRIN	0.01 U	MG/L	11/12/91	CT
HEPTACHLOR	0.005 U	MG/L	11/12/91	CT
LINDANE	0.01 U	MG/L	11/12/91	CT
METHOXYCHLOR	0.01 U	MG/L	11/12/91	CT
TOXAPHENE	0.040 U	MG/L	11/12/91	CT
HEPTACHLOR EPOXIDE	0.005 U	MG/L	11/12/91	CT
Test: TCLP VOLATILES		Extracted: 11/05/91	Analyst: ET	
Method: 8240				
BENZENE	0.050 U	MG/L	11/19/91	JEB
CARBON TETRACHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROFORM	0.050 U	MG/L	11/19/91	JEB
1,2 DICHLOROETHANE	0.050 U	MG/L	11/19/91	JEB

Submitted by _____

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy, Inc.
P.O. Box 907
85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7375

Lexington, Ky. 606/299-7775
Louisville, Ky. 502/429-5777
Madisonville, Ky. 502/821-7375
Paducah, Ky. 502/444-9547
Pikeville, Ky. 606/432-3104
Evansville, In. 812/425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-03
Date Sampled: 10/30/91
Location: WILSON #1 CLARIFIER

P.O. #: REL. #005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
1,1-DICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
METHYL ETHYL KETONE (MEK)	0.050 U	MG/L	11/19/91	JEB
TETRACHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
TRICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
VINYL CHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROBENZENE	0.050 U	MG/L	11/19/91	JEB

Submitted by

Big Rivers
Electric Corporation

INTEROFFICE MEMO

October 31, 1991

TO: TOM SHAW

FROM: MIKE WELLS mw

SUBJECT: PAINT FILTER LIQUID TEST

A Paint Filter Liquid Test was performed according to EPA Method 9095 on the following sample with results as shown:

CL #	DESCRIPTION	RESULTS
16503	Wilson #1 Clarifier Blasting Grit	Passed*

*Deemed to be free of liquids for purposes of 40 CFR 264.314 and 265.314. No material passed through filter during designated period.

crg

LOG NUMBER 01-647

GENERATOR: Big Rivers Electric Corp. PAGE 4 OF 5

WASTE NAME: Grease Coal Combustion Waste DATE: 1/13/92

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name: Big Rivers Electric Corp. 2. County: Ohio

3. Landfill Permit #: 92-04 4. Expires: 6/30/92

B. APPROVAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: JAN 22 1992

George F. Gilbert Jr.

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

C. DENIAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, rejects this application for the reason(s) stated below.

Date: _____

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

Bryant 01-446

Best Available Copy

STEBBINS COUNTY:
RECEIVED
AUG 26 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

FOR INTERNAL USE ONLY:
Date Logged: _____
Receipt Number: 2734
Date Approved/Denied: _____
County: _____

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

☑ NEW
☐ UPDAT

(Prepare an individual application for each waste stream)

RECEIVED
DEC 05 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH
ATT. Tom Shaw

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Big Rivers Electric Corp D. B. Wilson
2. Mailing Address: P.O. Box 24 Henderson KY 42420
3. Address Where Waste Generated: P.O. Box 547 ~~Sebree~~ Centertown KY 42328 ATT Tom Shaw
4. Contact Person: Tom Shaw 5. Telephone: _____

B. WASTE DESCRIPTION:

1. Waste Name: Abrasive blasting contaminated with coal tar ~~epoxy~~ Epoxy

   Describe source of the waste including industrial process: Abrasive blasting with Black Beauty the FGD system outlet duct to remove coal tar epoxy from the steel.

2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☐ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions?

   Regulatory Cite: _____

RECEIVED
JAN 10 1992
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

4. Waste Condition Upon Generation: ☑ Solid ☐ Semi-solid ☐ Liquid ☐ Other _____
5. Waste Treatment Description: _____
6. Disposal Site Name: Big Rivers Electric Corp D.B. Wilson Station Permit # 092.04
8. Waste Condition Upon Disposal: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other _____
9. Waste Amount: _____ 55-gal. drums or 25 Cubic Yards (Note: 1 cubic yard = 202 gallons)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE *(See Instructions)*:

☐ Paper bag _____ ☐ Fiber drum or cardboard box _____ ☐ Metal or plastic drum _____
☐ Plastic bag _____ ☐ Double bagged in container _____ ☐ Other *(specify)* _____
☒ Bulk _____ ☐ Mixed with plant trash _____

D. FEE: Check payable to "KENTUCKY STATE TREASURER." *(MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)*

Check for $50.00 # 140032

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous waste under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 40. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-580), as amended.

Signature of Authorized Agent: Joe L. Craig Date: 7/24/91

Name of Authorized Agent *(typed or printed)*: Joe L. Craig Title: Vice General Manager o

Fuels, Environmental Affairs, and Informati Systems

GENERATOR: Big Rivers Electric Corp D.B. Wilson PAGE 2

WASTE NAME: Abrasive blasting contaminated with coal TAR EPOXY DATE: 6-14-91

II. LABORATORY INFORMATION ATTACHED

A. LABORATORY IDENTIFICATION:

1. Laboratory Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4 Telephone: _____

B. SAMPLE COLLECTION:

1. Sampler Name: _____
2. Company: _____

C. SAMPLE CONTAINER:

1. Container Type: ☐ Glass ☐ Plastic ☐ Other (*explain*) _____
2. Sample Type: ☐ Composite ☐ Grab ☐ Other (*explain*) _____
3. Size of Container: _____
4. Preservative: _____

D. WASTE CHARACTERISTICS:

1. Does the waste exhibit the characteristic of a hazardous waste as described in 401 KAR 31:000:

CHARACTERISTICS	YES	NO	ANALYSIS
Ignitability	☐	☐	Flashpoint _____ °F
Corrosivity	☐	☐	pH _____
Reactivity	☐	☐	_____ mg/kg ☐ H_2S ☐ HCN
EP Toxicity	☐	☐	Contaminant(s) _____ _____ mg/l

2. Is the waste characteristically hazardous? ☐ Yes ☐ No
3. Waste passed paint filter test? ☐ Yes ☐ No 4. Solids Content _____

E. LABORATORY CERTIFICATION:

I certify the above results are true and correct and analyses were conducted in accordance with EPA publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Signature of Laboratory Analyst: _____ Date: _____

ATTACH LABORATORY RESULTS

F. MATERIAL SAFETY DATA SHEET:

1. Attached ☒ Yes ☐ No

III. TRANSPORTER INFORMATION

A. HAULER IDENTIFICATION:

1. Hauler Name: Big Rivers Electric Corp. D.B. Wilson
2. Mailing Address: _____
3. Contact Person: Tom Strand 4. Telephone: 502 827-2561

B. SECONDARY HAULER IDENTIFICATION:

1. Hauler Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

GENERATOR: Big Rivers Electric - D.B. Wilson PAGE 3

WASTE NAME: Abrasive blasting contaminated with coal tar Epoxy DATE: 6-14-91

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Big Rivers Electric Corp. - D.B. Wilson 2. Permit #: 0902-04
3. Mailing Address: P.O. Box 543 Centertown KY 42328 AT: Tom Shaw
4. Contact Person: Tom Shaw 5. Telephone:

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: 7:30 to 3:30 pm
2. Special handling requirements: Cover with poz-o-tec

3. Comments:

C. DISPOSAL METHOD:

☐ Bury in container ☐ Co-mix with garbage ☑ Bury at bottom of lift ☐ Per EPA asbestos procedure

☐ Other

D. LANDFILL CERTIFICATION:

I certify that I [☐] will not or [☐] if approved, will accept the waste described in Section I at the landfill named in Section IV.A. I propose to use the method of disposal described in Section IV. C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill: Date: 7-2-92

Name of Authorized Agent (Typed or Printed): Stephen Moss Title: Plant Superintendent

McCoy & McCoy Laboratories, Inc.
[illegible]
P.O. Box 217
67 East Nine Avenue
Madisonville, Kentucky 42431
Telephone 502 821-7370

Lexington, Ky. 606 296-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502 821-7370
Paducah, Ky. 502 444 6547
Pikeville, Ky. 606 432-3100
Evansville, In. 812-425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 06/21/91
Date Reported: 07/22/91
Order #: 91-06-297-03
Date Sampled: 06/20/91
Location: ST #1 TURBINE SHROUD
Wilson Station

P.O. #: NOT AVAILABLE

Work ID: TCLP METALS & FLASHPOINT

Test Description	Results	Units	Analyzed	By
FLASHPOINT	NON-FLAME	DEGREES F	07/18/91	ET
Test: TCLP METALS Method: 1311		Extracted: 07/19/91	Analyst: ET	
ARSENIC	NA	MG/L		
BARIUM	NA	MG/L		
CADMIUM	NA	MG/L		
CHROMIUM	NA	MG/L		
LEAD	0.03 U	MG/L	07/19/91	RWF
MERCURY	NA	MG/L		
SELENIUM	NA	MG/L		
SILVER	NA	MG/L		

Submitted by _____

[illegible]

MATERIAL SAFETY DATA SHEET

NFPA 1-82

FOR COATINGS, RESINS AND RELATED MATERIALS

7001
7005

(Approved by U.S. Department of Labor, Essentially Similar to Form OSHA 20)

Section I

MANUFACTURER'S NAME: PORTER PAINT CO.

DATE OF PREP: 11/16/84

STREET ADDRESS: 400 South 13th Street

CITY, STATE AND ZIP CODE: Louisville, KY 40201

EMERGENCY TELEPHONE NO: (502) 588-9259

INFORMATION TELEPHONE NO: (502) 586-9290

PRODUCT CLASS: Coal Tar Epoxy

MANUFACTURER'S CODE IDENTIFICATION

TRADE NAME

7001 Tarset Standard (Part A)
7005 Tarset Catalyst (Part B)

Section II—HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT A	PERCENT B	PERCENT A+B	OCCUPATIONAL EXPOSURE LIMITS (TLV)	VAPOR PRESSURE (@ 20°C)	TOXICITY DATA
Coal Tar Pitch Volatiles (benzene solubles), CAS #8007-45-2	<1		<1	0.2 mg/m³		skin, inhala
Hi Flash Naphtha		30	<1	200 ppm	<3.0	
Xylene, CAS #1330-20-7	<5		<5	100 ppm	5.1	
Coal Tar Naphtha, CAS #MX8030-31-7	15		15	100 ppm *		
Diethylenetriamine, CAS #111-40-0		65	2	1 ppm		skin, pulmor sensitizer
Benzene, CAS #71-43-2	<0.1	**by volume		10 ppm		
	* Indene present, TLV of			10 ppm		≤ 45 mg/m³

Section III—PHYSICAL DATA

BOILING RANGE: 282-374°F

VAPOR DENSITY: ☒ HEAVIER ☐ LIGHTER THAN AIR

EVAPORATION RATE: ☐ FASTER ☒ SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME: A=30 B=37 A+B=30

WEIGHT PER GALLON: A=11.0 lbs. B=7.7 lbs. A+B=10.6 lbs.

Section IV—FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: Combustible Liquid, OSHA Class II; DOT Combustible

FLASH POINT: A=103°F B=115°F A+B=101°F

LEL 0.7

EXTINGUISHING MEDIA

☒ FOAM ☐ ALCOHOL FOAM ☒ CO_2 ☒ DRY CHEMICAL ☐ WATER FOG ☐ OTHER

UNUSUAL FIRE AND EXPLOSION HAZARDS

Keep containers tightly closed. Isolate from heat, sparks, electrical equipment, and open flame. Closed containers may explode when exposed to extreme heat. In absence of electricity water spray (fog nozzle preferred) may be used to cool containers. Avoid exposure to decomposition products. Wear self-contained breathing equipment.

Section V—HEALTH HAZARD DATA

HEALTH HAZARDS (ACUTE AND CHRONIC)

Inhalation: Irritation of the respiratory tract or acute nervous system causing headache,dizziness, nausea.

Acute: Eye and Skin: Primary irritation. Photo sensitization may occur.

Chronic: Prolonged or repeated exposures may lead to dermatitis, skin cancer. DETA has potential to be a pulmonary sensitizer.

EMERGENCY AND FIRST AID PROCEDURES

Vapors: Remove from exposure. Restore breathing. Keep warm and quiet. Notify physician.

Splash (Eyes): Flush immediately with large amounts of water for at least 15 minutes. Take to physician for medical treatment.

Splash (Skin): Wash affected areas with water. Remove contaminated clothing.

Section VI—REACTIVITY DATA

STABILITY (UNSTABLE, STABLE) STABLE CONDITIONS TO AVOID

INCOMPATABILITY (MATERIALS TO AVOID)

HAZARDOUS DECOMPOSITION PRODUCTS

May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain CO

HAZARDOUS POLYMERIZATION (MAY OCCUR, WILL NOT OCCUR) WILL NOT OCCUR

Section VII—SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition (flames, hot surfaces, and electrical, static or friction sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and use non-sparking tools.

WASTE DISPOSAL METHOD: Dispose of in a safe manner in accordance with local, state, and federal regulations. Do not incinerate closed containers.

Section VIII—SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION In outdoor or open areas with unrestricted ventilation, use NIOSS/MSHA-approved filter respirator to remove solid airborne particles of overspray during spray application. In restricted ventilation areas use approved mechanical filter respirators designed to remove particulates, gas and vapor. In confined areas, use approved air line type respirators and hood. VENTILATION: Provide general dilution or local exhaust ventilation in volume and pattern to keep the TLV's and the LEL below the stated limits and to remove decomposition products during welding or flame cutting of surfaces coated with this product.

PROTECTIVE GLOVES Required for prolonged or repeated contact.

EYE PROTECTION Must use safety eyewear with splash guards or side shields.

OTHER PROTECTIVE EQUIPMENT Remove and wash contaminated clothing.

Section IX—SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Secure closures and keep containers upright to prevent leakage. Store large quantities only in buildings designed to comply with OSHA 1910.106. Other Precautions:Do not store above 120°F. Do not take internally. Before smoking or eating, clean hands thoroughly. Do not get on skin or in eyes. Avoid breathing vapors or spray mist. Avoid storing or using near heat, sparks, or flame. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. Do not flame cut, braze or weld without approved respirator or appropriate ventilation. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Workmen should be required to use only non-ferrous tools and wear non-sparking and conductive shoes in areas where explosion hazards exist.

REED MINERALS

MATERIAL SAFETY DATA SHEET

(Complies with 29 CFR 1910.1200)

SECTION I - GENERAL

Reed Minerals
A Division of Harsco Corporation
8145 C Kennedy Avenue
Highland, IN 46322
Emergency Telephone Number:
(219) 923-4200

Product Name: Black Beauty®
Abrasives
CAS Number : 68476-86-8
Particulates not
otherwise regulated.
Common Name : Boiler Slag
Date : April 15, 1987
Revised : August 1, 1988
2nd Revision: September 1, 1989

SECTION II - INGREDIENTS

		OSHA *PEL	ACGIH *TLV
Boiler Slag 100% (Typically as an amorphous mixture of Fe,Al,Ca silicates)	Nuisance Dust		
	Total Dust :	15	10
	Respirable Dust :	5	5

*Values Expressed as mg/M^3

SECTION III - PHYSICAL DATA

Physical Form	:	Solid (angular granules)
Boiling Temperature	:	N/A
Melting Temperature	:	greater than 2300°F
Vapor Pressure/Density	:	N/A
Evaporation Rate	:	N/A
Specific Gravity	:	2.7 g/cc (typical)
Water Solubility	:	Negligible
Color	:	Black
Odor	:	None

SECTION IV - FIRE AND EXPLOSION DATA

Product is non-flammable and non-explosive.

SECTION V - REACTIVITY DATA

Product is stable under normal conditions of use, storage, and transportation.

Glass Medial

SECTION VI - HEALTH HAZARD DATA

Low health risk by inhalation. Treat as a nuisance dust. Typical free silica less than 0.1%. Human toxic response has not been demonstrated for any route of entry. Mechanical irritation may occur to eyes, skin, or respiratory tract. Pre-existing health conditions may be aggravated.

Carcinogenicity: NTP - No
IARC Monographs - No
OSHA Regulated - No

FIRST AID

In case of:

1. Eye contact - Immediately flush eyes thoroughly with water.
2. Skin contact - Wash skin with soap and water if irritation occurs.
3. Inhalation - Remove affected person(s) to fresh air source.
4. Oral intake - Rinse mouth out with water.

If symptoms persist, contact a physician or other medical personnel.

SECTION VII - SPILL, LEAK, AND DISPOSAL PROCEDURES

No special procedures required for clean-up. Wetting with water will reduce airborne dust. Uncontaminated product does not exhibit characteristic EP Toxicity and may be disposed of as inert material in an appropriate solid waste landfill according to applicable Federal, State, and Local regulations.

SECTION VIII - CONTROL MEASURES

Use appropriate NIOSH certified respiratory protection when exposure limits may be exceeded. Maintain sufficient ventilation to allow visual contact with work surfaces. Appropriate abrasive blaster's protective equipment is required, which may also include gloves, head with protective lens, safety glasses, and hearing protection.

SECTION IX - SPECIAL PRECAUTIONS

Keep product dry and free of all contamination to assure free flow. Use an appropriate safety screen over fill hatch of blasting pot. Respirable dusts may be generated during pressure abrasive cleaning operations.

- N O T E -

The opinions expressed herein are those of qualified experts within Harsco Corporation. Harsco believes that the information contained herein is current and accurate for the normal and intended use of this product as of the date of this Material Safety Data Sheet. Since the use of this information and of those opinions or the conditions of use of the product are not within the control of Harsco Corporation, it is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations.

Kolors

technical data for:

*May, 1983
No. 12

SILICONE-ALKYD PAINTS	No. 9554 POLY-SILICONE GRAY PRIMER	No. 8250 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	P-SERIES POLY-SILICONE ENAMEL	P-2-SERIES S POLY-SILICONE STAINLESS STEEL	T-SERIES TRI-POLAR SILICONE ENAMEL	T-2-SERIES S TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	30% Silicone Alkyd	10% Silicone Alkyd	20-30% Silicone Alkyd	15-25% Silicone Alkyd	40-45% Modified Silicone Alkyd	40% Modified Silicone Alkyd
Solids by Volume (ASTM)	48%	34%	33%	34%	33%	34%
Solids by Weight (ASTM)	63%	72%	66%	71%	66%	71%
Corrosion Inhibitor	Calcium Borosilicate	Barium Metaborate	—	—	—	—
COST DATA:						
Theoretical Sq. Ft./Gal.	915	450	429	430	340	345
Dry Film Thickness at Theoretical Sq. Ft./Gal.	1.5	2.0	2.0	2.0	2.0	2.0
Cost per Mil Sq. Ft. (Mist Prime)	$.005	$.030	$.036	$.034	$.022	$.030
Gallon per Ton of Structural Steel	1.0	1.0	1.0	1.0	1.0	1.0
PHYSICAL DATA:						
Lbs per Gallon (Pounds)	9.2 ± .3	10.6 ± .3	9.0 ± .3	10.4 ± .3	9.0 ± .3	10.4 ± .3
Dry Time at 75° (hours)						
—To Touch	2	2	2	2	2	2
—To Handle	4	4	4	4	4	4
—To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens) (ASTM)	105°F	101°F	101°F	101°F	101°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°F	—	—	—	—	—	—
Curing Time at 72°F	—	—	—	—	—	—
Temperature Resistance	600°F	450°F	450°F	450°F	250°F	250°F
Viscosity at 77°F (in Krebs Units)	80 ± 5	82 ± 5	82 ± 5	82 ± 5	82 ± 5	82 ± 5
Gloss (60° meter)	87 ± 5	35 ± 10	85 ± 5	40 ± 10	85 ± 5	40 ± 10
Color	Gray	Gray	Any	Limited	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (mils)	2.5 - 3.5	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (mils)	1.2 - 1.6	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7
Temperature Range (°F)	65 - 90°F	65 - 90°F	65 - 90°F	65 - 90°F	65 - 90°F	65 - 90°F
Humidity Range (Dew Pt. - RH)	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F
Induction Time	—	—	—	—	—	—
Surface Preparation (SSPC)	SP-6, 10	Primer	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.035	.055	.055	.055	.055	.055
Pressure (PSIG)	40 - 60	40 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (KU)	72 ± 2	72 ± 2	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015 - .019	.015 - .019	.013 - .017	.013 - .017	.013 - .017	.013 - .017
Pressure (PSIG)	2000	2000	2500	2500	2500	2500
Viscosity (KU)	78 ± 2	82 ± 2	82 ± 3	82 ± 3	82 ± 3	82 ± 3
Use of Roller Viscosity (KU)	78 ± 2	78 ± 2	80 ± 3	80 ± 3	80 ± 3	80 ± 3
Flow Cup Viscosity (Seconds Cup)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 1636	No. 1638	No. 1635	No. 1638	No. 1633	No. 1638

Big Rivers Electric Corporation
Wilson Station
Paint to be removed
No 6040 White

Tnemec

technical data for:

*AUGUST 1982

No. 53

METAL PRIMERS	TRI-POLAR PRIMERS *NO. 6040 WHITE NO. 6050 LT. GRAY NO. 6051 GRAY	*TRI-POLAR FERRITE PRIMER NO. 6000	SUB-MARINE PRIMERS NO. 7200 WHITE NO. 4300 RED	HILBE-POXY PRIMERS NO. 3200 WHITE NO. 4277 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids by Volume (± 3%)	61%	55%	53%	65%
Solids By Weight (± 3%)	80%	76%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Barium Metaborate	Calcium Borosilicate (No. 4277 Only)
COST DATA				
Theoretical Square Feet/Gallon	390	350	565	350
Dry Film Thickness at Theoretical Sq. Ft./Gal. (mils)	2.5	2.5	1.5	1.0
*Cost per mil Sq. Ft. (List Price)	$.018	$.020	$.028	$.019
Gallons per Ton of Structural Steel	2.4	2.0	1.0	2.0
SEAL DATA				
Weight/Gallon (pounds)	12.3 ± .5	12.3 ± .5	14.0 ± .5	13.1 ± .5
Drying Time at 72°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Handle	4 hrs.	4 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs.	24 hrs.
Flash Point Pensky-Martens (±2°F.)	100°F	100°F	95°F	85°F
Shelf Life	2 yrs.	2 yrs.	1 yr.	2 yrs.
Pot Life at 72°F.	—	—	—	7 hrs.
Cure Time at 72°F.	—	—	—	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	350°F
Viscosity at 77°F. in Krebs Units	92 ± 5	92 ± 5	78 ± 5	75 ± 5
Gloss (60° meter)	11 ± 5	15 ± 5	10 ± 5	8 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA				
Wet Film Thickness Range (mils)	4.0 - 6.0	3.8 - 5.5	3.0 - 5.0	3.8 - 9.1
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 6.0
Temperature Range (°F.)	45-90	45-90	45-90	50-120
Humidity (Dew Point - DP) (Relative Humidity - RH)	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH
Induction Time at 72°F	—	—	—	1 hr.
Surface Preparation (SSPC)	SP-1, 6, 7	SP-1, 6, 7	SP-6	SP-6
Application Methods at 72°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.055-.073	.055-.073
Pressure (psig)	50 - 60	50 - 60	40 - 60	50 - 60
Viscosity (KU)	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.025	.013-.017	.015-.019
Pressure (psig)	2500	2500	2500	2500
Viscosity (KU)	88 ± 3	90 ± 3	92 ± 3	87 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	82 ± 3	78 ± 3	85 ± 3
Flow Coating Viscosity (Sears Cup)	21	20	20	---
Recommended Thinner	No. 1029	No. 1029	No. 1029	

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy Inc
P.O. Box 307
65 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502 821-7375

Lexington, Ky. 606/299 7775
Louisville, Ky. 502 425-5777
Madisonville, Ky 502/821-7375
Paducah, Ky 502 444-6547
Pikeville, Ky 606 432-3104
Evansville, In. 812/425 9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

P.O. #: REL. #005388

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385
Date Sampled:
Location: FGD
Work ID: WILSON PAINT GRIT

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01A	WILSON BARGE UNLOADER
02A	WILSON FDC
03A	WILSON #1 CLARIFIER

U: Concentration is below the given detection limit.
B: Analyte found in the blank as well as the sample.
C: Confirmation of pesticides by gc/ms.
J: Estimated value based on the known detection limit.

Submitted by

McCoy & McCoy Laboratories, Inc.
A Subsidiary of McCoy & McCoy, Inc.
P.O. Box 207
50 East Noe Avenue
Madisonville, Kentucky 42431
Telephone: 502 821-7375

Lexington, Ky. 506 299-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502 821-7375
Paducah, Ky. 502 442-6547
Pikeville, Ky. 606 432-3104
Evansville, In. 812 425-9298

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-02
Date Sampled: 10/30/91
Location: WILSON FDC

P.O. #: REL. 9005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP ACIDS		Extracted: 11/12/91	Analyst: TC	
Method: 8270				
O-CRESOL	0.01 U	MG/L	11/19/91	RBN
M-CRESOL	0.01 U	MG/L	11/19/91	RBN
P-CRESOL	0.01 U	MG/L	11/19/91	RBN
TOTAL CRESOL	0.01 U	MG/L	11/19/91	RBN
PENTACHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,5 TRICHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,6 TRICHLOROPHENOL	0.01 U	MG/L	11/19/91	RBN
Test: TCLP BASE NEUTRALS		Extracted: 11/13/91	Analyst: TC	
Method: 8270				
1,4-DICHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
2,4-DINITROTOLUENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBUTADIENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROETHANE	0.01 U	MG/L	11/19/91	RBN
NITROBENZENE	0.01 U	MG/L	11/19/91	RBN
PYRIDINE	0.01 U	MG/L	11/19/91	RBN
Test: TCLP HERBICIDES		Extracted: 11/08/91	Analyst: RR	
Method: 8150				
2,4-D	0.10 U	MG/L	11/19/91	CT
2,4,5-TP (SILVEX)	0.01 U	MG/L	11/19/91	CT

Submitted by _____

McCoy & McCoy Laboratories, Inc.
A Subsidiary of McCoy & McCoy, PSC
P. O. Box 957
85 East Hoe Avenue
Madisonville, Kentucky 42431
Telephone: 502/821-7375

Lexington, Ky. 606 299-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502/821-7375
Paducah, Ky. 502/444-6647
Pikeville, Ky. 606/432-3104
Evansville, In. 812/425-9298

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-02
Date Sampled: 10/30/91
Location: WILSON FDC

P.O. #: REL. #005388

Work ID: WILSON PAINT CRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP METALS		Extracted: 11/04/91	Analyst: ET	
Method: 1311				
ARSENIC	0.05	MG/L	11/12/91	RWF
BARIUM	0.06	MG/L	11/12/91	RWF
CADMIUM	0.002 U	MG/L	11/12/91	RWF
CHROMIUM	0.02	MG/L	11/12/91	RWF
LEAD	0.03 U	MG/L	11/12/91	RWF
MERCURY	0.0002 U	MG/L	11/12/91	KD
SELENIUM	0.15 U	MG/L	11/12/91	RWF
SILVER	0.003 U	MG/L	11/12/91	RWF
Test: TCLP PESTICIDES		Extracted: 11/07/91	Analyst: TC	
Method: 8080				
CHLORDANE	0.01 U	MG/L	11/12/91	CT
ENDRIN	0.01 U	MG/L	11/12/91	CT
HEPTACHLOR	0.005 U	MG/L	11/12/91	CT
LINDANE	0.01 U	MG/L	11/12/91	CT
METHOXYCHLOR	0.01 U	MG/L	11/12/91	CT
TOXAPHENE	0.040 U	MG/L	11/12/91	CT
HEPTACHLOR EPOXIDE	0.005 U	MG/L	11/12/91	CT
Test: TCLP VOLATILES		Extracted: 11/05/91	Analyst: ET	
Method: 8240				
BENZENE	0.050 U	MG/L	11/19/91	JEB
CARBON TETRACHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROFORM	0.050 U	MG/L	11/19/91	JEB
1,2 DICHLOROETHANE	0.050 U	MG/L	11/19/91	JEB

Submitted by _____

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy Inc
P.O. Box 807
53 East Noel Avenue
Vandalia, Kentucky 62471
Telephone 502/621-7275

Lexington, Ky. 606-299-7775
Louisville, Ky. 502-429-5777
Madisonville, Ky. 502-821-7375
Paducah, Ky. 502-444-6547
Pikeville, Ky. 606-432-3504
Evansville, In. 812-425-9268

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-02
Date Sampled: 10/30/91
Location: WILSON FDG

P.O. #: REL. #005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
1,1-DICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
METHYL ETHYL KETONE (MEK)	0.050 U	MG/L	11/19/91	JEB
TETRACHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
TRICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
VINYL CHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROBENZENE	0.050 U	MG/L	11/19/91	JEB

Submitted by

Big Rivers
Electric Corporation

INTEROFFICE MEMO

October 31, 1991

TO: TOM SHAW

FROM: MIKE WELLS

SUBJECT: PAINT FILTER LIQUID TEST

A Paint Filter Liquid Test was performed according to EPA Method 9095 on the following sample with results as shown:

CL #	DESCRIPTION	RESULTS
16502	Wilson FGD Blasting Grit	Passed*

*Deemed to be free of liquids for purposes of 40 CFR 264.314 and 265.314. No material passed through filter during designated period.

crg

LOG NUMBER 01-446

GENERATOR: Big Rivers Electric Corp PAGE 4 OF 5

WASTE NAME: _____ DATE: 1/13/92

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name: Big Rivers Electric Corp. 2. County Ohio

3. Landfill Permit #: 92 04 4. Expires: 6/30/92

B. APPROVAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: JAN 22 1992

George F. Gilbert, Jr.

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

C. DENIAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, rejects this application for the reason(s) stated below:

Date: _____

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

01-335 / Allen

SOLID WASTE BRANCH ONLY:

RECEIVED
JUN 24 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

FOR INTERNAL USE ONLY:
Date Logged: 6-26-91
Receipt Number:
Date Approved/Denied: 1-2292
County: Ohio

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

(Prepare an individual application for each waste stream)

☐ NEW
☐ UPDATE

RECEIVED
DEC 05 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Big Rivers Electric Corp. Wilson Station
2. Mailing Address: P.O. Box 24 42328
3. Address Where Waste Generated: P.O. Box 547 Rt 85 Centertown, KY.
4. Contact Person: Tom Shaw 5. Telephone: (502) 827-2561

B. WASTE DESCRIPTION:

1. Waste Name: Black Beauty Abrasive contaminated with (non lead base) Paint

   Describe source of the waste including industrial process: Sandblasting steel to remove old paint

2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☒ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions? ☐ Yes ☐ No

   Regulatory Cite:

RECEIVED
JAN 10 1992
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

4. Waste Condition Upon Generation: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other
5. Waste Treatment Description:

Ohio

6. Disposal Site Name: Big Rivers Electric Corp D. B. Wilson Station 7. Permit # 092.04
8. Waste Condition Upon Disposal: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other
9. Waste Amount: _____ 55-gal. drums or 1900 Cubic Yards (Note: 1 cubic yard = 202 gallons)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE *(See Instructions)*:

☐ Paper bag _____ ☐ Fiber drum or cardboard box _____ ☐ Metal or plastic drum _____
☐ Plastic bag _____ ☐ Double bagged in container _____ ☐ Other *(specify)* _____
☒ Bulk _____ ☐ Mixed with plant trash _____

D. FEE: Check payable to "KENTUCKY STATE TREASURER." *(MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)*

Check for $50.00 # 138484

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous waste under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 40. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-580), as amended.

Signature of Authorized Agent: X Joe L. Craig Date: 6-18-91

Name of Authorized Agent *(typed or printed)*: Joe L. Craig Title: Vice General Manager

of Environmental Affairs
Fuels, and Information
Systems

GENERATOR: Big Rivers Electric Corp. Wilson Station PAGE 2 OF

WASTE NAME: Glass Beads abrasive contaminated with (non-lead based) paint DATE: 6-19-97

II. LABORATORY INFORMATION

A. LABORATORY IDENTIFICATION:

1. Laboratory Name: N/A
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

B. SAMPLE COLLECTION:

1. Sampler Name: _____
2. Company: _____

C. SAMPLE CONTAINER:

1. Container Type: ☐ Glass ☐ Plastic ☐ Other (explain) _____
2. Sample Type: ☐ Composite ☐ Grab ☐ Other (explain) _____
3. Size of Container: _____
4. Preservative: _____

D. WASTE CHARACTERISTICS:

1. Does the waste exhibit the characteristic of a hazardous waste as described in 401 KAR 31:030.

CHARACTERISTICS	YES	NO	ANALYSIS
Ignitability	☐	☐	Flashpoint _____ °F
Corrosivity	☐	☐	pH _____
Reactivity	☐	☐	_____ mg/kg ☐ H_2S ☐ HCN
EP Toxicity	☐	☐	Contaminant(s) _____ mg/l

2. Is the waste characteristically hazardous? ☐ Yes ☐ No
3. Waste passed paint filter test? ☒ Yes ☐ No 4. Solids Content: 100 %

E. LABORATORY CERTIFICATION:

I certify the above results are true and correct and analyses were conducted in accordance with EPA publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Signature of Laboratory Analyst: _____ Date: _____

ATTACH LABORATORY RESULTS

F. MATERIAL SAFETY DATA SHEET:

1. Attached ☒ Yes ☐ No

III. TRANSPORTER INFORMATION

A. HAULER IDENTIFICATION:

1. Hauler Name: Big Rivers Electric Corp.
2. Mailing Address: P.O. 24 Henderson KY
3. Contact Person: Tom Shaw 4. Telephone (502) 827-2561

B. SECONDARY HAULER IDENTIFICATION:

1. Hauler Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

GENERATOR: _____ PAGE 3 OF 3

WASTE NAME: _____ DATE: _____

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Big Rivers Electric Corp D.B. Wilson 2. Permit # 092-04

3. Mailing Address: P.O. Box

4. Contact Person: Tom Shaw 5. Telephone: (502) 827-2561

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: 7:30 to 5:00

2. Special handling requirements: Material will be covered with pozz-o-tec (Scrubber Sludge)

3. Comments:

C. DISPOSAL METHOD:

☐ Bury in container ☐ Co-mix with garbage ☐ Bury at bottom of lift ☐ Per EPA asbestos procedure

☒ Other Cover with pozz-o-tec

D) LANDFILL CERTIFICATION:

I certify that I [ ] will not or [X] if approved, will accept the waste described in Section I at the landfill named in Section IV.A. I propose to use the method of disposal described in Section IV. C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill: _____ Date: _____

Name of Authorized Agent (*Typed or Printed*): Stephen Nunn Title: Plant Superintendent

Big River Electric Corporation
Wilson Station
Point Beach Remedial
Air Gray White

Kalsbeek technical data for:

*AUGUST, 1982

No. 13

METAL PRIMERS	TRI-POLAR PRIMERS* NO. 6040 WHITE NO. 6040 LT. GRAY NO. 4851 GRAY	TRI-POLAR* FERRITE PRIMER NO. 6000	SUB-MARINE PRIMERS NO. 7310 WHITE NO. 4300 RED	KOLOR-POXY PRIMERS NO. 3200 WHITE NO. 4279 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids By Volume (± 3%)	61%	55%	53%	65%
Solids By Weight (± 3%)	80%	76%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Barium Metaborate	Calcium Sarcosinate (No. 4279 Only)
COSI DATA				
Theoretical Square Feet/Gallon	100	150	555	350
Dry Film Thickness at Theoretical Sq. Ft./Gal. (mils)	2.5	2.5	1.0	2.5
*Cost per mil Sq. Ft. (List Price)	$ 018	$.020	$.020	$.019
Gallons per Ton of Structural Steel	1.0	1.0	1.0	1.0
SICAL DATA				
Weight/Gallon (pounds)	12.1 ± .5	12.2 ± .5	14.0 ± .5	13.0 ± .5
Drying Time at 72°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Handle	4 hrs.	6 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs.	24 hrs.
Flash Point Pensky-Martens (±2°F.)	100°F	100°F	85°F	65°F
Shelf Life	2 yrs.	2 yrs.	1 yr.	2 yrs.
Pot Life at 72°F.	—	—	—	8 hrs.
Curing Time at 72°F.	—	—	—	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	350°F
Viscosity at 77°F. in Krebs Units	92 ± 5	82 ± 5	78 ± 5	75 ± 5
Gloss (60° meter)	15 ± 5	15 ± 5	10 ± 5	6 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA				
Wet Film Thickness Range (mils)	6.0 - 8.0	5.0 - 6.5	5.0 - 9.0	7.0 - 9.0
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 4.0
Temperature Range (°F.)	45-90	45-90	45-90	50-120
Humidity (Dew Point - DP) (Relative Humidity - RH)	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH
Induction Time at 72°F	—	—	—	1 hr.
Surface Preparation (SSPC)	SP-1, 6, 7	SP-1, 6, 7	SP-6	SP-6
Application Methods at 72°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.055-.070	.055-.073
Pressure (psig)	50 - 60	50 - 60	40 - 60	50 - 60
Viscosity (KU)	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.019	.013-.017	.011-.019
Pressure (psig)	2500	2500	2500	2500
Viscosity (KU)	86 ± 3	86 ± 3	82 ± 3	87 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	82 ± 3	78 ± 3	85 ± 3
Flow Coating Viscosity (Zahn Cup)	21	20	20	—
Recommended Thinner	No. 1678	No. 1638	No. 1200	No. 3700

Big Rivers Electric Corp. ...
Wilson Station
Primer Coating ...
T-Series

technical data for:

May, 1983
No. 12

SILICONE-ALKYD PAINTS	No. 9584 POLY-SILICONE GRAY PRIMER	No. 8230 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	P-SERIES POLY-SILICONE ENAMEL	P-SERIES S POLY-SILICONE STAINLESS STEEL	T-SERIES TRI-POLAR SILICONE ENAMEL	T-SERIES S TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	30% Silicone Alkyd	35% Silicone Alkyd	29-30% Silicone Alkyd	25-27% Silicone Alkyd	10-15% Modified Silicone Alkyd	Not Modified Silicone Alkyd
Solids by Volume (±3%)	48%	54%	35%	54%	53%	54%
Solids by Weight (±3%)	63%	72%	66%	73%	66%	73%
Corrosion Inhibitor	Calcium Borosilicate	Barium Metaborate	----	----	----	----
COST DATA:						
Theoretical Sq. Ft./Gal.	310	435	420	430	340	345
Dry Film Thickness at Theoretical Sq. Ft./Gal.	1.5	2.0	2.0	2.0	2.0	2.5
$/Gal. per Mil Sq. Ft. (Flat Paint)	$.031	$.037	$.035	$.036	$.032	$.030
Dollar per Ton of Structural Steel	1.0	1.0	1.0	1.0	1.0	1.0
PHYSICAL DATA:						
Lbs. per Gallon (Pounds)	9.2 ± .3	10.5 ± .3	9.0 ± .3	10.4 ± .3	9.0 ± .3	10.4 ± .3
Drying Time at 72°F (Hours)						
-To Touch	2	2	2	2	2	2
-To Handle	4	4	4	4	4	4
-To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens) (82°F)	105°F	101°F	101°F	101°F	101°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°F	----	----	----	----	----	----
Curing Time at 72°F	----	----	----	----	----	----
Temperature Resistance	500°F	450°F	450°F	450°F	250°F	250°F
Viscosity at 77°F - in Krebs Units	80 ± 5	82 ± 5	82 ± 5	82 ± 5	82 ± 5	82 ± 5
Gloss (60° meter)	67 ± 5	75 ± 10	65 ± 5	40 ± 10	85 ± 5	40 ± 10
Color	Grey	Grey	All	Limited	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (mils)	2.5 - 3.5	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (mils)	1.2 - 1.6	1.5 - 2.2	1.5 - 2.2	1.5 - 2.2	1.5 - 2.2	1.5 - 2.2
Temperature Range (°F)	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F
Humidity Range (Dew Pt. - DP)	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F
Induction Time	----	----	----	----	----	----
Surface Preparation (SSPC)	SP-6, 10	Primed	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.055	.055	.055	.055	.055	.055
Pressure (PSIG)	40 - 60	40 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (KU)	72 ± 2	72 ± 2	72 ± 2	72 ± 2	72 ± 2	72 ± 2
Airless Spray - Nozzle Size	.015 - .019	.015 - .019	.015 - .017	.015 - .017	.015 - .017	.015 - .017
Pressure (PSIG)	2000	2000	2300	2300	2300	2300
Viscosity (KU)	78 ± 2	82 ± 5	82 ± 5	82 ± 5	80 ± 5	82 ± 5
Use of Paint Viscosity (KU)	78 ± 2	78 ± 2	80 ± 5	80 ± 5	80 ± 5	80 ± 5
Flow Cup Viscosity (Ford Cup #4)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 1838	No. 1838	No. 1838	No. 1838	No. 1838	No. 1838

This information is presented as accurate and correct, in good faith, to assist the user in ...

Black Mount

REED MINERALS

MATERIAL SAFETY DATA SHEET

(Complies with 29 CFR 1910.1200)

SECTION I - GENERAL

Reed Minerals
A Division of Harsco Corporation
8145 C Kennedy Avenue
Highland, IN 46322
Emergency Telephone Number:
(219) 923-4200

Product Name: Black Beauty®
Abrasives
CAS Number : 68476-86-0
Particulates not
otherwise regulated.
Common Name : Boiler Slag
Date : April 15, 1987
Revised : August 1, 1988
2nd Revision: September 1, 1989

SECTION II - INGREDIENTS

	OSHA *PEL	ACGIH *TLV
Boiler Slag 100% (Typically as an amorphous mixture of Fe,Al,Ca silicates)		
Nuisance Dust		
Total Dust :	15	10
Respirable Dust :	5	5

*Values Expressed as mg/M^3

SECTION III - PHYSICAL DATA

Physical Form	: Solid (angular granules)
Boiling Temperature	: N/A
Melting Temperature	: greater than 2300°F
Vapor Pressure/Density	: N/A
Evaporation Rate	: N/A
Specific Gravity	: 2.7 g/cc (typical)
Water Solubility	: Negligible
Color	: Black
Odor	: None

SECTION IV - FIRE AND EXPLOSION DATA

Product is non-flammable and non-explosive.

SECTION V - REACTIVITY DATA

Product is stable under normal conditions of use, storage, and transportation.

Glass Bead
Abr. Media

SECTION VI - HEALTH HAZARD DATA

Low health risk by inhalation. Treat as a nuisance dust. Typical free silica less than 0.1%. Human toxic response has not been demonstrated for any route of entry. Mechanical irritation may occur to eyes, skin, or respiratory tract. Pre-existing health conditions may be aggravated.

Carcinogenicity: NTP - No
IARC Monographs - No
OSHA Regulated - No

FIRST AID

In case of:

1. Eye contact - Immediately flush eyes thoroughly with water.
2. Skin contact - Wash skin with soap and water if irritation occurs.
3. Inhalation - Remove affected person(s) to fresh air source.
4. Oral Intake - Rinse mouth out with water.

If symptoms persist, contact a physician or other medical personnel.

SECTION VII - SPILL, LEAK, AND DISPOSAL PROCEDURES

No special procedures required for clean-up. Wetting with water will reduce airborne dust. Uncontaminated product does not exhibit characteristic EP Toxicity and may be disposed of as inert material in an appropriate solid waste landfill according to applicable Federal, State, and Local regulations.

SECTION VIII - CONTROL MEASURES

Use appropriate NIOSH certified respiratory protection when exposure limits may be exceeded. Maintain sufficient ventilation to allow visual contact with work surfaces. Appropriate abrasive blaster's protective equipment is required, which may also include gloves, hood with protective lens, safety glasses, and hearing protection.

SECTION IX - SPECIAL PRECAUTIONS

Keep product dry and free of all contamination to assure free flow. Use an appropriate safety screen over fill hatch of blasting pot. Respirable dusts may be generated during pressure abrasive cleaning operations.

- N O T E -

The opinions expressed herein are those of qualified experts within Harsco Corporation. Harsco believes that the information contained herein is current and accurate for the normal and intended use of this product as of the date of this Material Safety Data Sheet. Since the use of this information and of these opinions or the conditions of use of the product are not within the control of Harsco Corporation, it is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations.

Big River Electric Corporation
Wilson Station
Paint to be removed
Use beige White

Kolors

technical data for:

AUGUST, 1982

No. 13

VINYL PRIMERS	TRI-POLAR PRIMERS NO. 6040 WHITE NO. 6050 LT. GRAY NO. 6053 GRAY	TRI-POLAR TERRITE PRIMER NO. 6000	SUB-MARINE PRIMERS NO. 7100 WHITE NO. 4100 RED	EPOXY-POXY PRIMERS NO. 3200 WHITE NO. 3275 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids By Volume (± 3%)	61%	55%	53%	65%
Solids By Weight (± 3%)	80%	78%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Barium Metaborate	Calcium Germanolicate (No. 4275 Only)
COST DATA				
Theoretical Square Feet/Gallon	330	350	366	350
Dry Film Thickness at Theoretical Sq. Ft./Gal. (mils)	2.5	2.5	1.5	3.0
*Cost per mil Sq. Ft. (List Price)	$.018	$.020	$.028	$.018
Gallons per Ton of Structural Steel	1.0	1.0	1.0	1.0
TYPICAL DATA				
Weight/Gallon (pounds)	12.1 ± .5	12.1 ± .5	14.0 ± .5	13.7 ± .5
Drying Time at 72°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Handle	4 hrs.	4 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs.	24 hrs.
Flash Point Pensky-Martens (72°F.)	100°F	100°F	85°F	85°F
Shelf Life	2 yrs.	2 yrs.	2 yr.	2 yrs.
Pot Life at 72°F.	---	---	---	4 hrs.
Curing Time at 72°F.	---	---	---	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	350°F
Viscosity at 77°F. in Krebs Units	94 ± 5	93 ± 5	78 ± 5	75 ± 5
Gloss (60° meter)	15 ± 5	15 ± 5	10 ± 5	6 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA				
Wet Film Thickness Range (mils)	4.0 - 6.0	3.0 - 5.5	3.0 - 5.0	3.8 - 9.3
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 6.2
Temperature Range (°F.)	45-90	45-90	45-90	50-110
Humidity (Dew Point - DP) (Relative Humidity - RH)	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH
Induction Time at 72°F	---	---	---	1 hr.
Surface Preparation (SSPC)	SP-1, 6, 7	SP-1, 6, 7	SP-6	SP-6
Application Methods at 72°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.055-.073	.035-.07)
Pressure (psig)	50 - 60	50 - 60	60 - 80	50 - 60
Viscosity (KU)	92 ± 3	92 ± 3	92 ± 3	75 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.019	.013- 017	.015- 019
Pressure (psig)	2500	2500	2500	2500
Viscosity (KU)	88 ± 3	88 ± 3	82 ± 3	87 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	80 ± 3	78 ± 3	65 ± 3
Flow Coating Viscosity (Sears Cup)	21	20	20	---
Recommended Thinner	No. 1635	No. 1638	No. 1300	---

Big Rivers Electric Corporation
Wilson Station
Primer Evaluation
T-Series

KOLOR

technical data for:

May, 1983
No. 12

SILICONE-ALKYD PAINTS	No. 9534 POLY-SILICONE GRAY PRIMER	No. 5250 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	P-SERIES POLY-SILICONE ENAMEL	P-2-SERIES S POLY-SILICONE STAINLESS STEEL	T-SERIES TRI-POLAR SILICONE ENAMEL	T-2-SERIES S TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	30% Silicone-alkyd	35% Silicone-alkyd	20-30% Silicone-alkyd	15-23% Silicone-alkyd	10-15% Modified Silicone-alkyd	30% Modified Silicone-alkyd
Solids by Volume (ASTM)	48%	54%	55%	54%	33%	54%
Solids by Weight (ASTM)	69%	75%	66%	72%	65%	71%
Corrosion Inhibitor	Calcium Borosilicate	Barium Meta-borate	—	—	—	—
COST DATA:						
Theoretical Sq. Ft./Gal.	510	450	425	430	340	345
Dry Film Thickness at Theoretical Sq. Ft./Gal.	1.5	2.0	2.0	2.0	2.0	2.0
Gallons per Mil Sq. Ft. (Last Primer)	5.051	5.051	5.075	5.034	5.022	5.030
Gallon per Ton of Structural Steel	5.0	5.0	5.0	5.0	5.0	5.0
PHYSICAL DATA:						
Weight per Gallon (Pounds)	9.2 ± .3	10.6 ± .3	9.0 ± .3	10.4 ± .3	9.0 ± .3	10.4 ± .3
Drying Time at 72°F (Hours)						
—To Touch	2	2	2	2	2	2
—To Handle	4	4	4	4	4	4
—To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens) (ASTM)	105°F	101°F	101°F	101°F	101°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°F	—	—	—	—	—	—
Curing Time at 72°F	—	—	—	—	—	—
Temperature Resistance	600°F	450°F	450°F	450°F	250°F	250°F
Viscosity at 77°F in Stormer Units	80 ± 3	82 ± 3	82 ± 3	82 ± 3	82 ± 3	82 ± 3
Gloss (60° meter)	87 ± 5	75 ± 10	85 ± 5	40 ± 10	85 ± 5	40 ± 10
Color	Gray	Gray	Red	Limited	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (Mils)	2.5 - 3.5	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (Mils)	1.2 - 1.6	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7
Temperature Range (°F)	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F
Humidity Range (Dew Pt. - DF)	DF + 5°F	DF + 5°F	DF + 5°F	DF + 5°F	DF + 5°F	DF + 5°F
Induction Time	—	—	—	—	—	—
Surface Preparation (SSPC)	SP-6, 10	Primed	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.033	.055	.055	.055	.055	.035
Pressure (PSIG)	40 - 60	40 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (KU)	72 ± 2	72 ± 2	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015 - .019	.015 - .019	.013 - .017	.015 - .017	.015 - .017	.013 - .017
Pressure (PSIG)	2000	2000	2500	2500	2300	2300
Viscosity (KU)	78 ± 2	82 ± 3	82 ± 3	82 ± 3	82 ± 3	82 ± 3
Roll or Roller Viscosity (KU)	78 ± 2	78 ± 2	80 ± 3	80 ± 3	80 ± 3	80 ± 3
Flow Cup Viscosity (Ford Cup #)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 1638	No. 1638	No. 1638	No. 1638	No. 1633	No. 1635

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy Inc
P.O. Box 907
[illegible] Avenue
Madisonville, Kentucky 42431
Telephone 502 821-7375

Lexington, Ky. 606.299-7775
Louisville, Ky. 502 425-5777
Madisonville, Ky. 502 821-7376
Paducah, Ky. 502 444-6547
Pikeville, Ky. 606 432-3104
Evansville, In. 812/425-6288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385
Date Sampled:
Location:

P.O. #: REL. #0005386

Work ID: WILSON PAINT GRIT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01A	WILSON BARGE UNLOADER	02A	WILSON FGC
03A	WILSON #1 CLARIFIER		

U: Concentration is below the given detection limit.
B: Analyte found in the blank as well as the sample.
C: Confirmation of pesticides by gc/ms.
J: Estimated value based on the known detection limit.

Submitted by

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy Inc.
P.O. Box 307
85 East Nile Avenue
Madisonville, Kentucky 42431
Telephone 502 821-7275

Lexington, Ky. 606-269-7726
Louisville, Ky. 502-429-5777
Madisonville, Ky. 502 821-7275
Paducah, Ky. 502-444-6547
Pikeville, Ky. 606-432-3104
Evansville, In. 812-425-4288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-01
Date Sampled: 10/30/91
Location: WILSON BARGE UNLOADER

P.O. #: REL. #005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP ACIDS Method: 8270		Extracted: 11/12/91	Analyst: TC	
O-CRESOL	0.01 U	MG/L	11/19/91	RBN
M-CRESOL	0.01 U	MG/L	11/19/91	RBN
P-CRESOL	0.01 U	MG/L	11/19/91	RBN
TOTAL CRESOL	0.01 U	MG/L	11/19/91	RBN
PENTACHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,5 TRICHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,6 TRICHLOROPHENOL	0.01 U	MG/L	11/19/91	RBN
Test: TCLP BASE NEUTRALS Method: 8270		Extracted: 11/12/91	Analyst: TC	
1,4-DICHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
2,4-DINITROTOLUENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBUTADIENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROETHANE	0.01 U	MG/L	11/19/91	RBN
NITROBENZENE	0.01 U	MG/L	11/19/91	RBN
PYRIDINE	0.01 U	MG/L	11/19/91	RBN
Test: TCLP HERBICIDES Method: 8150		Extracted: 11/08/91	Analyst: RE	
2,4-D	0.10 U	MG/L	11/19/91	CT
2,4,5-TP (SILVEX)	0.01 U	MG/L	11/19/91	CT

Submitted by _____

McCoy & McCoy Laboratories, Inc.
[illegible] McCoy & McCoy Inc
P.O. Box 207
95 East Nolin Avenue
Martinsville, Kentucky 42151
Telephone: 502 [illegible]

Lexington, Ky. 606 299-7776
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502 821-7375
Paducah, Ky. 502 444-5547
Pikeville, Ky. 606 432-3104
Evansville, In. 812 425 [illegible]

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-365-0
Date Sampled: 10/30/91
Location: WILSON BARGE UNLOADER

P.O. #: REL. #005338

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP METALS Method: 1311		Extracted: 11/04/91 Analyst: ET		
ARSENIC	0.2	MG/L	11/12/91	RWF
BARIUM	2.1	MG/L	11/12/91	RWF
CADMIUM	0.03	MG/L	11/12/91	RWF
CHROMIUM	0.06	MG/L	11/12/91	RWF
LEAD	0.37	MG/L	11/12/91	RWF
MERCURY	0.0002 U	MG/L	11/12/91	KD
SELENIUM	0.26	MG/L	11/12/91	RWF
SILVER	0.04	MG/L	11/12/91	RWF
Test: TCLP PESTICIDES Method: 8080		Extracted: 11/07/91 Analyst: TC		
CHLORDANE	0.01 U	MG/L	11/12/91	CT
ENDRIN	0.01 U	MG/L	11/12/91	CT
HEPTACHLOR	0.005 U	MG/L	11/12/91	CT
LINDANE	0.01 U	MG/L	11/12/91	CT
METHOXYCHLOR	0.01 U	MG/L	11/12/91	CT
TOXAPHENE	0.040 U	MG/L	11/12/91	CT
HEPTACHLOR EPOXIDE	0.005 U	MG/L	11/12/91	CT
Test: TCLP VOLATILES Method: 8240		Extracted: 11/05/91 Analyst: ET		
BENZENE	0.050 U	MG/L	11/19/91	JEB
CARBON TETRACHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROFORM	0.050 U	MG/L	11/19/91	JEB
1,2 DICHLOROETHANE	0.050 U	MG/L	11/19/91	JEB

Submitted by _____

THIS DOCUMENT HAS BEEN PRINTED ON TAMPERPROOF PAPER FOR YOUR PROTECTION

McCoy & McCoy Laboratories, inc.
a subsidiary of McCoy & McCoy, Inc.
P.O. Box 807
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Madisonville, Ky. 502 821-7375
Paducah, Ky. 502 444-6547
Pikeville, Ky. 606 432-2104
Evansville, In. 812 425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385 01
Date Sampled: 10/30/91
Location: WILSON BARGE UNLOADER

P.O. #: REL. #005300

Work ID: WILSON PAINT CRIT

Test Description	Results	Units	Analyzed	By
1,1-DICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
METHYL ETHYL KETONE (MEK)	0.050 U	MG/L	11/19/91	JEB
TETRACHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
TRICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
VINYL CHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROBENZENE	0.050 U	MG/L	11/19/91	JEB

Submitted by

Big Rivers
Electric Corporation

INTEROFFICE MEMO

October 31, 1991

TO: TOM SHAW

FROM: MIKE WELLS

SUBJECT: PAINT FILTER LIQUID TEST

A Paint Filter Liquid Test was performed according to EPA Method 9095 on the following sample with results as shown:

CL #	DESCRIPTION	RESULTS
16504	Wilson Barge Unloader Blasting Grit	Passed*

*Deemed to be free of liquids for purposes of 40 CFR 264.314 and 265.314. No material passed through filter during designated period.

crg

LOG NUMBER [illegible]

GENERATOR: [illegible] PAGE 4 OF 5

WASTE NAME: [illegible] DATE: [illegible]

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name: [illegible] 2. County: [illegible]

3. Landfill Permit #: [illegible] 4. Expires: [illegible]

B. APPROVAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: AUG 2 3 1992

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

C. DENIAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, rejects this application for the reason(s) stated below:

Date:

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

GENERATOR: _____ LOG NO: _____ IR _____

WASTE NAME: _____ DATE: _____

DIVISION OF WASTE MANAGEMENT RECOMMENDATIONS

INTERNAL SIGN OFF SHEET FOR

APPLICATION TO ACCEPT AN ADDITIONAL WASTESTREAM

A SOLID WASTE PERMIT REVIEWER:

1. ☐ Approve ☐ Deny
2. Comments: _____

Reviewer Signature: _____ Date: _____

B PERMIT REVIEW SECTION:

1. Generator Name: _____
2. Waste Name: _____
3. Date of Generator Signature: _____
4. Recommends: ☐ Approval ☐ Denial
5. Comments: _____

Supervisor Signature: _____ Date: _____

Signature: _____ Date: _____

DEP 7084
4th REV 1-91

Best Available Copy

SOLID WASTE BRANCH ONLY:
RECEIVED
AUG 26 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

Bryant
FOR INTERNAL USE ONLY:
Date Logged: 01-447
Receipt Number: 2734
Date Approved/Denied: 1-22-92
County:

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

(Prepare an individual application for each waste stream)

☑ NEW
☐ UPDATE

RECEIVED
DEC 05 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Big Rivers Electric Corp D.B. Wilson Station
2. Mailing Address: P.O. Box 24 Henderson KY 4242 ATT: Tom Shaw
3. Address Where Waste Generated: P.O. Box 547 Centertown KY 42328
4. Contact Person: Tom Shaw 5. Telephone: 502 827-2561

B. WASTE DESCRIPTION:

1. Waste Name: Abrasive blasting grit contaminated with non lead-base paint.
   Describe source of the waste including industrial process: Abrasive blasting with Black Beauty grit the clarifier clarifier
2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☒ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions? ☐ Yes ☒ No
   Regulatory Cite:

RECEIVED
JAN 10 1992
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

4. Waste Condition Upon Generation: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other
5. Waste Treatment Description: None this is.
6. Disposal Site Name: Big Rivers Electric Corp. D.B Wilson Station 7. Permit # 092.04
8. Waste Condition Upon Disposal: ☑ Solid ☐ Semi-solid ☐ Liquid ☐ Other
9. Waste Amount: _____ 55-gal. drums or 6080 Cubic Yards (Note: 1 cubic yard = 202 gallons)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE *(See Instructions)*:

☐ Paper bag _____ ☐ Fiber drum or cardboard box _____ ☐ Metal or plastic drum _____
☐ Plastic bag _____ ☐ Double bagged in container _____ ☐ Other *(specify)* _____
☒ Bulk _____ ☐ Mixed with plant trash _____

D. FEE:

Check payable to "KENTUCKY STATE TREASURER." *(MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)*
Check for $50.00 # 140032

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous waste under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 40. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-580), as amended.

Signature of Authorized Agent: Joe L. Craig Date: 7/29/91
Name of Authorized Agent *(typed or printed)*: Joe L. Craig Title: Vice General Manager

of Fuels, Environmental Affairs, and Information Systems

GENERATOR: Big Rivers Electric Corp. D.B. Wilson Station PAGE 2 OF

WASTE NAME: Abrasive blasting grit contaminated with non-lead base paint DATE: 7-29-91

II. LABORATORY INFORMATION ATTACHED

A. LABORATORY IDENTIFICATION:

1. Laboratory Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

B. SAMPLE COLLECTION:

1. Sampler Name: _____
2. Company: _____

C. SAMPLE CONTAINER:

1. Container Type: ☐ Glass ☐ Plastic ☐ Other (explain) _____
2. Sample Type: ☐ Composite ☐ Grab ☐ Other (explain) _____
3. Size of Container: _____
4. Preservative: _____

D. WASTE CHARACTERISTICS:

1. Does the waste exhibit the characteristic of a hazardous waste as described in 401 KAR 31:030:

CHARACTERISTICS	YES	NO	ANALYSIS
Ignitability	☐	☐	Flashpoint _____ °F
Corrosivity	☐	☐	pH _____
Reactivity	☐	☐	_____ mg/kg ☐ H_2S ☐ HCN
EP Toxicity	☐	☐	Contaminant(s) _____ mg/l

2. Is the waste characteristically hazardous? ☐ Yes ☐ No
3. Waste passed paint filter test? ☐ Yes ☐ No 4. Solids Content: _____

E. LABORATORY CERTIFICATION:

I certify the above results are true and correct and analyses were conducted in accordance with EPA publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Signature of Laboratory Analyst: _____ Date: _____

ATTACH LABORATORY RESULTS

F. MATERIAL SAFETY DATA SHEET:

1. Attached ☑ Yes ☐ No

III. TRANSPORTER INFORMATION

A. HAULER IDENTIFICATION:

1. Hauler Name: Big Rivers Electric Corp. D.B. Wilson Station
2. Mailing Address: _____
3. Contact Person: Tim Shaw 4. Telephone: (502) 827-2561

B. SECONDARY HAULER IDENTIFICATION:

1. Hauler Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

GENERATOR: Big Rivers Electric Corp. D.B. Wilson Station PAGE 3 OF 3

WASTE NAME: Abrasive blasting grit contaminated with lead-base paint DATE: 7-29-97

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Big Rivers Electric Corp. D.B. Wilson 2. Permit #: 0220-04

3. Mailing Address: P.O. Box 543 Centertown KY 42328 Att. Tom Sloan

4. Contact Person: Tom Sloan 5. Telephone:

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: 7:30 am to 2:30 pm

2. Special handling requirements: Cover with poly-plastic

3. Comments

C. DISPOSAL METHOD:

☐ Bury in container ☐ Co-mix with garbage ☒ Bury at bottom of lift ☐ Per EPA asbestos procedure

☐ Other

D. LANDFILL CERTIFICATION:

I certify that I [ ] will not or [ ] if approved, will accept the waste described in Section I for the landfill named in Section IV.A. I propose to use the method of disposal described in Section IV, C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill: Date: 7-30-97

Name of Authorized Agent (Typed or Printed): Stephen Moss, Plant Superintendent Title:

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy, Inc.
P.O. Box 907
85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7375

Lexington, Ky. 606/299-7775
Louisville, Ky. 502/429-5777
Madisonville, Ky. 502/821-7375
Paducah, Ky. 502/444-6547
Pikeville, Ky. 606/432-3104
Evansville, In. 812/425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

P.O. #: NOT AVAILABLE

Date Received: 06/21/91
Date Reported: 07/22/91
Order #: 91-06-297-02
Date Sampled: 06/20/91
Location: ST. #1 OUTSIDE SURFACE WILSON
Work ID: TCLP METALS & FLASHPOINT

Test Description	Results	Units	Analyzed	By
FLASHPOINT	NON-FLAME	DEGREES F	07/18/91	ET

Extracted: 07/16/91 Analyst: ET

Test: TCLP METALS
Method: 1311

ARSENIC	NA	MG/L		
BARIUM	NA	MG/L		
CADMIUM	NA	MG/L		
CHROMIUM	NA	MG/L		
LEAD	0.10	MG/L	07/19/91	RWF
MERCURY	NA	MG/L		
SELENIUM	NA	MG/L		
SILVER	NA	MG/L		

Submitted by

THIS DOCUMENT HAS BEEN PRINTED ON TAMPERPROOF PAPER FOR YOUR PROTECTION.

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy, Inc.
P.O. Box 907
85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7375

Lexington, Ky. 606/299-7775
Louisville, Ky. 502/429-5777
Madisonville, Ky. 502/821-7375
Paducah, Ky. 502/444-6547
Pikeville, Ky. 606/432-3104
Evansville, In. 812/425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

P.O. #: NOT AVAILABLE

Date Received: 06/21/91
Date Reported: 07/22/91
Order #: 91-06-297-01
Date Sampled: 06/20/91
Location: ST #1, INSIDE SURFACE
Wilson Station
Work ID: TCLP METALS & FLASHPOINT

Test Description	Results	Units	Analyzed	By
FLASHPOINT	NON-FLAME	DEGREES F	07/18/91	ET

Extracted: 07/16/91 Analyst: ET

Test: TCLP METALS
Method: 1311

ARSENIC	NA	MG/L		
BARIUM	NA	MG/L		
CADMIUM	NA	MG/L		
CHROMIUM	NA	MG/L		
LEAD	0.03 U	MG/L	07/19/91	RWF
MERCURY	NA	MG/L		
SELENIUM	NA	MG/L		
SILVER	NA	MG/L		

Submitted by _____

THIS DOCUMENT HAS BEEN PRINTED ON TAMPERPROOF PAPER FOR YOUR PROTECTION.

Black Beauty

REED MINERALS

MATERIAL SAFETY DATA SHEET

(Complies with 29 CFR 1910.1200)

SECTION I - GENERAL

Reed Minerals
A Division of Harsco Corporation
3149 C Kennedy Avenue
Highland, IN 46322
Emergency Telephone Number:
(219) 923-4200

Product Name: Black Beauty®
Abrasives
CAS Number : 68476-86-0
Particulates not
otherwise regulated.
Common Name : Boiler Slag
Date : April 15, 1987
Revised : August 1, 1988
2nd Revision: September 1, 1989

SECTION II - INGREDIENTS

	OSHA *PEL	ACGIH *TLV
Boiler Slag 100% (Typically as an amorphous mixture of Fe,Al,Ca silicates)	Nuisance Dust	
	Total Dust : 15	10
	Respirable Dust : 5	5

*Values Expressed as mg/M^3

SECTION III - PHYSICAL DATA

Physical Form	: Solid (angular granules)
Boiling Temperature	: N/A
Melting Temperature	: greater than 2300^0F
Vapor Pressure/Density	: N/A
Evaporation Rate	: N/A
Specific Gravity	: 2.7 g/cc (typical)
Water Solubility	: Negligible
Color	: Black
Odor	: None

SECTION IV - FIRE AND EXPLOSION DATA

Product is non-flammable and non-explosive.

SECTION V - REACTIVITY DATA

Product is stable under normal conditions of use, storage, and transportation.

Black Beauty
Black Magic

SECTION VI - HEALTH HAZARD DATA

Low health risk by inhalation. Treat as a nuisance dust. Typical free silica less than 0.1%. Human toxic response has not been demonstrated for any route of entry. Mechanical irritation may occur to eyes, skin, or respiratory tract. Pre-existing health conditions may be aggravated.

Carcinogenicity: NTP - No
IARC Monographs - No
OSHA Regulated - No

FIRST AID

In case of:

1. Eye contact - Immediately flush eyes thoroughly with water.
2. Skin contact - Wash skin with soap and water if irritation occurs.
3. Inhalation - Remove effected person(s) to fresh air source.
4. Oral Intake - Rinse mouth out with water.

If symptoms persist, contact a physician or other medical personnel.

SECTION VII - SPILL, LEAK, AND DISPOSAL PROCEDURES

No special procedures required for clean-up. Wetting with water will reduce airborne dust. Uncontaminated product does not exhibit characteristic EP Toxicity and may be disposed of as inert material in an appropriate solid waste landfill according to applicable Federal, State, and Local regulations.

SECTION VIII - CONTROL MEASURES

Use appropriate NIOSH certified respiratory protection when exposure limits may be exceeded. Maintain sufficient ventilation to allow visual contact with work surfaces. Appropriate abrasive blaster's protective equipment is required, which may also include gloves, hood with protective lens, safety glasses, and hearing protection.

SECTION IX - SPECIAL PRECAUTIONS

Keep product dry and free of all contamination to assure free flow. Use an appropriate safety screen over fill hatch of blasting pot. Respirable dusts may be generated during pressure abrasive cleaning operations.

- N O T E -

The opinions expressed herein are those of qualified experts within Harsco Corporation. Harsco believes that the information contained herein is current and accurate for the normal and intended use of this product as of the date of this Material Safety Data Sheet. Since the use of this information and of these opinions or the conditions of use of the product are not within the control of Harsco Corporation, it is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations.

Big Rivers Electric Corporation
Wilson Station
Primer to be used
for Series

KOLOSS

technical data for:

May, 1983
No. 12

SILICONE-ALKYD PAINTS	No. 9384 POLY-SILICONE GRAY PRIMER	No. 6250 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	K-6 SERIES POLY-SILICONE ENAMEL	P-2-SERIES S POLY-SILICONE STAINLESS STEEL	7-SERIES TRI-POLAR SILICONE ENAMEL	7-2 SERIES S TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	30% Silicone/Alkyd	19% Silicone/Alkyd	20-30% Silicone/Alkyd	45-55% Silicone/Alkyd	100% Modified Silicone/Alkyd	10% Modified Silicone/Alkyd
Solids by Volume (ASTM)	48%	54%	53%	54%	53%	54%
Solids by Weight (ASTM)	63%	72%	66%	71%	66%	71%
Corrosion Inhibitor	Calcium Borosilicate	Barium Meta-borate	—	—	—	—
COST DATA:						
Theoretical Sq. Ft./Gal.	510	430	475	490	540	345
Dry Film Thickness at Theoretical Sq. Ft./Gal.	1.5	2.0	1.8	2.0	1.9	2.5
Cost per Mil Sq. Ft. (List Price)	$.031	$.037	$.035	$.034	$.032	$.050
Gallon per Ton of Structural Steel	1.0	1.0	1.0	1.0	1.0	1.0
PHYSICAL DATA:						
Lbs per Gallon (Pounds)	9.2 ± .3	10.6 ± .3	9.0 ± .3	10.4 ± .3	9.0 ± .3	10.4 ± .3
Drying Time at 72°F (Hours)						
—To Touch	2	2	2	2	2	2
—To Handle	4	4	4	4	4	4
—To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens) (ASTM)	101°F	101°F	101°F	101°F	101°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°F	—	—	—	—	—	—
Curing Time at 72°F	—	—	—	—	—	—
Temperature Resistance	500°F	450°F	450°F	550°F	250°F	250°F
Viscosity at 77°F in Krebs Units	80 ± 3	82 ± 3	81 ± 3	82 ± 3	82 ± 3	85 ± 3
Gloss (60° meter)	87 ± 6	75 ± 10	85 ± 5	40 ± 20	85 ± 5	60 ± 10
Color	Gray	Gray	All	Limited	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (Mils)	2.5 - 3.5	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (Mils)	1.2 - 1.6	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7
Temperature Range (°F)	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F
Humidity Range (Dew Pt. - DP)	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F
Induction Time	—	—	—	—	—	—
Surface Preparation (SSPC)	SP-6, 10	Primed	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.055	.055	.055	.055	.055	.055
Pressure (PSIG)	40 - 60	50 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (KU)	72 ± 2	72 ± 2	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015 - .019	.015 - .019	.013 - .017	.013 - .017	.015 - .017	.013 - .017
Pressure (PSIG)	2000	2000	2500	2500	2500	2500
Viscosity (KU)	78 ± 2	82 ± 3	82 ± 3	82 ± 3	82 ± 3	82 ± 3
Thinner - Viscosity (KU)	78 ± 2	78 ± 2	80 ± 3	80 ± 3	80 ± 3	80 ± 3
Flow Cup Viscosity (Zahn Cup #2)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 1638	No. 1638	No. 1638	No. 1638	No. 1638	No. 1638

This information is presented as accurate and correct, in good faith, to assist the user in specification

Big River Electric Corporation
Wilson Station
Paint to be removed
No Epoxy White

KALORES

technical data for:

*AUGUST, 1982

No. 13

METAL PRIMERS	TRI-POLAR PRIMERS * NO. 8040 WHITE NO. 8000 LT. GRAY NO. 5853 GRAY	TRI-POLAR * FERRITE PRIMER NO. 8000	SUB-MARINE PRIMERS NO. 7800 WHITE NO. 4300 RED	MOLOR-POXY PRIMERS NO. 3200 WHITE NO. 4279 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids by Volume (± 3%)	61%	55%	53%	65%
Solids By Weight (± 3%)	80%	76%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Barium Metaborate	Calcium Borosilicate (No. 4279 Only)
COST DATA				
Theoretical Square Feet/Gallon	385	365	565	365
Dry Film Thickness at Theoretical Sq. Ft./Gal. (mils)	2.5	2.5	1.5	3.0
*Cost per mil Sq. Ft. (List Price)	$.018	$.020	$.028	$.019
Gallons per Ton of Structural Steel	1.5	1.0	1.0	1.0
SPECIAL DATA				
Weight/Gallon (pounds)	12.1 ± .5	12.1 ± .5	14.0 ± .5	10.2 ± .5
Drying Time at 72°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Handle	4 hrs.	4 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs	24 hrs.
Flash Point Pensky-Martens (±2°F.)	100°F	100°F	85°F	85°F
Shelf Life	2 yrs.	2 yrs.	1 yr.	2 yrs.
Pot Life at 72°F.	---	---	---	2 hrs
Curing Time at 72°F.	---	---	---	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	350°F
Viscosity at 77°F. in Krebs Units	92 ± 5	92 ± 5	78 ± 5	95 ± 5
Gloss (60° meter)	15 ± 5	15 ± 5	10 ± 5	6 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA				
Wet Film Thickness Range (mils)	4.0 - 6.0	3.8 - 5.5	3.0 - 5.0	3.8 - 9.1
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 5.0
Temperature Range (°F.)	45-90	45-90	45-90	50-120
Humidity (Dew Point + 0F) (Relative Humidity + 40%	DP + 5	DP + 5	DP + 5	DP + 5
Induction Time at 72°F	---	---	---	1 hr.
Surface Preparation (SSPC)	SP-1, 6, 7	SP-1, 6, 7	SP-6	SP-6
Application Methods at 72°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.053-.071	.055-.071
Pressure (psig)	50 - 60	50 - 60	40 - 60	50 - 60
Viscosity (KU)	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.019	.013-.017	.015-.019
Pressure (psig)	2500	2500	2500	2500
Viscosity (KU)	86 ± 3	86 ± 3	80 ± 3	87 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	81 ± 3	78 ± 3	85 ± 3
Flow Coating Viscosity (Sears Cup)	21	20	20	---
Recommended Thinner	No. 1638	No. 1619	No. 1203	No. 3705

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy, Inc.
P.O. Box 247
35 Industrial Avenue
Maysville, Kentucky 41056
Telephone: 606 564-7175

Lexington, Ky. 606 299-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502 821-7376
Paducah, Ky. 502 444-6547
Pikeville, Ky. 606 432-3104
Evansville, In. 812 425-9266

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

P.O. #: REL. #005388

Date Received: 10/30/91
Date Reported: 11/27/91
Order #: 91-10-365
Date Sampled:
Location:
Work ID: WILSON PAINT CRIT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01A	WILSON BARGE UNLOADER	02A	WILSON FDC
03A	WILSON #1 CLARIFIER		

U: Concentration is below the given detection limit.
B: Analyte found in the blank as well as the sample.
C: Confirmation of pesticides by gc/ms.
J: Estimated value based on the known detection limit.

Submitted by

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy Inc
P.O. Box 307
39 Fort Hill Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7525

Lexington, Ky. 606-299-7775
Louisville, Ky. 502/429-5777
Madisonville, Ky. 502 821-7525
Paducah, Ky. 502/444-6547
Pikeville, Ky. 606 432-3404
Evansville, In. 812 476-9964

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-03
Date Sampled: 10/30/91
Location: WILSON #1 CLARIFIER

P.O. #: REL. #005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP ACIDS Method: 8270		Extracted: 11/12/91 Analyst: TC		
O-CRESOL	0.01 U	MG/L	11/19/91	RBN
M-CRESOL	0.01 U	MG/L	11/19/91	RBN
P-CRESOL	0.01 U	MG/L	11/19/91	RBN
TOTAL CRESOL	0.01 U	MG/L	11/19/91	RBN
PENTACHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,5 TRICHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,6 TRICHLOROPHENOL	0.01 U	MG/L	11/19/91	RBN
Test: TCLP BASE NEUTRALS Method: 8270		Extracted: 11/12/91 Analyst: TC		
1,4-DICHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
2,4-DINITROTOLUENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBUTADIENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROETHANE	0.01 U	MG/L	11/19/91	RBN
NITROBENZENE	0.01 U	MG/L	11/19/91	RBN
PYRIDINE	0.01 U	MG/L	11/19/91	RBN
Test: TCLP HERBICIDES Method: 8150		Extracted: 11/08/91 Analyst: RE		
2,4-D	0.10 U	MG/L	11/19/91	CT
2,4,5-TP (SILVEX)	0.01 U	MG/L	11/19/91	CT

Submitted by

McCoy & McCoy Laboratories, Inc.
A Subsidiary of McCoy & McCoy, Inc.
P.O. Box 307
65 Dan Mor Avenue
Madisonville, Kentucky 42431
Telephone 502 821-7275

Lexington, Ky. 606-299-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky 502 821-7275
Paducah, Ky. 502 444 6547
Pikeville, Ky. 606 432-3184
Evansville, In. 812 465-9268

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAF
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-355-03
Date Sampled: 10/30/91
Location: WILSON #1 CLARIFIER

P.O. #: REL. #0005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP METALS		Extracted: 11/04/91	Analyst: ET	
Method: 1311				
ARSENIC	0.03 U	MG/L	11/12/91	RWF
BARIUM	0.08	MG/L	11/12/91	RWF
CADMIUM	0.002	MG/L	11/12/91	RWF
CHROMIUM	0.02	MG/L	11/12/91	RWF
LEAD	0.03 U	MG/L	11/12/91	RWF
MERCURY	0.0002 U	MG/L	11/12/91	KD
SELENIUM	0.15 U	MG/L	11/12/91	RWF
SILVER	0.003 U	MG/L	11/12/91	RWF
Test: TCLP PESTICIDES		Extracted: 11/07/91	Analyst: TC	
Method: 8080				
CHLORDANE	0.01 U	MG/L	11/12/91	CT
ENDRIN	0.01 U	MG/L	11/12/91	CT
HEPTACHLOR	0.005 U	MG/L	11/12/91	CT
LINDANE	0.01 U	MG/L	11/12/91	CT
METHOXYCHLOR	0.01 U	MG/L	11/12/91	CT
TOXAPHENE	0.040 U	MG/L	11/12/91	CT
HEPTACHLOR EPOXIDE	0.005 U	MG/L	11/12/91	CT
Test: TCLP VOLATILES		Extracted: 11/05/91	Analyst: ET	
Method: 8240				
BENZENE	0.050 U	MG/L	11/19/91	JEB
CARBON TETRACHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROFORM	0.050 U	MG/L	11/19/91	JEB
1,2 DICHLOROETHANE	0.050 U	MG/L	11/19/91	JEB

Submitted by

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy, Inc.
P.O. Box 917
Rt. 60, Nine Avenue
Madisonville, Kentucky 42431
Telephone 502 821-7375

Lexington, Ky. 606/299-7775
Louisville, Ky. 502/426-5777
Madisonville, Ky. 502 821-7375
Paducah, Ky. 502/444 8547
Elkville, Ky. 606 439-3104
Evansville, In. 812 426-9236

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-03
Date Sampled: 10/30/91
Location: WILSON #1 CLARIFIER

P.O. #: REL. #005308

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
1,1-DICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
METHYL ETHYL KETONE (MEK)	0.050 U	MG/L	11/19/91	JEB
TETRACHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
TRICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
VINYL CHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROBENZENE	0.050 U	MG/L	11/19/91	JEB

Submitted by

Big Rivers
Electric Corporation

INTEROFFICE MEMO

October 31, 1991

TO: TOM SHAW

FROM: MIKE WELLS

SUBJECT: PAINT FILTER LIQUID TEST

A Paint Filter Liquid Test was performed according to EPA Method 9095 on the following sample with results as shown:

CL #	DESCRIPTION	RESULTS
16503	Wilson #1 Clarifier Blasting Grit	Passed*

*Deemed to be free of liquids for purposes of 40 CFR 264.314 and 265.314. No material passed through filter during designated period.

crq

LOG NUMBER _____

GENERATOR: _____ PAGE 4 OF 5

WASTE NAME: _____ DATE: _____

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name _____ 2. County: _____

3. Landfill Permit #: _____ 4. Expires: _____

B. APPROVAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: _____

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

C. DENIAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, rejects this application for the reason(s) stated below:

Date: _____

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

BIG RIVERS ELECTRIC CORPORATION

CERTIFIED P 750 195 082

February 7, 1992

Mr. Mark Crum
Natural Resources And Environmental
Protection Cabinet
Frankfort Office Park
14 Reilly Road
Frankfort, KY 40601

Dear Mr. Crum:

Please find enclosed the corrected additional wastestream applications. The application for abrasive blasting contaminated with iron oxide (01-330) has been withdrawn.

If you have any questions, please contact me at (502)827-2561 ext. 2855.

Sincerely,

Thomas L. Shaw
Senior Environmental Scientist

ls
enclosure

GENERATOR: [illegible] LOG NUM: [illegible]

WASTE NAME: [illegible] DATE: [illegible]

DIVISION OF WASTE MANAGEMENT RECOMMENDATIONS

INTERNAL SIGN OFF SHEET FOR

APPLICATION TO ACCEPT AN ADDITIONAL WASTESTREAM

A SOLID WASTE PERMIT REVIEWER:

1. ☐ Approve ☐ Deny
2. Comments: _____

Reviewer Signature: [illegible] Date: [illegible]

B PERMIT REVIEW SECTION:

1. Generator Name: _____
2. Waste Name: _____
3. Date of Generator Signature: _____
4. Recommends: ☑ Approval ☐ Denial
4. Comments: _____

Supervisor Signature: [illegible] Date: [illegible]

Signature: _____ Date: _____

Bryant 01-446

STE BR. NCH O LY:
RECEIVED
AUG 26 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

FOR INTERNAL USE ONLY:
Date Logged: _____
Receipt Number: 2734
Date Approved/Denied: 1-22-92
County: _____

APPLICATION TO ACCEPT AN ADDITIONAL WASTE STREAM

☑ NEW ☐ UPDATE

(Prepare an individual application for each waste stream)

RECEIVED
DEC 05 1991
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

I. WASTE GENERATOR INFORMATION

A. GENERATOR IDENTIFICATION:

1. Name: Big Rivers Electric Corp D. B. Wilson
2. Mailing Address: P.O. Box 24 Henderson KY 42420 ATT. Tom Shaw
3. Address Where Waste Generated: P.O. Box 547 ~~Sebree~~ Centertown KY 42328 ATT Tom Shaw
4. Contact Person: Tom Shaw 5. Telephone: _____

B. WASTE DESCRIPTION:

1. Waste Name: Abrasive blasting contaminated with coal tar ~~epoxy~~ epoxy

   Describe source of the waste including industrial process: Abrasive blasting with Black Beauty the FGD system outlet duct to remove coal tar epoxy from the steel.

2. Is the waste hazardous under 401 KAR 31:010, Section 3, which includes the characteristics of 401 KAR 31:030 and the lists of 401 KAR 31:040? ☐ Yes ☐ No (If yes, contact your local Division of Waste Management Field Office for further assistance. See instructions for locations and telephone numbers.)
3. Is the waste an "exempt" hazardous waste under the regulatory cites in the Instructions? ☐ Yes ☐ No

   Regulatory Cite: _____

RECEIVED
JAN 16 1992
DIVISION OF WASTE MANAGEMENT
SOLID WASTE BRANCH

4. Waste Condition Upon Generation: ☑ Solid ☐ Semi-solid ☐ Liquid ☐ Other _____
5. Waste Treatment Description: New Cents
6. Disposal Site Name: Big Rivers Electric Corp D.B. Wilson Station Permit # 092.04
8. Waste Condition Upon Disposal: ☒ Solid ☐ Semi-solid ☐ Liquid ☐ Other _____
9. Waste Amount: _____ 55-gal. drums or 25 Cubic Yards (Note: 1 cubic yard = 202 gallons)
10. Frequency: ☐ Per Month ☒ Per Year ☐ One-Time Only

C. CONTAINER TYPE *(See Instructions)*:

☐ Paper bag _____ ☐ Fiber drum or cardboard box _____ ☐ Metal or plastic drum _____

☐ Plastic bag _____ ☐ Double bagged in container _____ ☐ Other *(specify)* _____

☒ Bulk _____ ☐ Mixed with plant trash _____

D. FEE:

Check payable to "KENTUCKY STATE TREASURER." *(MAIL CHECK DIRECTLY TO SOLID WASTE BRANCH, DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KENTUCKY 40601)*

Check for $50.00 # 140032

E. SOLID WASTE GENERATOR CERTIFICATION:

I certify that the information set forth in Section I pertaining to the waste is true and correct and that the waste is not regulated as a hazardous waste under 401 KAR Chapter 31 which requires storage, treatment or disposal at a hazardous waste facility under 401 KAR Chapters 32 through 40. I understand that failure to properly manage a hazardous waste could lead to possible civil and criminal penalties under KRS Chapter 224 or the Resource Conservation and Recovery Act of 1976, (Public Law 94-580), as amended.

Signature of Authorized Agent: Joe L. Craig Date: 7/29/91

Name of Authorized Agent *(typed or printed)*: Joe L. Craig Title: Vice General Manager of Fuels, Environmental Affairs, and Information Systems

GENERATOR: Big Rivers Electric Corp D.B. Wilson PAGE 2 OF

WASTE NAME: Abrasive blasting contaminated with coal tar epoxy DATE: 6-14-91

II. LABORATORY INFORMATION ATTACHED

A. LABORATORY IDENTIFICATION:

1. Laboratory Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4. Telephone: _____

B. SAMPLE COLLECTION:

1. Sampler Name: _____
2. Company: _____

C. SAMPLE CONTAINER:

1. Container Type: ☐ Glass ☐ Plastic ☐ Other (*explain*) _____
2. Sample Type: ☐ Composite ☐ Grab ☐ Other (*explain*) _____
3. Size of Container: _____
4. Preservative: _____

D. WASTE CHARACTERISTICS:

1. Does the waste exhibit the characteristic of a hazardous waste as described in 401 KAR 31:030:

CHARACTERISTICS	YES	NO	ANALYSIS
Ignitability	☐	☐	Flashpoint _____ °F
Corrosivity	☐	☐	pH _____
Reactivity	☐	☐	_____ mg/kg ☐ H_2S ☐ HCN
EP Toxicity	☐	☐	Contaminant(s) _____ _____ mg/l

2. Is the waste characteristically hazardous? ☐ Yes ☐ No
3. Waste passed paint filter test? ☐ Yes ☐ No 4. Solids Content: _____

E. LABORATORY CERTIFICATION:

I certify the above results are true and correct and analyses were conducted in accordance with EPA publication SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."

Signature of Laboratory Analyst: _____ Date: _____

ATTACH LABORATORY RESULTS

F. MATERIAL SAFETY DATA SHEET:

1. Attached ☒ Yes ☐ No

III. TRANSPORTER INFORMATION

A. HAULER IDENTIFICATION:

1. Hauler Name: Big Rivers Electric Corp D.B. Wilson
2. Mailing Address: _____
3. Contact Person: Tom Sinard 4. Telephone: 502 827 2561

B. SECONDARY HAULER IDENTIFICATION:

1. Hauler Name: _____
2. Mailing Address: _____
3. Contact Person: _____ 4 Telephone: _____

GENERATOR: Big Rivers Electric Corp. D.B. Wilson

WASTE NAME: Abrasive blasting contaminated with coal tar epoxy DATE: 6-14-04

IV. LANDFILL INFORMATION

A. DISPOSAL SITE IDENTIFICATION:

1. Landfill Name: Big Rivers Electric Corp D.B. Wilson 2. Permit #: 0920-04
3. Mailing Address: PO Box 343 Centertown KY 42328 Att: Tim Sons
4. Contact Person: Tim Sons 5. Telephone:

B. INSTRUCTIONS TO GENERATOR:

1. Time of Day Waste is to be Delivered: 7:30 to 3:30 pm
2. Special handling requirements: Cover with pre-cover tarp

3. Comments:

C. DISPOSAL METHOD:

☐ Bury in container ☐ Co-mix with garbage ☑ Bury at bottom of lift ☐ Per EPA asbestos procedure

☐ Other

D. LANDFILL CERTIFICATION:

I certify that I ☐ will not or ☐ if approved, will accept the waste described in Section I at the landfill named in Section IV.A. I propose to use the method of disposal described in Section IV. C. above. Failure to use the described, approved procedure may constitute illegal disposal. The waste to be received under this permit modification is compatible to the above mentioned landfill operation.

Signature of Authorized Agent for Landfill: Date: 7-27-04

Name of Authorized Agent (Typed or Printed): Stephen Moss, Plant Superintendent Title:

McCoy & McCoy Laboratories, Inc.
a subsidiary of McCoy & McCoy, Inc.
P.O. Box 907
85 East Noel Avenue
Madisonville, Kentucky 42431
Telephone 502/821-7375

Lexington, Ky. 606/299-7775
Louisville, Ky. 502/429-5777
Madisonville, Ky. 502/821-7375
Paducah, Ky. 502/444-6547
Pikeville, Ky. 606/432-3104
Evansville, In. 812/425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

P.O. #: NOT AVAILABLE

Date Received: 06/21/91
Date Reported: 07/22/91
Order #: 91-06-297-03
Date Sampled: 06/20/91
Location: ST #1 TURBINE SHROUD
Wilson Station
Work ID: TCLP METALS & FLASHPOINT

Test Description	Results	Units	Analyzed	By
FLASHPOINT	NON-FLAME	DEGREES F	07/18/91	ET

Test: TCLP METALS
Method: 1311

Extracted: 07/19/91 Analyst: ET

ARSENIC	NA	MG/L		
BARIUM	NA	MG/L		
CADMIUM	NA	MG/L		
CHROMIUM	NA	MG/L		
LEAD	0.03 U	MG/L	07/19/91	RWF
MERCURY	NA	MG/L		
SELENIUM	NA	MG/L		
SILVER	NA	MG/L		

Submitted by

THIS DOCUMENT HAS BEEN PRINTED ON TAMPERPROOF PAPER FOR YOUR PROTECTION

MATERIAL SAFETY DATA SHEET

NFCA 1-82

FOR COATINGS, RESINS AND RELATED MATERIALS

7001
7005

(Revision of U.S. Department of Labor Essentially Similar to Form OSHA 20)

Section I

MANUFACTURER'S NAME: PORTER PAINT CO.

DATE OF PREP: 11/16/84

STREET ADDRESS: 400 South 13th Street

CITY, STATE AND ZIP CODE: Louisville, KY 40201

EMERGENCY TELEPHONE NO: (502) 588-9250

INFORMATION TELEPHONE NO: (502) 588-9200

PRODUCT CLASS: Coal Tar Epoxy

MANUFACTURER'S CODE IDENTIFICATION

TRADE NAME

7001 Tarset Standard (Part A)
7005 Tarset Catalyst (Part B)

Section II—HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT A	PERCENT B	PERCENT A+B	OCCUPATIONAL EXPOSURE LIMITS (TLV)	VAPOR PRESSURE (@ 20°C)	TOXICITY DATA
Coal Tar Pitch Volatiles (benzene solubles), CAS #8007-45-2	<1		<1	0.2 mg/m³		skin, inhalatir
Hi Flash Naphtha		30	<1	200 ppm	<2.0	
Xylene, CAS #1330-20-7	5		<5	100 ppm	5.1	
Coal Tar Naphtha, CAS #MX8030-31-7	15		15	100 ppm *		
Diethylenetriamine, CAS #111-40-0		65	2	1 ppm		skin, pulmonary sensitizer
Benzene, CAS #71-43-2	<0.1			10 ppm		≤ 45 mg/m³

**by volume

* Indene present, TLV of 10 ppm

Section III—PHYSICAL DATA

BOILING RANGE: 282-374°F

VAPOR DENSITY: LIGHTER THAN AIR

HEAVIER: A=30

WEIGHT PER GALLON: A=11.0 lbs. B=7.2 lbs. A+B=10.8 lbs.

EVAPORATION RATE: FASTER SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME: B=13, A+B=30

Section IV—FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: Combustible Liquid, OSHA Class IIIA, DOT Combustible

FLASH POINT: A=101°F B=115°F A+B=101°F

LEL: 0.7

EXTINGUISHING MEDIA

FOAM | CO2 | LIQUID | DRY CHEMICAL | WATER FOG | OTHER

UNUSUAL FIRE AND EXPLOSION HAZARDS

Keep containers tightly closed. Isolate from heat, sparks, electrical equipment, and open flame. Closed containers may explode when exposed to extreme heat. In absence of electricity water spray (fog nozzle preferred) may be used to cool containers. Avoid exposure to decomposition products. Wear self-contained breathing equipment.

Section V—HEALTH HAZARD D. A

[illegible]

Inhalation: Irritation of the respiratory tract or acute nervous system causing headache/dizziness, nausea.

Acute: Eye and Skin: Primary irritation. Photo sensitization may occur.

Chronic: Prolonged or repeated exposures may lead to dermatitis, skin cancer. DETA has potential to be a pulmonary sensitizer.

EMERGENCY AND FIRST AID PROCEDURES

Vapors: Remove from exposure. Restore breathing. Keep warm and quiet. Notify physician.

Splash (Eyes): Flush immediately with large amounts of water for at least 15 minutes. Take to physician for medical treatment.

Splash (Skin): Wash affected areas with water. Remove contaminated clothing.

Section VI—REACTIVITY DATA

STABILITY (CONSIDER TO BE) STABLE CONDITIONS TO AVOID

INCOMPATABILITY (MATERIALS TO AVOID)

HAZARDOUS DECOMPOSITION PRODUCTS

May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain CO

HAZARDOUS POLYMERIZATION (WILL OCCUR) X (WILL NOT OCCUR)

Section VII—SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition (flames, hot surfaces, and electrical, static or friction sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and use non-sparking tools.

WASTE DISPOSAL METHOD: Dispose of in a safe manner in accordance with local, state, and federal regulations. Do not incinerate closed containers.

Section VIII—SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION In outdoor or open areas with unrestricted ventilation, use NIOSH/MSHA-approved filter respirator to remove solid airborne particles of overspray during spray application. In restricted ventilation areas use approved mechanical filter respirators designed to remove particulates, gas and vapor. In confined areas, use approved air line type respirators and hood. VENTILATION: Provide general dilution or local exhaust ventilation in volume and pattern to keep the TLV's and the LEL below the stated limits and to remove decomposition products during welding or flame cutting of surfaces coated with this product.

PROTECTIVE GLOVES Required for prolonged or repeated contact.

EYE PROTECTION Must use safety eyewear with splash guards or side shields.

OTHER PROTECTIVE EQUIPMENT Remove and wash contaminated clothing.

Section IX—SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Secure closures and keep containers upright to prevent leakage. Store large quantities only in buildings designed to comply with OSHA 1910.106. Other Precautions:Do not store above 120°F. Do not take internally. Before smoking or eating, clean hands thoroughly. Do not get on skin or in eyes. Avoid breathing vapors or spray mist. Avoid storing or using near heat, sparks, or flame. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. Do not flame cut, braze or weld without approved respirator or appropriate ventilation. All electrical equipment and installations should be made and grounded in accordance with the National Electrical Code. Workmen should be required to use only non-ferrous tools and wear non-sparking and conductive shoes in areas where explosion hazards exist.

Black Mineral

REED MINERALS

MATERIAL SAFETY DATA SHEET

(Complies with 29 CFR 1910.1200)

SECTION I - GENERAL

Reed Minerals
A Division of Hanaco Corporation
9149 C Kennedy Avenue
Highland, IN 46322
Emergency Telephone Number:
(219) 923-4200

Product Name: Black Beauty®
Abrasives
CAS Number : 68476-96-0
Particulates not
otherwise regulated.
Common Name : Boiler Slag
Date : April 15, 1987
Revised : August 1, 1996
2nd Revision: September 1, 1999

SECTION II - INGREDIENTS

	OSHA *PEL	ACGIH *TLV
Boiler Slag 100% (Typically as an amorphous mixture of Fe,Al,Ca silicates)		
Nuisance Dust		
Total Dust :	15	10
Respirable Dust :	3	5

*Values Expressed as mg/M^3

SECTION III - PHYSICAL DATA

Physical Form	: Solid (angular granules)
Boiling Temperature	: N/A
Melting Temperature	: greater than 2300°F
Vapor Pressure/Density	: N/A
Evaporation Rate	: N/A
Specific Gravity	: 2.7 g/cc (typical)
Water Solubility -	: Negligible
Color	: Black
Odor	: None

SECTION IV - FIRE AND EXPLOSION DATA

Product is non-flammable and non-explosive.

SECTION V - REACTIVITY DATA

Product is stable under normal conditions of use, storage, and transportation.

Glass Media

SECTION VI - HEALTH HAZARD DATA

Low health risk by inhalation. Treat as a nuisance dust. Typical free silica less than 0.1%. Human toxic response has not been demonstrated for any route of entry. Mechanical irritation may occur to eyes, skin, or respiratory tract. Pre-existing health conditions may be aggravated.

Carcinogenicity: NTP - No
IARC Monographs - No
OSHA Regulated - No

FIRST AID

In case of:

1. Eye contact - Immediately flush eyes thoroughly with water.

2. Skin contact - Wash skin with soap and water if irritation occurs.

3. Inhalation - Remove effected person(s) to fresh air source.

4. Oral intake - Rinse mouth out with water.

If symptoms persist, contact a physician or other medical personnel.

SECTION VII - SPILL, LEAK, AND DISPOSAL PROCEDURES

No special procedures required for clean-up. Wetting with water will reduce airborne dust. Uncontaminated product does not exhibit characteristic EP Toxicity and may be disposed of as inert material in an appropriate solid waste landfill according to applicable Federal, State, and Local regulations.

SECTION VIII - CONTROL MEASURES

Use appropriate NIOSH certified respiratory protection when exposure limits may be exceeded. Maintain sufficient ventilation to allow visual contact with work surfaces. Appropriate abrasive blaster's protective equipment is required, which may also include gloves, hood with protective lens, safety glasses, and hearing protection.

SECTION IX - SPECIAL PRECAUTIONS

Keep product dry and free of all contamination to assure free flow. Use an appropriate safety screen over fill hatch of blasting pot. Respirable dusts may be generated during pressure abrasive cleaning operations.

- N O T E -

The opinions expressed herein are those of qualified experts within Harsco Corporation. Harsco believes that the information contained herein is current and accurate for the normal and intended use of this product as of the date of this Material Safety Data Sheet. Since the use of this information and of these opinions or the conditions of use of the product are not within the control of Harsco Corporation, it is the user's obligation to determine and observe the conditions of safe use and disposal of the product by their operations.

Big Rivers Electric Corporation
Wilson Station
Primer Coating Specification
T-Series

KELCORS

technical data for:

May, 1982
No. 12

SILICONE-ALKYD PAINTS	No. 2584 POLY-SILICONE GRAY PRIMER	No. 6250 POLY-SILICONE STAINLESS STEEL INTERMEDIATE PRIMER	P-SERIES POLY-SILICONE ENAMEL	P-2-SERIES S POLY-SILICONE STAINLESS STEEL	T-1-SERIES POLAR-GLAZE SILICONE ENAMEL	T-2-SERIES S TRI-POLAR SILICONE STAINLESS STEEL
COMPOSITION DATA:						
Generic Type	34% Silicone-alkyd	65% Silicone-alkyd	20-30% Silicone-alkyd	75-23% Silicone-alkyd	30-65% Modified Silicone-alkyd	10% Modified Silicone-alkyd
Solids by Volume (ASTM)	45%	56%	33%	34%	33%	34%
Solids by Weight (ASTM)	63%	77%	66%	71%	66%	72%
Corrosion Inhibitor	Calcium Borosilicate	Barium Meta-borate	—	—	—	—
COST DATA:						
Theoretical Sq. Ft./Gal.	510	430	425	430	340	345
Dry Film Thickness at Theoretical Sq. Ft./Gal.	1.2	2.0	2.0	2.0	2.5	2.5
Cost per Mil Sq. Ft. (List Prices)	$.051	$.037	$.026	$.034	$.027	$.033
Cost per Ton of Structural Steel	$.0	$.0	$.0	$.0	$.0	$.0
PHYSICAL DATA:						
Weight per Gallon (Pounds)	9.2 ± .3	10.6 ± .3	9.0 ± .3	10.4 ± .3	9.0 ± .3	10.6 ± .3
Drying Time at 72°F (Hours)						
—To Touch	2	2	2	2	2	2
—To Handle	4	4	4	4	4	4
—To Recoat	24	24	24	24	24	24
Flash Point (Pensky-Martens) (ASTM)	105°F	104°F	101°F	101°F	101°F	101°F
Shelf Life	1 year	2 years	2 years	2 years	2 years	2 years
Pot Life at 72°F	—	—	—	—	—	—
Curing Time at 72°F	—	—	—	—	—	—
Temperature Resistance	500°F	650°F	450°F	450°F	250°F	250°F
Viscosity @ 77°F In Kreb Units	80 ± 5	82 ± 5	82 ± 5	82 ± 5	82 ± 5	82 ± 5
Gloss (60° meter)	87 ± 5	75 ± 10	85 ± 5	45 ± 10	85 ± 5	45 ± 10
Color	Gray	Gray	All	Limited	Limited	Limited
APPLICATION DATA:						
Wet Film Thickness Range (Mils)	2.0 - 3.5	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0	3.5 - 5.0
Dry Film Thickness Range (Mils)	1.2 - 1.6	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7	1.8 - 2.7
Temperature Range (°F)	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F	45 - 90°F
Humidity Range (Dew Pt. - DP)	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F	DP + 5°F
Induction Time	—	—	—	—	—	—
Surface Preparation (SSPC)	SP-6, 10	Primed	Primed	Primed	Primed	Primed
Application Methods at 72°F						
Air Spray - Nozzle Size	.055	.055	.055	.055	.055	.055
Pressure (PSIG)	40 - 60	40 - 60	50 - 60	50 - 60	50 - 60	50 - 60
Viscosity (KU)	72 ± 2	72 ± 3	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015 - .018	.015 - .019	.013 - .017	.013 - .017	.013 - .017	.013 - .017
Pressure (PSIG)	2000	2000	2500	2500	2500	2500
Viscosity (KU)	78 ± 2	82 ± 3	82 ± 3	82 ± 3	82 ± 3	82 ± 3
Roll or Roller Viscosity (KU)	78 ± 2	78 ± 2	80 ± 3	80 ± 3	80 ± 3	80 ± 3
Flow Cup Viscosity (Zahn Cup #2)	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.	20 ± 1 sec.
Recommended Thinner	No. 1614	No. 1638	No. 1638	No. 1638	No. 1638	No. 1638

Big River Electric Corporation
Wilson Station
Paint to be removed
No 6040 White

KALORS

technical data for:

*AUGUST, 1982

No. 13

METAL PRIMERS	TRI-POLAR PRIMERS *NO. 6040 WHITE NO. 6060 LT. GRAY NO. 6050 GRAY	TRI-POLAR *ZINKITE PRIMER NO. 6003	SUB-MARINE PRIMERS NO. 7230 WHITE NO. 4300 RED	SOLVENT-POXY PRIMERS NO. 3500 WHITE NO. 4279 RED
COMPOSITION DATA				
Generic Type	Oil/Alkyd	Oil/Alkyd	Phenolic	Polyamide Epoxy
Solids By Volume (± 3%)	61%	55%	53%	65%
Solids By Weight (± 3%)	80%	76%	77%	80%
Corrosion Inhibitor	Barium Metaborate	Barium Metaborate	Basic Metaborate	Calcium Borosilicate (No. 4279 Only)
COST DATA				
Theoretical Square Feet/Gallon	300	350	565	350
Dry Film Thickness at Theoretical Sq. Ft./Gal. (mils)	2.5	2.5	1.5	3.0
*Cost per Mil Sq. Ft. (List Price)	$.018	$.020	$.028	$.019
Gallons per Ton of Structural Steel	1.0	1.0	1.0	1.0
TYPICAL DATA				
Weight/Gallon (pounds)	12.3 ± .5	12.3 ± .5	14.0 ± .5	13.2 ± .5
Drying Time at 77°F.				
- To Touch	2 hrs.	2 hrs.	1/2 hr.	4 hrs.
- To Handle	6 hrs.	4 hrs.	2 hrs.	8 hrs.
- To Recoat	24 hrs.	24 hrs.	12 hrs.	24 hrs.
Flash Point Tensky-Martens (±1°F.)	100°F	100°F	85°F	85°F
Shelf Life	2 yrs.	2 yrs.	1 yr.	2 yrs.
Pot Life at 77°F.	—	—	—	7 hrs.
Curing Time at 77°F.	—	—	—	24-48 hrs.
Temperature Resistance	300°F	300°F	250°F	150°F
Viscosity at 77°F. KU Krebs Units	92 ± 5	92 ± 5	78 ± 5	75 ± 5
Gloss (60° meter)	15 ± 5	15 ± 5	25 ± 5	6 ± 5
Color	White, Gray	Mustard	White, Red	White, Red
APPLICATION DATA				
Wet Film Thickness Range (mils)	4.0 - 6.0	3.8 - 5.5	3.0 - 5.0	3.8 - 8.3
Dry Film Thickness Range (mils)	2.5 - 3.5	2.0 - 3.0	1.5 - 2.5	2.5 - 5.0
Temperature Range (°F.)	60-90	45-90	45-90	50-120
Humidity (Dew Point - DP) (Relative Humidity - RH)	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH	DP + 5 <80%RH
Induction Time at 77°F	—	—	—	1 hr.
Surface Preparation (SSPC)	SP-1, 6, 7	SP-1, 6, 7	SP-6	SP-6
Application Methods at 77°F.				
Air Spray - Nozzle Size	.055-.073	.055-.073	.055-.073	.025-.013
Pressure (psig)	50 - 60	50 - 60	40 - 60	50 - 60
Viscosity (KU)	72 ± 3	72 ± 3	72 ± 3	72 ± 3
Airless Spray - Nozzle Size	.015-.021	.015-.019	.013-.017	.015-.019
Pressure (psig)	2500	2500	2500	2500
Viscosity (KU)	88 ± 3	88 ± 3	82 ± 3	87 ± 3
Brush or Roller Viscosity (KU)	82 ± 3	82 ± 3	76 ± 3	85 ± 3
Flow Coating Viscosity (Sears Cup)	22	20	20	—
Recommended Thinner	No. 1630	No. 1630	No. 1300	—

McCoy & McCoy Laboratories, Inc.
(a corporation of McCoy & McCoy, Inc.)
P.O. Box 997
66 Fast Central Avenue
Madisonville, Kentucky 42431
Telephone (502) 821-7575

Lexington, Ky. 606 259-7775
Louisville, Ky. 502 429-5777
Madisonville, Ky. 502 821-7575
Paducah, Ky. 502-444-6547
Pikeville, Ky 606-432-3104
Evansville, In. 812-425-9288

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385
Date Sampled:
Location:

P.O. #: REL. #005368

Work ID: WILSON PAINT CRIT

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01A	WILSON BARGE UNLOADER	02A	WILSON FDG
03A	WILSON #1 CLARIFIER		

U: Concentration is below the given detection limit.
B: Analyte found in the blank as well as the sample.
C: Confirmation of pesticides by gc/ms.
J: Estimated value based on the known detection limit.

Submitted by _____

McCoy & McCoy Laboratories, Inc.
A subsidiary of McCoy & McCoy, Inc.
P.O. Box 367
85 East Third Avenue
Madisonville, Kentucky 42431
Telephone (502) 821-7575

Lexington, Ky. (606) 299-7775
Louisville, Ky. (502) 429-5777
Madisonville, Ky. 502 821-7575
Paducah, Ky. 502 444-6547
Pikeville, Ky. 606 432-3104
Evansville, In. 812 425-9286

ANALYSIS REPORT

B/G RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-02
Date Sampled: 10/30/91
Location: WILSON FDC

P.O. #: REL. #0005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP ACIDS		Extracted: 11/12/91	Analyst: EC	
Method: 8270				
O-CRESOL	0.01 U	MG/L	11/19/91	RBN
M-CRESOL	0.01 U	MG/L	11/19/91	RBN
P-CRESOL	0.01 U	MG/L	11/19/91	RBN
TOTAL CRESOL	0.01 U	MG/L	11/19/91	RBN
PENTACHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,5 TRICHLOROPHENOL	0.05 U	MG/L	11/19/91	RBN
2,4,6 TRICHLOROPHENOL	0.01 U	MG/L	11/19/91	RBN
Test: TCLP BASE NEUTRALS		Extracted: 11/13/91	Analyst: EC	
Method: 8270				
1,4-DICHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
2,4-DINITROTOLUENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBENZENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROBUTADIENE	0.01 U	MG/L	11/19/91	RBN
HEXACHLOROETHANE	0.01 U	MG/L	11/19/91	RBN
NITROBENZENE	0.01 U	MG/L	11/19/91	RBN
PYRIDINE	0.01 U	MG/L	11/19/91	RBN
Test: TCLP HERBICIDES		Extracted: 11/08/91	Analyst: BS	
Method: 8150				
2,4-D	0.10 U	MG/L	11/19/91	CT
2,4,5-TP (SILVEX)	0.01 U	MG/L	11/19/91	CT

Submitted by _____

McCoy & McCoy Laboratories, Inc.
(A Subsidiary of McCoy & McCoy, Inc.)
P.O. Box 007
75 East Nick Rodman
Madisonville, Kentucky 42431
Telephone 502 821-7375

Lexington, Ky. 606-299-7775
Louisville, Ky. 502-426-5777
Madisonville, Ky. 502 821-7375
Paducah, Ky. 502 444-6547
Pikeville, Ky. 606-432-3104
Evansville, In. 812 425-0289

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-02
Date Sampled: 10/30/91
Location: WILSON FDC

P.O. #: REL. #005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
Test: TCLP METALS Method: 1311		Extracted: 11/04/91	Analyst: ET	
ARSENIC	0.05	MG/L	11/12/91	RWF
BARIUM	0.06	MG/L	11/12/91	RWF
CADMIUM	0.002 U	MG/L	11/12/91	RWF
CHROMIUM	0.02	MG/L	11/12/91	RWF
LEAD	0.03 U	MG/L	11/12/91	RWF
MERCURY	0.0002 U	MG/L	11/12/91	KD
SELENIUM	0.15 U	MG/L	11/12/91	RWF
SILVER	0.003 U	MG/L	11/12/91	RWF
Test: TCLP PESTICIDES Method: 8080		Extracted: 11/07/91	Analyst: TC	
CHLORDANE	0.05 U	MG/L	11/12/91	CT
ENDRIN	0.01 U	MG/L	11/12/91	CT
HEPTACHLOR	0.005 U	MG/L	11/12/91	CT
LINDANE	0.01 U	MG/L	11/12/91	CT
METHOXYCHLOR	0.01 U	MG/L	11/12/91	CT
TOXAPHENE	0.040 U	MG/L	11/12/91	CT
HEPTACHLOR EPOXIDE	0.005 U	MG/L	11/12/91	CT
Test: TCLP VOLATILES Method: 8240		Extracted: 11/05/91	Analyst: ET	
BENZENE	0.050 U	MG/L	11/19/91	JEB
CARBON TETRACHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROFORM	0.050 U	MG/L	11/19/91	JEB
1,2 DICHLOROETHANE	0.050 U	MG/L	11/19/91	JEB

Submitted by _____

McCoy & McCoy Laboratories, Inc.
A Subsidiary of McCoy & McCoy, Inc.
P. O. Box 207
45 East Industrial Drive
Madisonville, Kentucky 42431
Telephone: 502 821 7375

Lexington, Ky. 606-299-7775
Louisville, Ky 502.429-5777
Madisonville, Ky 502 821 7375
Paducah, Ky. 502 444-0547
Pikeville, Ky. 606 432-3104
Evansville, In. 812 425-9260

ANALYSIS REPORT

BIG RIVERS ELECTRIC CORP.
Attn: TOM SHAW
CENTRAL LABORATORY
P. O. BOX 24
HENDERSON, KY 42420

Date Received: 10/30/91
Date Reported: 11/25/91
Order #: 91-10-385-02
Date Sampled: 10/30/91
Location: WILSON FDG

P.O. #: REL. #005388

Work ID: WILSON PAINT GRIT

Test Description	Results	Units	Analyzed	By
1,1-DICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
METHYL ETHYL KETONE (MEK)	0.050 U	MG/L	11/19/91	JEB
TETRACHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
TRICHLOROETHYLENE	0.050 U	MG/L	11/19/91	JEB
VINYL CHLORIDE	0.050 U	MG/L	11/19/91	JEB
CHLOROBENZENE	0.050 U	MG/L	11/19/91	JEB

Submitted by _____

Big Rivers
Electric Corporation

INTEROFFICE MEMO

October 31, 1991

TO: TOM SHAW

FROM: MIKE WELLS

SUBJECT: PAINT FILTER LIQUID TEST

A Paint Filter Liquid Test was performed according to EPA Method 9095 on the following sample with results as shown:

CL #	DESCRIPTION	RESULTS
16502	Wilson FGD Blasting Grit	Passed*

*Deemed to be free of liquids for purposes of 40 CFR 264.314 and 265.314. No material passed through filter during designated period.

crq

LOG NUMBER [illegible]

GENERATOR [illegible] PAGE 4 OF 5

WASTE NAME: [illegible] DATE: [illegible]

V. DIVISION OF WASTE MANAGEMENT FINAL DETERMINATION

A. GENERAL INFORMATION:

1. Landfill Name: [illegible] 2. County: [illegible]

3. Landfill Permit #: [illegible] 4. Expires: [illegible]

B. APPROVAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, modifies the landfill permit cited in Section IVA of this application to allow disposal of the waste described herein. The Division reserves the right to modify or revoke this approval. This approval is invalid in the absence of a valid permit or if disposal is not in accordance with description herein or conditions described below.

Date: [illegible]

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

C. DENIAL:

The Division of Waste Management, Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, rejects this application for the reason(s) stated below

Date:

George F. Gilbert, Jr., Manager
Solid Waste Branch
Division of Waste Management

GENERATOR: [illegible] LOG # [illegible]

WASTE NAME: [illegible] DATE: [illegible]

DIVISION OF WASTE MANAGEMENT RECOMMENDATIONS

INTERNAL SIGN OFF SHEET FOR

APPLICATION TO ACCEPT AN ADDITIONAL WASTESTREAM

A SOLID WASTE PERMIT REVIEWER:

1. ☐ Approve ☐ Deny
2. Comments: _____

Reviewer Signature: [illegible] Date: [illegible]

B PERMIT REVIEW SECTION:

1. Generator Name: _____
2. Waste Name: _____
3. Date of Generator Signature: _____
4. Recommends: ☑ Approval ☐ Denial
5. Comments: _____

Supervisor Signature: [illegible] Date: 1/2/19

Signature: _____ Date: _____

Page 1 of 2 *

DEP 7036
Rev. 1-91

10/28/91
Initial Submittal Date
Revised Date

Dept. for Environmental Protection
Division for Air Quality
316 St. Clair Mall
Frankfort, Kentucky 40601
(502) 564-2150 FAX(502) 564-4245
(Submit by mail hard copies of faxed information.)

RECEIVED OCT 31 1991

91 - 76
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos removal or any prep or other work which would disturb the asbestos-containing material (ACM). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with first two digits being the project year and remaining digits being the project number (for example, first project in 1991 is number 91-1). After notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that invalidate reported information, an amended form must be filed. If new start date is earlier than start date on file, submit amended schedule not later than 10 days before the new start date. Delayed removal/disposal dates must be submitted at least one day prior to the most current removal/disposal date on file. Submit other amendments (including amount changes of greater than 20% or 160SF/ 260LF) at least one day before the fact. Amended form should be a copy of the original form, with corrections pencilled in, including the new "Revised Date."

Contractor: Big Rivers Electric Corp. Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **Zip:** 42455
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# N/A

Facility Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson **State:** Ky **Zip:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Location of Project: Address: P.O. Box 325
City: Hawesville **County** Hancock **State:** Ky **Zip:** 42420
Building# or name, floor & room (if appropriate) NA
Age of Building(s) or affected part: 20 yrs **Present or Prior Use of Building(s):** Power Plant
Size of Building(s) or affected part (sq. ft.): NA **# Floors Affected:** NA

	friable or potentially friable	nonfriable, will remain nonfriable	
Amount of ACM to be removed (l. ft.):	2		**Abatement Technique:** Glove bag
Amount of ACM to be removed (s. ft.):			**Abatement Technique:**
Dislodged ACM to be removed (cu. ft.):			**Abatement Technique:**

Contract Dates: Start Renovation/Demolition _____ Finish _____
Start Removal/Disturbance 11/13/91 (begin prep / begin removing) Finish 11/14/91

If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)

TYPE OF PROJECT (CHECK ONE):

Planned Renovation X Is this part of a long-term notification?(Y/N) N

Emergency Renovation _____ Attach description of sudden, unexpected event which necessitated removal, including date & hour of event and explanation of necessity of removal (unsafe, equipment damage, unreasonable financial burden, health problems).

Demolition _____ Property condemned?(Y/N) _____ Attach signed, dated copy of order which includes date when demolition is to begin.

*If attachments are needed to explain information presented on this form, propose alternative procedures, request non-friability determination, etc., please indicate number of additional pages and attach them.

DEP 7036

Description of planned renovation/demolition: Remove ACM from Recycle Line

Description of affected facility components, including asbestos detection technique:
Boiler Feed Pump, DA Tank - Polarized Light Microscopy

Amount of nonfriable ACM that will be affected by renovation/demolition but will remain nonfriable and will not be removed _____. Describe physical characteristics which make this ACM nonfriable and the methods to be used to keep it nonfriable:

Contingency plan describing procedures to be followed in the event this ACM becomes friable:
Glove bag

Contingency plan to address any additional ACM uncovered during renovation/demolition:
Glove bag

Disposal Site: D. B. Wilson Land fill Ohio Co.

Address: P. O. Box 190 (Street) Island (City) Ky (State) Phone: (502) 827-2561

Disposal Amounts: 0.0002
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: unknown at this time - will dispose as landfill space is available
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Waste Transporter(s) Name: Big Rivers Electric Corp

Address: 201 3rd St (Street) Henderson (City) Ky (State) Phone: (502) 827-2561

I hereby certify that at least one trained person listed on contractor's Kentucky-issued certificate will supervise the abatement work described herein.

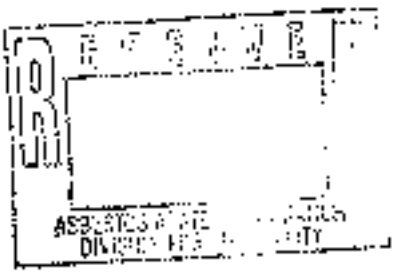
_____ of _____
Signature (your company name)

Submitted by Joe L Craig of Big Rivers Electric Corp

*If attachments are needed to explain information presented on this form, propose alternative procedures, request non-friability determination, etc., please indicate number of additional pages and attach them.

BIG RIVERS ELECTRIC CORPORATION

CERTIFIED #P-034-404-527



October 29, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

RE: Notification #91-78

Dear Mr. Moore:

Enclosed is a Ten Day Report form for Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

J. Dale Roberts
Waste Management Scientist

lk
Registered/Return Receipt Requested

P.O. Box 24 • Berry, Kentucky 41003 • Telephone 606-627-2558

NOTIFICATION OF DEMOLITION AND RENOVATION (Continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove ACM from Fan Room - Negative Air Enclosure / Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Negative Air Enclosure

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Land Fill Ohio County
Location: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Telephone: Dale Roberts

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

(Signature of Owner/Operator) 8/4/91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

NOTIFICATION OF DEMOLITION AND RENOVATION

091-1580-0003

LOG #652

Operator Project #	Postmark	Date Received	Notification #
			91-51

I. TYPE OF NOTIFICATION (O-Original R-Revised C-Cancelled): O — R

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operators)

OWNER NAME: Big Rivers Electric Corp

Address: 201 3rd St.

City: Henderson | State: Ky | Zip: 4242

Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Certin Corp.

Address: 6601 N. Interchange Rd

City: Evansville | State: In | Zip: 47715

Contact: Mike Danhauer | Tel: 812-473-9927

OTHER OPERATOR:

Address:

City:

Contact: | State: | Zip:

Tel:

III. TYPE OF OPERATION (D-Demo O-Ordered Demo R-Renovation E-Other Renovation): O

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman Station Old Fan Room Unit 1+2

Address: P.O. Box 225

City: Hawesville | State: Ky | County: Hancock

Site Location: NA

Building Size: NA | # of Floors: NA | Age in Years: 20

Present Use: Power Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microsopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING:

1. Regulated ACM to be removed
2. Category I ACM Not Removed
3. Category II ACM Not Removed

	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes				Lnft:	Lin m:
Surface Area	274			Sqft:	Sq m:
Vol RACM Off Facility Components				Cuft: ✓	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 8-22-91 Complete: 8-30-91

11-27-91 OR
11-6-91 DR

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

BIG RIVERS ELECTRIC CORPORATION

CERTIFIED #P-780-195-223

October 28, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

RE: Notification #91-51

Dear Mr. Moore:

Enclosed is a Revised Ten Day Report Form for Notification of Asbestos Abatement Activities. The completion date has been changed from November 6, 1991 to November 27, 1991.

If further information is needed, please feel free to contact me.

Sincerely,

Dale Roberts
Waste Management Scientist

ls
Registered/Return Receipt Requested

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

9-15-91
Date

91 - 62
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

Contractor: Big River Electric Corp Wilson Station
Address: P.O. Box 447
City: Centertown **State:** Ky **ZIP:** 42328
Phone: (502) 852-2561

OFFICE USE ONLY
I.D.# 017 30 30-0069
LOG# 691

Facility Information:
Building Owner or Operator: Big River Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Kobeck **Phone:** (502) 827-2561
Age of Building(s): 5 yrs **Use of Building(s):** Power Plant
Address: P.O. Box 447
City: Centertown **State:** Ky **ZIP:** 42328
Amount of Asbestos (l. ft.): _____ **Abatement Technique:** _____
Amount of Asbestos (s. ft.): 2003 **Abatement Technique:** wetting with amended water
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** Y
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: Start Removal: 9-30-91 Finish Removal: 10-3-91 10-7-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: Wilson Station Ash Pile
Site Name: Wilson Landfill
Address: P.O. Box 447 (Street) Centertown (City) Ky (State) **Phone:** (502) 852-2561
Disposal Amounts: 0.08
Enter total amounts to be disposed of from entire project. Enter amounts in cubic yards of asbestos waste.
Disposal Schedule: Various as this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big River Elec. Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Stamp	Date Received	Notification #
			91-62

I. TYPE OF NOTIFICATION (1=Original 2=Revised 3=Cancelling): 1 Previous P

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator) 10-4-91 DK

OWNER NAME: Big Rivers Electric Corp

Address: 201 2nd St

City: Henderson State: Ky Zip: 42420

Contact: Dale Lake II Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp. Wilson Station

Address: P.O. Box 543

City: Centertown State: Ky Zip: 42328

Contact: Dale Lake II Tel: 502-827-2561

OTHER OPERATOR:

Address:

City: State: Zip:

Contact: Tel:

III. TYPE OF OPERATION (1=Demo 2=Covered Demo 3=Renovation 4=Emer.-Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Wilson Station

Address: P.O. Box 543

City: Centertown State: Ky County: Ohio

Site Location: N/A

Building Size: N/A # of Floors: N/A Age in Years: 6 yrs

Present Use: Power Plant Prior Use: N/A

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	Regulated ACM to be Removed	Nonfriable Asbestos Material Not to be Removed		Indicate Unit of Measurement Below	
		Cat I:	Cat II:	UNIT	
Pipes				Lnft:	Ln ft:
Surface Area	2063			Sqft: ✓	Sq ft:
Vol RACM off Facility Components				Cuft:	Cu ft:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY): Start: 9-25-91 Completed: 10-3-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY): Start: Completed: 10-7-91

9/25/91 DK

Continued on page two

Figure 1. Notification of Demolition and Renovation

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

Remove Acoustic Tile with Water Based Sealer - Insert into Poly Drum

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

Vacuum - wet wipe, Bobcat

XII. WASTE TRANSPORTER #1

Name: Bi-River Electric Corp.

Address: 201 3rd St

City: Henderson | State: Ky | Zip: 42420

Contact Person: Dale Roberts | Telephone: 502-827-3561

WASTE TRANSPORTER #2

Name:

Address:

City: | State: | Zip:

Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: OK Wilson Landfill

Address: PO Box 540

City: Centertown | State: Ky | Zip: 42328

Telephone: (502-932-3561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:

Authority:

Date of Order (mm/dd/yy): | Date Ordered to Begin (mm/dd/yy):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (mm/dd/yy):

Description of the sudden, unexpected event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable hazard to persons:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT

Joe Lam 9/21/91

(Signature of Owner/Operator) (Date)

Figure 3. Notification of Demolition and Renovation

BIG RIVERS ELECTRIC CORPORATION

CERTIFIED # P 780 195 322

October 4, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

RE: Notification #91-62

Dear Mr. Moore:

Enclosed is a copy of the Revised Ten Day Report Form for Prior Notification of Asbestos Abatement Activities. The stop date has been changed from October 15 to October 3.

If further information is needed, please feel free to contact me.

Sincerely,

D. Dale Roberts
Waste Management Scientist

ls

DEP 7038

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

9/26/91
Date

91 - 72
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

Contractor: Big Rivers Electric Corp Coleman Station
Address: P.O. Box 335
City: Hawesville State: Ky ZIP: 42348
Phone: (502) 927-3561

OFFICE USE ONLY
I.D.# 007-1580-0003
LOG# N/A

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: PO Box 335
City: Hawesville State: Ky ZIP: 42348
Representative Bob Booth Phone: (502) 852-2561
Age of Building(s): 20 yrs Use of Building(s): Power Plant
Address: PO Box 335
City: Hawesville State: Ky ZIP: 42348
Amount of Asbestos (l. ft.): 8 Abatement Technique: Glove Bag
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ _____ Is this part of a long-term notification? (Y/N) N
Emergency Renovation? ☒ X Demolition? ☒ _____
Contract Dates: Start Removal: 9/25/91 Finish Removal: 9/25/91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Landfill Adams Co.
Site Name: Wilson Landfill
Address: P.O. Box 549 (Street) Centertown (City) Ky (State) Phone: (502) 339-2561
Disposal Amounts: 0.008
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOV ION

Operator Project #	FOREMAN	Date Received	Notification #
			9172

I. TYPE OF NOTIFICATION (Original Amendment Cancelled): Original

II. FACILITY INFORMATION (Identify owner, operator, contractor, and other operator)

OWNER NAME: Big River [illegible]

Address: [illegible]

City: [illegible] State: [illegible] Zip: 4240[illegible]

Contact: Cole Kobert Tel: 522-307-2[illegible]

REMOVAL CONTRACTOR: Big River [illegible] c/o Cakeman Station

Address: P.O. Box 325

City: Harrisville State: [illegible] Zip: 40 348

Contact: Cole Kobert Tel: 502-478-35[illegible]

OTHER OPERATOR:

Address:

City: State: Zip:

Contact: Tel:

III. TYPE OF OPERATION (Owned Operated Demolition Renovation): Demol. Renovation): E

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman Store

Address: P.O. Box 325

City: Harrisville County: Hancock

Site Location: N/A

Building Size: N/A # of Floors: Age in Years: 72

Present Use: Auction Place Vacant or Occupied: N/A

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Visual Inspection

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	Check To Be Removed	Nonfriable Asbestos Material Not To Be Removed: Cat I	Cat II	Indicate Unit of Measurement Below: Unit	
Pipes	✓			Lnft: ✓	Sq ft:
Surfaces Area				Sqft:	Sq ft:
Cubic Ft Off Facility Components				Cuft:	Cu ft:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (mo/day/yr): Start: 9/25/91 Completion: 9/25/91

IX. SCHEDULED DATES DEMO/RENOVATION (mo/day/yr): Start: Completion:

Continued on page two

Figure 3. Notification for Demolition and Renovation

Best Available Copy

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

Repair Hole in Pipe - Glove Bag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

Glove Bag

XII. WASTE TRANSPORTER #1

Name: Big River Waste Corp

Address: 201 2nd St

City: Henderson | State: Ky | Zip: 42420

Contact Person: Dale Robert | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:

Address:

City: | State: | Zip:

Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: O.B. Wilson Landfill

Location: P.O. Box 547

City: Centertown | State: Ky | Zip: 42328

Telephone: 502-932-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:

Authority:

Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY): 9/25/91 1000

Description of the Sudden, Unexpected Event:

Hole in Steam coil line

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

Hole in line would Allow Insulation to be blown out

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. [Required 1 year after promulgation]:

(Signature of Owner/Operator) (Date)

XVIII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

(Signature of Owner/Operator) 9/26/91 (Date)

Figure 3. Notification of Demolition and Renovation

BIG RIVERS ELECTRIC CORPORATION

September 20, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

RE: Notification #91-72

Dear Mr. Moore:

Enclosed is a Emergency Ten Day Report Form for Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

G. Dale Roberts
Waste Management Scientist

ls
Registered/Return Receipt Requested

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

9-15-91
Date

SEP 27 '91 91 - 62
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

Contractor: Big River Fabric Corp of Ky
Address: P.O. Box 507
City: Cadiz State: Ky ZIP: 42211
Phone: (502) 924-2501

OFFICE USE ONLY
I.D.# 017-307-0069
LOG# 691

Facility Information:

Building Owner or Operator: Big River Fabric Corp
Address: 201 2nd St.
City: Henderson State: Ky ZIP: 42420
Representative Bob Pickett Phone: (502) 924-2501
Age of Building(s): 6 yrs Use of Building(s): Paper Plant
Address: P.O. Box 507
City: Cadiz State: Ky ZIP: 42211
Amount of Asbestos (l. ft.): _____ Abatement Technique: _____
Amount of Asbestos (s. ft.): 2000 ± Abatement Technique: Wet removal
Planned Renovation? ☒ X Is this part of a long-term notification? (Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: 9-23-91 Finish Removal: 10-15-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D. R. Williams Sanitary Landfill
Site Name: D. R. Williams Sanitary Landfill
Address: P.O. Box 502 (Street) Cadiz (City) Ky (State) Phone: (502) 924-2501

Disposal Amounts: 40 CY
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Within 24 hrs. of removal
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security

Submitted by: _____ (Signature) of Big River Fabric Corp (Signature company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Permark	Date Received	Notification #
			91-62

I. TYPE OF NOTIFICATION : O-Original R-Revised C-Cancelled [O] R 4/25 K. DK

II. FACILITY INFORMATION : Identify owner, removal contractor, and other operators :

OWNER NAME: Big Rivers Electric Corp.

Address: 201 3rd St

City: Henderson | State: Ky | Zip: 42420

Contact: Dale Robert | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp. Wilson Station

Address: P.O. Box 543

City: Centertown | State: Ky | Zip: 42328

Contact: Dale Robert | Tel: 502-273-3564

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tel:

III. TYPE OF OPERATION : D-Demo O-Otherwise Demo R-Renovation T-Char.Renovation [R]

IV. IS ASBESTOS PRESENT? [Yes/No] Y

V. FACILITY DESCRIPTION : Include building name, number and floor or room address :

Bldg Name: Wilson Station

Address: PO Box 543

City: Centertown | State: Ky | County: 42328

Site Location: NA

Building Size: N/A | # of Floors: N/A | Age in Years: 6, 1/2

Present Use: Coke Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL.

Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Friable ACM to be removed 2. Friable ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable ACM(RACM) Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes				Linear	Or Ft
Surface Area	2043			Square	Sq Ft
Vol RACM Off Facility Components				Cubic	Cu Ft

VIII. SCHEDULED DATES ASBESTOS REMOVAL (mo/da/yr) Start: 9-15-91 Completed: 10-15-91

IX. SCHEDULED DATES DEMO/RENOVATION (mo/da/yr) Actual: Completed:

Continued on page two

Figure 1. Notification of Demolition and Renovation

Big Rivers Elec. Corp.

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

Remove Acoustic Tile, Vinyl Tile & Base, Plaster - Drywall Interior - Brick Exterior

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

Vacuum - wet wipe, Lockdown

XII. WASTE TRANSPORTER #1

Name: Bi-Rivers Electric Corp.

Address: 2012 2nd St

City: Henderson | State: Ky | Zip: 42420

Contact Person: Don Hobart | Telephone: 502-827-9?

WASTE TRANSPORTER #2

Name:

Address:

City: | State: | Zip:

Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: O.B. Williams Landfill

Location: P.O. Box 548

City: Centertown | State: Ky | Zip: 42328

Telephone: (502-924-5561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:

Authority:

Date of Order (MM/DD/YY): | Date Received by Owner/Operator (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):

Description of the sudden, unexpected event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

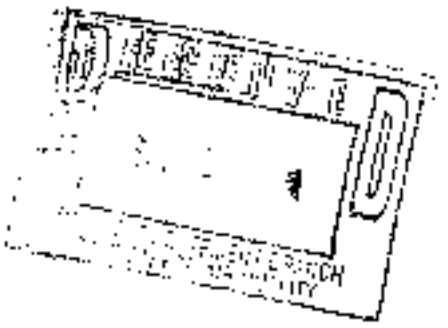
(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

(Signature of Owner/Operator) 9/21/91 (Date)

Figure 3. Notification of Demolition and Renovation

BIG RIVERS ELECTRIC CORPORATION



September 25, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

RE: Notification #91-67

Dear Mr. Moore:

Enclosed is a Revised Ten Day Report form for Notification of Asbestos Abatement Activities. The start date has been changed from September 25, 1991 to September 30, 1991.

If further information is needed, please feel free to contact me.

Sincerely,

J. Dale Roberts
Waste Management Scientist

lc
Registered/Return Receipt Requested

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

9-6-91
Date

91-51
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 159 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

Contractor: Contin Corp.
Address: 6601 N. Interchange Rd.
City: Evansville State: In ZIP: 47715
Phone: (812) 473-9907

OFFICE USE ONLY
I.D.# 071-1550-[illegible]
LOG# 6512

Facility Information:

Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson State: Ky ZIP: 42420
Representative Dale Roberts Phone: (502) 827-3561
Age of Building(s): 20 yrs Use of Building(s): Power Plant
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Amount of Asbestos (l. ft.): 0 Abatement Technique:
Amount of Asbestos (s. ft.): 2400 Abatement Technique: Negative Air Enclosure - Glove Bag
Planned Renovation? ☒ X Is this part of a long-term notification?(Y/N) N/A
Emergency Renovation? ☒ [illegible] Demolition? ☒
Contract Dates: Start Removal: 9-20-91 Finish Removal: 8-30-91
If previously reported; by: Phone (date) Telefax (date) Other (date)
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 540 (Street) Centertown (City) Ky (State) Phone: (502) 827-3561
Disposal Amounts: 10.45
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: [signature] (Signature) of Big River Electric Corp. (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-51

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp

Address: 201 3rd St.

City: Henderson | State: Ky | Zip: 42420

Contact: Dale Bohnert | Tel: 502-827-2561

REMOVAL CONTRACTOR: Centria Corp

Address: 6101 N. Interchange Rd.

City: Evansville | State: In | Zip: [redacted] 47715

Contact: Mike Danhauer | Tel: 812-473-9927

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tel:

III. TYPE OF OPERATION (A=Asbs D=Covered Asbs R=Demolition S=Sngl. Removal): O

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman Station 010 Fan Room Unit 1+2

Address: P.O. Box 225

City: Hawesville | State: Ky | County: Hancock

Site Location: N.A.

Building Size: N/A | # of Floors: N/A | Age in Years: 30

Present Use: Power Plant | Prior Use: N/A

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	Estimated Amount To Be Removed	Nonfriable Asbestos Material Not to Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	Unit	
Pipes				Linear:	Do not
Surface Area	274			Square:	Do not
No. Each or Facility Components				Cubic: 1	Do not

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY): Start: 9-23-91 Completed: 9-30-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY): Start: Completed:

Continued on page two

Figure 2. Notification of Demolition and Renovation

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove ACM from Fan Room - Negative Air Enclosure / Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Negative Air Enclosure

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.R. Wilson Land Fill
Location: P.O. Box 540
City: Centertown | State: Ky | Zip: 42328
Telephone: Dale Roberts

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered by Agency (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVIII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

[signature] 8/4/90
(Signature of Owner/Operator) (Date)

Figure 3. Notification of Demolition and Renovation

BIG RIVERS ELECTRIC CORPORATION

August 6, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

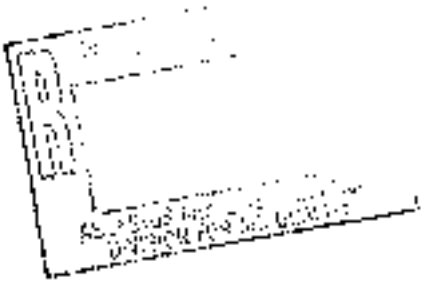
Enclosed is a copy of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

J. Debo Roberts
Waste Management Scientist

enc
Registered/Return Receipt Requested



P.O. Box 24 Henderson, KY 42420 Telephone (502) 827-2561

DEP 7035

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

8-6-91
Date

91-50
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filed out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

Contractor: Big Rivers Electric Corp. Coleman Station
Address: P.O. Box 355
City: Hawesville State: Ky. ZIP: 42348
Phone: (502) 927-2561

OFFICE USE ONLY
I.D.# 021-1580-0003
LOG# 651

Facility Information:

Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson State: Ky. ZIP: 42420
Representative Dale Robertz Phone: (502) 929-2556
Age of Building(s): 20 yrs Use of Building(s): Power Plant
Address: P.O. Box 355
City: Hawesville State: Ky. ZIP: 42348
Amount of Asbestos (l. ft.): _____ Abatement Technique: _____
Amount of Asbestos (s. ft.): 59 Abatement Technique: wet + hepa vacuum
Planned Renovation? ☒ Y Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: 8-21-91 Finish Removal: 8-30-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 543 (Street) Centertown (City) Ky. (State) Phone: (502) 277-2561
Disposal Amounts: 0.04
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste
Disposal Schedule: unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Elect. Corp. (your company name)

NOTIFICATION OF DEMOLITION AND NOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-50

I. TYPE OF NOTIFICATION : O-Original R-Revised C-Cancelled): O

II. FACILITY INFORMATION : (Facility owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp

Address: 201 3rd St

City: Henderson | State: Ky | Zip: 42420

Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman Station

Address: P.O. Box 325

City: Hawesville | State: Ky | Zip: 42348

Contact: Dale Roberts | Tel: 502-852-2561

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tel:

III. TYPE OF OPERATION : D-Demo C-Covered Demo R-Renovation F-Other Renovation): D

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, suburb and floor or room number):

Bldg Name: Coleman Station

Address: PO Box 325

City: Hawesville | State: Ky | County: Hancock

Site Location: N/A

Building Size: N/A | # of Floors: N/A | Age in Years: 20

Present Use: Power Plant | Prior Use: N/A

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	Units To be Removed	Nonfriable Asbestos material Not to be Removed: Cat I	Cat II	Indicate Unit of Measurement Below: Unit	
Pipes				Linear	LN FT
Surface Area	21			Square	Sq FT
Vol: RACM Off Facility Component				Cubic	✓ CU FT

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 8-20-91 Completed: 9-20-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Completed:

Continued on page two

Figure 2. Notification of Demolition and Renovation

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

Remove Insulation from Steam Lines - wet + Hepa vacuum

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

wet + Hepa Vacuum

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp

Address: 201 2nd St

City: Henderson | State: Ky | Zip: 42420

Contact Person: Dale Edwards | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:

Address:

City: | State: | Zip:

Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D&B Wilson Landfill

Location: P.O. Box 549

City: Centertown | State: Ky | Zip: 42328

Telephone: 502-932-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:

Authority:

Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):

Description of the Sudden, Unexpected Event:

Explanation of How the Event Caused Unsafe Conditions or Would Cause Equipment Damage or an Unreasonable Financial Burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT:

[signature] 8/6/91

(Signature of Owner/Operator) (Date)

Figure 1. Notification of Demolition and Renovation

BIG RIVERS ELECTRIC CORPORATION

August 6, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

J. Dale Roberts
Waste Management Scientist

aj
Registered/Return Receipt Requested

Post Office Box 24 Henderson, KY 42420-0024 Telephone 502-827-2561

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

8-7-91
Date

91-59
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

Contractor: Big River Electric Corp. Coleman Stroat II
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 07-1990-0003
LOG# 615

Facility Information:

Building Owner or Operator: Big River Electric Corp
Address: 201 3rd St
City: Henderson State: Ky ZIP: 42420
Representative Dale Roberts Phone: (502) 827-2561
Age of Building(s): 20 yrs Use of Building(s): Power Plant
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Amount of Asbestos (l. ft.): 6.5 Abatement Technique: Glove bag
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ X Is this part of a long-term notification? (Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: 9-13-91 Finish Removal: 9-13-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other: _____ (date)
Disposal Site: O.B. Wilson Land Fill
Site Name: O.B. Wilson Land Fill
Address: P.O. Box 542 (Street) Owensboro (City) Ky (State) Phone: (502) 684-2564
Disposal Amounts: 0.01
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big River Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AN RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-54

I. TYPE OF NOTIFICATION (O=Original R=Rev.and C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp

Address: 201 3rd St

City: Henderson | State: KY | Zip: 42420

Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman TE Station

Address: P.O. Box 337

City: Hawesville | State: KY | Zip: 42348

Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tel:

III. TYPE OF OPERATION (O=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include Building name, number and floor or room number):

Bldg name: Coleman Station TE

Address: P.O. Box 337

City: Hawesville | State: KY | County: Hancock

Bldg location: NA

Building Size: NA | # of Floors: NA | Age in Years: 20

Present Use: Power Plant | Prior Use: NA

VI PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: a. Estimated ACM to be Removed b. Category I ACM Not Removed c. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not to Be Removed: Cat I	Cat II	Indicate Unit of Measurement Below: CHECK	
Pipes	6.8			Linear ✓	Lin ft
Surface Area				Sq ft	Sq ft
Vol RACM Of Facility Component				Cubic	Cu ft

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 9-13-91 Complete: 9-13-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 3 Notification of Demolition and Renovation

NOTIFICATION OF DEMOLITION AND RENOVATION (appl...num)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove Insulation from Furnace Pipe - Glove bag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glove bag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp
Address: 201 2nd St
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill
Location: P.O. Box 542
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-657-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):

Description of the Sudden, Unexpected Event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND ON PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.
PWB
(Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

[illegible]

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

RECEIVED
AUG 16 1991

8-7-91
Date

91 - 60
Notification Number

AUG 26 1991

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Coleman III Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 07-1580-0003
LOG# 678

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 9 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: Start Removal: 9-16-91 Finish Removal: 9-16-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Land fill
Site Name: Wilson Land fill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 897-2561
Disposal Amounts: 0.007
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Jose L Ray (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-60

I. TYPE OF NOTIFICATION : O=Original R=Revised C=Cancelled : O

II. FACILITY INFORMATION : (Identify owner, operator, contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp.

Address: P.O. Box 391 3rd Fl

City: Henderson | State: Ky | Zip: 42420

Contact: D. L. Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman PP Station

Address: P.O. Box 375

City: Hawesville | State: Ky | Zip: 42348

Contact: Dale Roberts | Tel: 502-927-2561

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tel:

III. TYPE OF OPERATION : D=Demolition C=Ordered Demo E=Emergency Renovation : R

IV. IS ASBESTOS PRESENT? : Y/N/O : Y

V. FACILITY DESCRIPTION : (Include building name, number and floor or room number)

Bldg Name: Coleman PP Station

Address: P.O. Box 375

City: Hawesville | State: Ky | County: Hancock

Site Location: N/A

Building Size: N/A | # of Floors: N/A | Age in Years: 20

Present Use: Power Plant | Prior Use: N/A

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be Removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	Each To Be Removed	Nonfriable Asbestos Material Not To Be Removed: Cat I	Cat II	Indicate Unit of Measurement Below: UNIT
Pipes	9			Sq/Ft: ✓ Sq M:
Surface Area				Sq/Ft: Sq M:
Any Each Not Facility Components				Cu/Ft: Cu M:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (mo/day/yr) Start: 9-11-91 Completed: 9-11-91

IX. SCHEDULED DATES DEMO/RENOVATION (mo/day/yr) Start: Completed:

Continued on page two

Figure 1. Notification of Demolition and Renovation

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove Insulation from "E" Piping S.W. Drain - Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glovebag

XII. WASTE TRANSPORTER #1

Name: Big River Electric Corp.
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact Person: D.L. Roberts | Telephone: 502-827-3581

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Land Fill
Location: P.O. Box 549
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-852-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Phone: | Person:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVIII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

P.W.B. (Signature of Owner/Operator) 9-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

8-7-91
Date

91-61
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

Contractor: Big Rivers Electric Corporation - Station
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Phone: (502) 927-256

OFFICE USE ONLY
I.D.# 05-1580-0003
LOG# 678

Facility Information:

Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson State: Ky ZIP: 42420
Representative Dale Roberts Phone: (502) 827-2561
Age of Building(s): 20 yrs Use of Building(s): Power Plant
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Amount of Asbestos (l. ft.): 30 Abatement Technique: Glovebag
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ X Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: 9-17-91 Finish Removal: 9-17-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: O.B. Wilson Landfill
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) Phone: (502) 932-256

Disposal Amounts: 0.02
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-121

I. TYPE OF NOTIFICATION (O=Original A=Amended C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp

Address: 201 3rd St

City: Henderson | State: Ky | Zip: 42420

Contact: Dale Roberts | Tele: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Coop Coleman III Station

Address: P.O. Box 325

City: Hawesville | State: Ky | Zip: 42348

Contact: Dale Roberts | Tele: 502-927-2561

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tele:

VII. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number):

Bldg Name: Coleman III Station

Address: P.O. Box 325

City: Hawesville | State: Ky | County: Hancock

Site location: N/A

Building Size: N/A | # of Floors: N/A | Age in Years: 20

Present Use: Power Plant | Prior Use: N/A

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	Units To be Removed	Nonfriable Asbestos Material Not To be Removed: Cat I	Cat II	Indicate Unit of Measure Below: Unit	
Pipes	30			Linear ✓	Lin ms
Surface Area				Sq Ft	Sq ms
Vol Each Off Facility Component				Cu Ft	Cu ms

VIII. SCHEDULED DATES ASBESTOS REMOVAL (mm/dd/yy): Start: 9-17-91 Complete: 9-17-91

IX. SCHEDULED DATES DEMO/RENOVATION (mm/dd/yy): Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

Best Available Copy

IFICATION OF DEMOLITION AND RENOVA... (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

Remove Insulation from 10" Primary SH Drain - Glove Bag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

Glovebag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp

Address: 201 3rd St.

City: Henderson | State: Ky | Zip: 42420

Contact Person: Dale Collett | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:

Address:

City: | State: | Zip:

Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill

Location: P.O. Box 544

City: Centertown | State: Ky | Zip: 42328

Telephone: 502-852-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:

Authority:

Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):

Description of the Sudden, Unexpected Event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

BJB

(Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

Best Available Copy

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

AUG 16 1991

8-7-91
Date

91 -- 58
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

AUG 26 1991

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. Coleman III Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42328
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 177-1580-0003
LOG# 678

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs. **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42328
Amount of Asbestos (l. ft.): 10 **Abatement Technique:** Glove bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 9-10-91 **Finish Removal:** 9-11-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)

Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-256

Disposal Amounts: 0.52
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Joe L. Hay (Signature) of Big Rivers Electric Corp. (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-58

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson | State: Ky | Zip: 42420
Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman Station III
Address: P.O. Box 325
City: Hawesville | State: Ky | Zip: 42328
Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:
Address:
City: | State: | Zip:
Contact: | Tel:

III. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman III Station
Address: P.O. Box ~~Road~~ 325
City: Hawesville | State: Ky | County: Hancock
Site Location: NA
Building Size: NA | # of Floors: NA | Age in Years: 20
Present Use: Power Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:
Polarized Light Microsopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes	10			Lnft: ✓	Ln m:
Surface Area				Sqft:	Sq m:
Vol RACM Off Facility Component				Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 9-10-91 Complete: 9-11-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

Best Available Copy

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove Insulation from Steam Coil Line By "D" Feed Deck-Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glovebag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill
Location: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-827-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.
PWB

(Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

ASBESTOS ABATEMENT BRANCH DIVISION FOR AIR QUALITY

Best Available Copy

DEP 7036

RECEIVED
AUG 1 8 1991

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

8-7-91
Date

91-57
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

AUG 26 1991

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 178

Contractor: Big Rivers Electric Corp Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs. **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 4 **Abatement Technique:** glove bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: Start Removal: 9-9-91 Finish Removal: 9-9-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)

Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 548 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561

Disposal Amounts: 0.09
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-57

I. TYPE OF NOTIFICATION (O-Original R-Revised C-Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp

Address: 201 3rd St

City: Henderson | State: KY | Zip: 42420

Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp. Coleman III Station

Address: P.O. Box 325

City: Hawesville | State: Ky | Zip: 42348

Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:

Address:

City:

Contact: | State: | Zip:

Tel:

III. TYPE OF OPERATION (O-Demo O-Ordered Demo R-Renovation E-Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No) Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman III Station

Address: P.O. Box 325

City: Hawesville | State: Ky | County: Hancock

Site Location: NA

Building Size: NA | # of Floors: NA | Age in Years: 20

Present Use: Power-Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microsopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING:

1. Regulated ACM to be removed
2. Category I ACM Not Removed
3. Category II ACM Not Removed

	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes				Lnft: ✓	Ln m:
Surface Area	4			Sqft:	Sq m:
Vol: RACM Off Facility Component				Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 9-9-91 Complete: 9-9-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

Best Available Copy

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove Insulation from #4 Heater Inlet Line - Glove bag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glove bag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Coop.
Address: 201 3rd St.
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B Wilson Land Fill
Location: P.O. Box 544
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-827-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT. PWD

(Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

Best Available Copy

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

8-7-91
Date

91 - 56
Notification Number

AUG 26 1991

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Coleman III Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077-1680-0003
LOG# 678

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 3 **Abatement Technique:** Glovebag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 9-7-91 **Finish Removal:** 9-7-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.0003
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-56

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman III Station
Address: P.O. Box 325
City: Hawesville | State: Ky | Zip: 42348
Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:
Address:
City: | State: | Zip:
Contact: | Tel:

III. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman III Station
Address: P.O. Box 325
City: Hawesville | State: Ky | County: Hancock
Site Location: NA
Building Size: NA | # of Floors: NA | Age in Years: 20
Present Use: Power Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:
Polarized Light Microsopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes	3			Lnft: ✓	Ln m:
Surface Area				Sqft:	Sq m:
Vol RACM Off Facility Component				Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 9-7-91 Complete: 9-7-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

Best Available Copy

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove Insulation from #3 Heat Bypass Valve Line - Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glovebag

XII. WASTE TRANSPORTER #1

Name: Big River's Electric Corp
Address: 201 3rd St.
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill
Location: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-827-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT:

RMB 111 (Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

Best Available Copy

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

AUG 16 1991

8-7-91
Date

91 -- 55
Notification Number

AUG 26 1991

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Coleman III Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 678

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs. **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 4 **Abatement Technique:** Glove bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 9-6-91 **Finish Removal:** 9-6-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.004
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Joe L. Gray (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-55

I. TYPE OF NOTIFICATION (O-Original R-Revised C-Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson | State: Ky | Zip: 42420
Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman III Station
Address: P.O. Box 325
City: Hawesville | State: Ky | Zip: 42348
Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:
Address:
City: | State: | Zip:
Contact: | Tel:

III. TYPE OF OPERATION (D-Demo O-Ordered Demo R-Renovation E-Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No) Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman III Station
Address: P.O. Box 325
City: Hawesville | State: Ky | County: Hancock
Site Location: NA
Building Size: NA | # of Floors: | Age in Years: 20
Present Use: Power Plant | Prior Use:

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Polarized Light Microsopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes	4			Lnft: ✓	Ln m:
Surface Area				Sqft:	Sq m:
Vol RACM Off Facility Component				Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: Complete:

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

Best Available Copy

IFICATION OF DEMOLITION AND REMOVAL (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove ACM from West Reheat Spray valve - Check valve - Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glovebag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill
Location: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-829-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the sudden, unexpected event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

PWB
(Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

Best Available Copy

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

8-7-91
Date

Ohio 91-54
Notification Number

AUG 26 1991

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Coleman III Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42328
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 678

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs. **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42328
Amount of Asbestos (l. ft.): 4 **Abatement Technique:** Glove bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 9-5-91 **Finish Removal:** 9-5-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Station
Site Name: Wilson Land fill
Address: P.O Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.57
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: _____
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-54

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp

Address: 201 3rd St.

City: Henderson | State: Ky | Zip: 42420

Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman Station

Address: P.O. Box 325

City: ~~Coleman~~ Hawesville | State: Ky | Zip: 42348

Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tel:

III. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No) Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman III Station

Address: P.O. Box 325

City: Hawesville | State: Ky | County: Hancock

Site Location: NA

Building Size: NA | # of Floors: NA | Age in Years: 20

Present Use: Power Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microsopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes	4			Lnft: V	Ln m:
Surface Area				SqFt:	Sq m:
Vol RACM Off Facility Component				CuFt:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 9-5-91 Complete: 9-5-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 3. Notification of Demolition and Renovation

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IFICATION OF DEMOLITION AND REMOVA...ON (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove ACM from Boiler Feed Pump Line - Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glovebag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name: [illegible]
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill
Location: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-827-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT:
PWB, //
(Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

Best Available Copy

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

AUG Ohio

8-7-91
Date

91 --52
Notification Number

AUG 26 1991

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. Coleman Station III
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077 - 1580 - 0003
LOG# 678

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs. **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 10 **Abatement Technique:** Glove BAG
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 9-4-91 **Finish Removal:** 9-4-91
If previously reported; by: **Phone** _____ (date) **Telefax** _____ (date) **Other** _____ (date)

Disposal Site: D.B Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 832-2561

Disposal Amounts: 0.004
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp. (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-52

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp.

Address: 201 3rd St.

City: Henderson | State: Ky | Zip: 42420

Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Coleman Station III

Address: P.O. Box 325

City: Hawesville | State: Ky | Zip: 42348

Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:

Address:

City: | State: | Zip:

Contact: | Tel:

III. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman III Station

Address: P.O. Box 325

City: Hawesville | State: Ky | County: ~~42348~~ Hancock

Site Location: NA

Building Size: NA | # of Floors: NA | Age in Years: 20

Present Use: Power Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes	10			Lnft: ✓	Ln m:
Surface Area				Sqft:	Sq m:
Vol RACM Off Facility Component				Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 9-4-91 Complete: 9-4-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

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NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove ACM from Boiler Feed Pump Line - Glove bag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glove bag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact Person: Dale Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City:
Contact Person: | State: | Zip:
Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill
Location: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-827-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT:

PWB 11 (Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

Best Available Copy

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

8-1-91
Date

91-53
Notification Number

AUG 26 1991

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

OFFICE USE ONLY
I.D.# 117-1580-0003
LOG# 678

Contractor: Big Rivers Electric Corp Coleman III Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 20 yrs **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 10 **Abatement Technique:** Glove bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 9-2-91 **Finish Removal:** 9-4-91
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)

Disposal Site: D.B. Wilson Station
Site Name: Wilson Land fill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561

Disposal Amounts: 0.14
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #
			91-53

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson | State: Ky | Zip: 42420
Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp. Coleman III Station
Address: P.O. Box 325
City: Hawesville | State: Ky | Zip: 42328
Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR:
Address:
City: | State: | Zip:
Contact: | Tel:

III. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No) Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: Coleman III Station
Address: P.O. Box 325
City: Hawesville | State: Ky | County: Hancock
Site Location: NA
Building Size: NA | # of Floors: NA | Age in Years: 20
Present Use: Power Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes	10			Lnft: ✓	Ln m:
Surface Area				Sqft:	Sq m:
Vol RACM Off Facility Component				Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 9-2-91 Complete: 9-4-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

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NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove ACM foam Fiberglass Bypass Valve - Glovebag

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
Glovebag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp
Address: P.O. Box 325
City: Hawesville | State: Ky | Zip: 42328
Contact Person: Dale Roberts | Telephone: 502-927-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill
Location: ~~P.O. Box 325~~ P.O. Box 547
City: Hawesville Cortstown | State: Ky | Zip: 42348
Telephone: 502-927-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):
Description of the Sudden, Unexpected Event:
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

PDB

(Signature of Owner/Operator) 8-12-91 (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

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NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:
Remove packing from fire hydrant valve

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:
glove bag

XII. WASTE TRANSPORTER #1

Name: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact Person: Bob Roberts | Telephone: 502-827-2561

WASTE TRANSPORTER #2

Name:
Address:
City: | State: | Zip:
Contact Person: | Telephone:

XIII. WASTE DISPOSAL SITE

Name: D.B. Wilson Landfill Ohio County
Location: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Telephone: 502-852-2561

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:
Authority:
Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY): 6/21/91 10:00
Description of the Sudden, Unexpected Event:
leaking packing around fire hydrant
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:
loss of fire protection

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.
Joe L Conn 6/24/91
(Signature of Owner/Operator) (Date)

Figure 3. Notification of Demolition and Renovation

BILLING CODE 6560-50-C

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Noti.
			91-4

I. TYPE OF NOTIFICATION (O-Original R-Revised C-Cancelled): O

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson | State: Ky | Zip: 42420
Contact: Dale Roberts | Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp Wilson Station
Address: P.O. Box 547
City: Centertown | State: Ky | Zip: 42328
Contact: Dale Roberts | Tel: 502-827-2561

OTHER OPERATOR: N/A
Address:
City: | State: | Zip:
Contact: | Tel:

III. TYPE OF OPERATION (D-Demo O-Ordered Demo R-Renovation E-Emer.Renovation): E

IV. IS ASBESTOS PRESENT? (Yes/No) Yes

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: D.B Wilson Power Plant
Address: P.O. Box 547
City: Centertown | State: Ky | County: Ohio
Site Location: N/A
Building Size: N/A | # of Floors: NA | Age in Years: 6
Present Use: Power Plant | Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

Polarized Light Microsopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING:

1. Regulated ACM to be removed
2. Category I ACM Not Removed
3. Category II ACM Not Removed

	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes				Lnft:	Lin m:
Surface Area				Sqft:	Sq m:
Vol RACM Off Facility Component	✓			Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 6-21-91 Complete: 6-21-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 1. Notification of Demolition and Renovation

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

RECEIVED
JUN 27 1991
AIR BRANCH
DIVISION FOR AIR QUALITY

6-21-91
Date

91-40
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Wilson Station
Address: P.O. Box 547
City: Centertown **State:** Ky **ZIP:** 42328
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077-3080-0069
LOG# N/A

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 6 yrs **Use of Building(s):** Powe Plant
Address: P.O. Box 547
City: Centertown **State:** Ky **ZIP:** 42328
Amount of Asbestos (l. ft.): 0.05 **Abatement Technique:** Glove bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** _____
Emergency Renovation? ☒ X **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 6-21-91 **Finish Removal:** 6-21-91
If previously reported; by: Phone 6-21-91 (date) Telefax _____ (date) Other _____ (date)
Shannon Rose-SCA

Disposal Site: D.B. Wilson Station
Site Name: Wilson Land Fill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561

Disposal Amounts: 0.001
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Joe L. Craig (Signature) of Big Rivers Electric Corp (your company name)

BIG RIVERS ELECTRIC CORPORATION

June 21, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of the Emergency Removal Ten Day Report Form for Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

J. Dale Roberts
Waste Management Scientist

ls
Registered/Return Receipt Requested

Post Office Box 24, Henderson, Ky. 42420 / Telephone 502-827-2561

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

RECEIVED JUN 17 1991 AIR QUALITY PERMIT BRANCH

6-10-91
Date

91 - 38
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. D.B. Wilson Station
Address: P.O. Box 547
City: Centertown **State:** Ky **ZIP:** 42328
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077-3080-0009
LOG# N/A

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 6 yrs. **Use of Building(s):** Power Plant
Address: P.O. Box 547
City: Centertown **State:** Ky **ZIP:** 42328
Amount of Asbestos (l. ft.): _____ **Abatement Technique:** _____
Amount of Asbestos (s. ft.): 1.2 **Abatement Technique:** wet wipe
Planned Renovation? ☒ x **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: Start Removal: ~~6-25-91~~ 6-27-91 Ok **Finish Removal:** ~~6-25-91~~ 6-27-91 Ok
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Landfill Ohio Co.
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.002
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Joe L Long (Signature) of Big Rivers Electric Corp (your company name)

BIG RIVERS ELECTRIC CORPORATION

RECEIVED
JUN 17
ASBESTOS ABATEMENT BRANCH
DIVISION FOR AIR QUALITY

June 10, 1991

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copies of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

J. Dale Roberts
Waste Management Scientist

ls
Registered/Return Receipt Requested

Post Office Box 24, Henderson, Ky. 42420 / Telephone 502-827-2561

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled): R

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson State: Ky Zip: 42420
Contact: Dale Roberts Tel: 502-827-2561

REMOVAL CONTRACTOR: Big Rivers Electric Corp D.B. Wilson Station
Address: P.O. Box 547
City: Centertown State: Ky Zip: 42328
Contact: Dale Roberts Tel: 502-827-2561

OTHER OPERATOR:
Address:
City: State: Zip:
Contact: Tel:

III. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation): R

IV. IS ASBESTOS PRESENT? (Yes/No): Y

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name: D.B. Wilson Station
Address: P.O. Box 547
City: Centertown State: Ky County: Ohio
Site Location: NA
Building Size: NA # of Floors: NA Age in Years: 6
Present Use: Power Plant Prior Use: NA

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL: Polarized Light Microscopy

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes				Lnft:	Ln m:
Surface Area	✓			Sqft: 1.4	Sq m:
Vol RACM Off Facility Component				Cuft:	Cu m:

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: 6-25-91 Complete: 6-25-91

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 3. Notification of Demolition and Renovation

ENFORCEMENT BRANCH
NOV 14 1990

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

11-5-90
Date

90 - 21
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. Coleman Unit 2
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY:
I.D.# 077 .4020. 0001
LOG# N/A

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp. NOV 09 1990
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Jon Shaw **Phone:** (502) 827-2561 ext 2855
Age of Building(s): 20 **Use of Building(s):** Power Plant
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 2 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ X **Demolition?** ☒ _____
Contract Dates: Start Removal: Nov 5 Finish Removal: Nov 5 1990
If previously reported; by: Phone Nov 5 (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Ohio Co.
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.00
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Material will be held in a fenced area until several more drums are filled
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L Shaw (Signature) of Big Rivers Electric Corp. (Your company name)

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

NOV 20 1990

11-19-90
Date

90-26
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. Coleman Station
Address: PO Box 325
City: Hawesville State: Ky ZIP: 42348
Phone: (502) 827-2561 Ext. 2855

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 756

Facility Information:

Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson State: Ky ZIP: 42420
Representative Dale Roberts Phone: (502) 827-2561
Age of Building(s): 19 Use of Building(s): Power Plant
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Amount of Asbestos (l. ft.): 32 Abatement Technique: Glove Bag
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ X Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: 12-5-90 Finish Removal: 12-5-90
If previously reported; by: Phone 11-19-90 (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill Ohio County
Address: P.O. Box 542 (Street) Centertown (City) Ky (State) Phone: (502) 827-2561
Disposal Amounts: 0.2
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

NOV 20 '90 11:15 BIG RIVERS PRODUCTION

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

NOV 20 1990

11-19-90
Date

90 - 24
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 755

Contractor: Big Rivers Electric Corp. Coleman Station
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Phone: (502) 827-2561 Ext. 2855

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson State: Ky ZIP: 42420
Representative Dale Roberts Phone: (502) 827-2561
Age of Building(s): 19 Use of Building(s): Power Plant
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Amount of Asbestos (l. ft.): 4 Abatement Technique: Glove Bag
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ X Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: 12-3-90 Finish Removal: 12-3-90
If previously reported; by: Phone 11-19-90 (date) Telefax _____ (date) Other _____ (date)

Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) Phone: (502) 827-2561

Disposal Amounts: 0.02
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: No Leaves at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Dale Roberts (Signature) of Big Rivers Electric Corp (your company name)

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

NOV 20 1990
COMPLIANCE BRANCH

11-19-90
Date

90 - 25
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 755

Contractor: Big Rivers Electric Corp Coleman Station
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Phone: (502) 827-2561 Ext 2855

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson State: Ky ZIP: 42420
Representative Dale Roberts Phone: (502) 827-2561
Age of Building(s): 19 Use of Building(s): Power Plant
Address: P.O. Box 325
City: Hawesville State: Ky ZIP: 42348
Amount of Asbestos (l. ft.): 16 Abatement Technique: Glove Bag
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ X Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: 12-3-90 Finish Removal: 12-3-90
If previously reported; by: Phone 11-19-90 (date) Telefax _____ (date) Other _____ (date)

Disposal Site: D.B. Wilson Station
Site Name: Wilson Land-Fill
Address: P.O. Box 543 (Street) Centertown (City) Ky (State) Phone: (502) 827-2561

Disposal Amounts: 0.1
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

RECEIVED
NOV 20 1990
DIV. ENVIRON.

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

11-19-90
Date

90-29
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561 Ext. 2855

OFFICE USE ONLY
I.D.# 177-1580-0003
LOG# 756

Facility Information:
Building Owner or Operator: Big Rivers Electric Coop
Address: 201 3rd St
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 19 **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 6 **Abatement Technique:** Glove bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 12-5-90 **Finish Removal:** 12-5-90
If previously reported; by: **Phone** 11-19-90 (date) **Telefax** _____ (date) **Other** _____ (date)
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.04
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Electric Corp (your company name)

077-1580-0003
LOGS 755 & 756

XEROX TELECOPIER 295 ; 11-20-90;12:02 PM; CCITT G3 → 5025644245 ; # 1
NOV 20 '90 11:12 BIG RIVERS PRODUCTION P01

BIG RIVERS ELECTRIC CORPORATION

TELECOPIER COVER SHEET

RECEIVED
NOV 20 1990

Pages to follow 5

To: Parker Moore

From: Dale Roberts

Telecopier No. (502) 827-2561 Ext. 2507

If you do not receive all the pages telephone: (502) 827-2561 Ext. 2500

BIG RIVERS ELECTRIC CORPORATION

November 20, 1990

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

RECEIVED
NOV 20 1990
COM.

Dear Mr. Moore:

Enclosed are copies of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

J. Dale Roberts
Waste Management Scientist

lg
Registered/Return Receipt Requested

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

RECEIVED
NOV 15 1990
COMPLIANCE Branch

11-15-90
Date

90-23
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Coleman Station
Address: P.O Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 077.1580.0003
LOG# NONE NEEDED

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (502) 827-2561
Age of Building(s): 19 **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 4 **Abatement Technique:** Vacuum and wet wipe
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ x **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 11-15-90 **Finish Removal:** 11-15-90
If previously reported; by: **Phone** 11-15-90 (date) **Telefax** _____ (date) **Other** _____ (date)
Note: material fell from pipe onto the floor
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill Ohio County
Address: P.O. Box 547 (Street) & Centertown (City) KY (State) **Phone:** (502) 827-2561
Disposal Amounts: 2 cu ft
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Tom Shaw (Signature) of Big Rivers Electric Corp (your company name)

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

NOV 26 1990

11-15-90
Date

90-123
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first ~~two digits~~ being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# NONE GIVEN

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (502) 827-2561
Age of Building(s): 19 **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 4 **Abatement Technique:** Vacuum and wet wipe
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ x **Demolition?** ☒ _____
Contract Dates: Start Removal: 11-15-90 Finish Removal: 11-15-90
If previously reported; by: Phone 11-15-90 (date) Telefax _____ (date) Other _____ (date)
Note: material fell from pipe onto the floor
Disposal Site: D.B. Wilson Station
Site Name: Wilson Landfill Ohio County
Address: P.O. Box 547 (Street) & Centertown (City) KY (State) **Phone:** (502) 827-2561
Disposal Amounts: 2 cu ft
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Tom Shaw (Signature) of Big Rivers Electric Corp (your company name)

BIG RIVERS ELECTRIC CORPORATION

077-1580-0003
No Log# GIVEN

RECEIVED
NOV 26 1990

November 15, 1990

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

Thomas L Shaw

Thomas L. Shaw
Senior Environmental Scientist

ls
Registered/Return Receipt Requested

Post Office Box 24, Henderson, Ky. 42420 / Telephone 502-827-2561

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

12-5-90
Date

90 - 28
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561 Ext. 2855

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 790

RECEIVED
DEC 10 1990

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 19 **Use of Building(s):** River Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 18 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 12-18-90 **Finish Removal:** 12-18-90
If previously reported; by: **Phone** 12-5-90 (date) **Telefax** _____ (date) **Other** _____ (date)
Disposal Site: O.B. Wilson Station
Site Name: Wilson Land-fill Ohio Co.
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.03
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big River (your company name)

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

90 - 27
Notification Number

12-3-90
Date

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

OFFICE USE ONLY
I.D.# 077-1580-0093
LOG# 795
RECEIVED
DEC 10 1990

Contractor: Big Rivers Electric Corp. Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561 Ext. 2855

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St.
City: Henderson **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 19 **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 6 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 12-17-90 **Finish Removal:** 12-17-90
If previously reported; by: **Phone** 12-5-90 (date) **Telefax** _____ (date) **Other** _____ (date)

Disposal Site: D.B. Wilson Station
Site Name: Wilson Land-fill Ohio County
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561

Disposal Amounts: Un Known at this time
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: D. 06
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: J Robertson (Signature) of Big Rivers Electric Corp (your company name)

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

12/10/90
Date

90 -- 29
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: BIG RIVERS ELECTRIC CORP - COLEMAN
Address: PO Box 325
City: HAWESVILLE **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 077-580-0003
LOG# 805

Facility Information:
Building Owner or Operator: BIG RIVERS ELECTRIC CORPORATION
Address: 201 THIRD ST. PO Box 24
City: HENDERSON **State:** Ky **ZIP:** 42420
Representative TOM SHAW **Phone:** (502) 827-2561
Age of Building(s): 19 **Use of Building(s):** POWER PLANT
Address: Po Box 325
City: HAWESVILLE **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 3 **Abatement Technique:** GLOVE BAG
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 12/21/90 **Finish Removal:** 12/21/90
If previously reported; by: **Phone** _____ (date) **Telefax** _____ (date) **Other** _____ (date)
Disposal Site: DB WILSON STATION
Site Name: WILSON LANDFILL Ohio County
Address: PO Box 547 (Street) CENTERTOWN (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: < 0.01
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: UNKNOWN
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of BIG RIVERS (your company name)

BIG RIVERS ELECTRIC CORPORATION

December 10, 1990

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

Gregory F. Black
Manager of Environmental Affairs

ls
Registered/Return Receipt Requested

RECEIVED
DEC 12 1990
COMPLIANCE BRANCH

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

JAN 8 1991
Date

91 -- 1
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp "Coleman Station"
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 077-1650-0003
LOG# 0106
RECEIVED
JAN 14 1991
DIVISION OF AIR QUALITY

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (502) 827-2561 ext 2855
Age of Building(s): 20 **Use of Building(s):** power plant
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 4 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ X **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ _____ **Demolition?** ☒ _____
Contract Dates: **Start Removal:** JAN 28 1991 **Finish Removal:** JAN 28 1991
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Station Ohio County
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) **Phone:** (502) 827-2561 Ext 2855
Disposal Amounts: 0.003 cuyd
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Hold until trailer load Big Rivers will transport.
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L Shaw (Signature) **of** Big Rivers Electric Corp. (your company name)

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

1-14-91
Date

91 - 3
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. "Coleman Station"
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 077 1580-0003
LOG# N/A

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (502) 827-2561 ext 2855
Age of Building(s): 20 **Use of Building(s):** Power plant
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 6 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** _____
Emergency Renovation? ☒ X **Demolition?** ☒ _____
Blowing insulation (wet) due to steam pipe tear
Contract Dates: **Start Removal:** 1-14-91 **Finish Removal:** 1-15-91
If previously reported; by: **Phone** 1-14-91 **Telefax** _____ **Other** _____
Pat Badgett (date)

RECEIVED
JAN 16 1991
COMPLIANCE BRANCH

Disposal Site: D.B. Wilson Station Ohio County
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) **Phone:** (502) 827-2561

Disposal Amounts: 0.05 cu yd
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Hold at secure area until trailer quantity
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L Shaw (Signature) of Big Rivers Electric Corp. (your company name)

BIG RIVERS ELECTRIC CORPORATION

December 31, 1990

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

Thomas L. Shaw

Thomas L. Shaw
Senior Environmental Scientist

ls
Registered/Return Receipt Requested

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

12-31-90
Date

90 -- 31
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. Coleman Station
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 177-1580.0003
LOG# 047

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (____)
Age of Building(s): 19 **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 80 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ X **Demolition?** ☒ _____
Contract Dates: **Start Removal:** ~~Dec~~ JAN 14 1991 **Finish Removal:** JAN 15 1991
If previously reported; by: **Phone** _____ (date) **Telefax** _____ (date) **Other** _____ (date)

Disposal Site: D.B. Wilson - Ohio County
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) **Phone:** (502) 827-2561 EXT 2855

Disposal Amounts: 0.03
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Stored on site until a truck load is possible
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If waste is to be stored by "final" disposal site, provide explanation along with information regarding storage location, duration, and security.

Submitted by: [signature] Signature
of Big Rivers Electric Corp. (your company name)

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

1-14-91
Date

91 - 4
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp "Coleman Station"
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# N/A

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (502) 827-2561
Age of Building(s): 20 **Use of Building(s):** Power Plant
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): _____ **Abatement Technique:** _____
Amount of Asbestos (s. ft.): 1 **Abatement Technique:** Vacuum
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** _____
Emergency Renovation? ☒ X (Insulation found on the floor) **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 1-14-91 **Finish Removal:** 1-14-91
If previously reported; by: **Phone** 1-14-91 (Pat Baakeke) **Telefax** _____ (date) **Other** _____ (date)

RECEIVED
JAN 16 1991
DEP

Disposal Site: D.B. Wilson Ohio County
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) **Phone:** ~~(502)~~ ~~827-2561~~

Disposal Amounts: 0.02 cu yd
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Hold at secure area until trailer quantity
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Tom Shaw (Signature) of Big Rivers Electric (your company name)

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

12-1
Date

12-90
Notification Number

TEN DAY REPORT FOR ... ORTRIC

NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp. - Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Phone: (502) 827-2561

OFFICE USE ONLY
I.D.# 177.1580.0003
LOG# 818
DEC 21 1990

Facility Information:
Building Owner or Operator: Big Rivers Electric Corporation
Address: 201 3rd. Street P.O. Box 24
City: Hawesville **State:** Ky **ZIP:** 42420
Representative Dale Roberts **Phone:** (502) 827-2561
Age of Building(s): 19 **Use of Building(s):** Power Plant
Address: P.O. Box 325
City: Hawesville **State:** Ky **ZIP:** 42348
Amount of Asbestos (l. ft.): 60 **Abatement Technique:** Glove Bag
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ X **Demolition?** ☒ _____
Contract Dates: **Start Removal:** 12-28-90 **Finish Removal:** 12-28-90
If previously reported; by: Phone 12-17-90 (date) (Pat Barker) Telefax _____ (date) Other _____ (date)
Disposal Site: D.B. Wilson Station Ohio County
Site Name: Wilson Land-fill
Address: P.O. Box 547 (Street) Centertown (City) Ky (State) **Phone:** (502) 827-2561
Disposal Amounts: 11
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Unknown at this time
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: _____ (Signature) of Big Rivers Elec. (your company name)

Best Available Copy

BIG RIVERS

December 17, 1990

DEC 21 1990

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of the Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

J. Dale Roberts
Waste Management Scientist

ls
Registered/Return Receipt Requested

Best Available Copy

Post Office Box 24, Henderson, Ky. 42420 / Telephone 502-827-2561

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

OCT 0 6 1990

90 - 15
Notification Number

5-28-1990
Date

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

OFFICE USE ONLY
I.D.# ____-____-____
LOG# ____

Contractor: Big Rivers Electric Corp. Johnson Station
Address: P.O. Box 24
City: Henderson State: KY ZIP: 42420
Phone: (502) 827-2561 ext 2255

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: [illegible]
City: Henderson State: KY ZIP: 42420
Representative [illegible] Phone: (502) 827-2561 ext 2255
Age of Building(s): 19 **Use of Building(s):** Power Plant
Address: P.O. Box 24
City: Henderson State: KY ZIP: 42420
Amount of Asbestos (l. ft.): 20 **Abatement Technique:** Glovebag removal
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ Y #6 Heater **Demolition?** ☒ _____
Contract Dates: Start Removal: 10-8-90 Finish Removal: 10-8-90
If previously reported; by: Phone _____ date Telefax 9-28-90 date Other _____ date

Disposal Site: D.B. Wilson
Site Name: Wilson Landfill Ohio Co.
Address: P.O. Box 547 (Street) Beaver Dam (City) KY (State) **Phone:** (502) 274-[illegible]
Disposal Amounts: 10 Cubic
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: _____
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: [signature] Signature of Big Rivers Electric Co. (your company name)

Best Available Copy

077-1580-0003
NO LOG#

BIG RIVERS ELECTRIC CORPORATION

RECEIVED
OCT 09 1990
DIVISION FOR AIR QUALITY

October 2, 1990

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of a Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

Thomas L Shaw

Thomas L. Shaw
Senior Enviromental Scientist

ls
Registered/Return Receipt Requested

Best Available Copy

Post Office Box 24 Henderson, KY 42420 / Telephone 502-827-2561

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

OCT 19 1990

Oct 17 1990
Date

90 - 18
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Coleman Station
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# 672

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (____) ____
Age of Building(s): 20 & 19 **Use of Building(s):** Power Plants C2 and C3
Address: P.O. Box 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 14 **Abatement Technique:** Glove Bag with neg air
Amount of Asbestos (s. ft.): ____ **Abatement Technique:** ____
Planned Renovation? ☒ ____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ x **Demolition?** ☒ ____
Contract Dates: **Start Removal:** 10-~~26~~27-90 **Finish Removal:** 10-~~26~~27-90
If previously reported; by: Phone ____ (date) Telefax ____ (date) Other ____ (date)
Disposal Site: D. B. Wilson Station Ohio Co.
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) **Phone:** (502) 827-2561
Disposal Amounts: 0.02
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.
Disposal Schedule: Possibly during the spring of 91 (items are stored in steel drums)
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L. Shaw (Signature) of Big Rivers Electric Corp (your company name)

Best Available Copy

RECEIVED DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

SEP 28 1990

Sept 28 1990
Date

9d - 15
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

Contractor: Big Rivers Electric Corp Coleman Station
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Phone: (502) 827-2561 ext 2855

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# NA

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson **State:** KY **ZIP:** 42420
Representative Tom Shaw **Phone:** (502) 827-2561 ext 2855
Age of Building(s): 19 **Use of Building(s):** Boiler Plant
Address: P.O. 325
City: Hawesville **State:** KY **ZIP:** 42348
Amount of Asbestos (l. ft.): 20 **Abatement Technique:** Glove Bag with negative air
Amount of Asbestos (s. ft.): _____ **Abatement Technique:** _____
Planned Renovation? ☒ _____ **Is this part of a long-term notification?(Y/N)** N
Emergency Renovation? ☒ X W6 Heater **Demolition?** ☒ _____
Contract Dates: Start Removal: 10-8-90 **Finish Removal:** 10-9-90
If previously reported; by: Phone _____ (date) Telefax 9-28-90 (date) Other _____ (date)

Disposal Site: D.B. Wilson
Site Name: Wilson Landfill Ohio
Address: P.O. Box 547 (Street) Centertown (City) KY (State) **Phone:** (502) 827-2561

Disposal Amounts: 0.1 cuyd
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: _____
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L Shaw (Signature) of Big Rivers Electric Corp (your company name)

Best Available Copy

UPDATE

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

OCT 04 1990

9-13-90
Date

90-15
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

W

Contractor: CENTIN CORP. Big Rivers Electric Corp Wilson Station
Address: P.O. Box 547 LINCOLN RT 85 INTERCHANGE Rd.
City: Centertown EVANSVILLE State: KY IN ZIP: 42328 47715
Phone: (502) 827-2561 (812) 473-9927

OFFICE USE ONLY
I.D.# 077.3080.0009
LOG# 595

Facility Information:

Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson State: KY ZIP: 42420
Representative Tom Shaw Phone: (502) 827-2561
Age of Building(s): 9 Use of Building(s): Power Plant
Address: P.O. Box 547
City: Centertown State: KY ZIP: 42328
Amount of Asbestos (l. ft.): 60 gasket material Abatement Technique: WET AND SCRAPE
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ ✓ Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ _____ Demolition? ☒ _____
Contract Dates: Start Removal: Oct 3 Finish Removal: ~~Oct 5~~ OCT 10
If previously reported; by: Phone _____ (date) Telefax _____ (date) Other _____ (date)

Disposal Site: D. B. Wilson
Site Name: D.B. Wilson Landfill Ohio
Address: Rt 85 (Street) Centertown (City) KY (State) Phone: (502) 827-2561
Disposal Amounts: 0.01 cu yd
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Oct 5 EST
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L Shaw of Big Rivers Electric Corp.
(Signature) (Your company name)

Best Available Copy

DEP 7036

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

SEP 13 1990

9-13-90
Date

Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square [illegible] or 260 linear [illegible] of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

OFFICE USE ONLY
I.D.# 077-3080-0069
LOG# 586

Contractor: Big Rivers Electric Corp Wilson Station
Address: P.O. Box 547 Rt 85
City: Centertown State: KY ZIP: 42328
Phone: (502) 827-2561

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St
City: Henderson State: KY ZIP: 42420
Representative Tom Shaw Phone: ( )
Age of Building(s): 9 Use of Building(s): Power Plant
Address: P.O. Box 547 Rt 85
City: Centertown State: KY ZIP: 42328
Amount of Asbestos (l. ft.): 2000 gasket Abatement Technique: wet and remove
Amount of Asbestos (s. ft.): Abatement Technique:
Planned Renovation? ☒ ✓ Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ Demolition? ☒
Contract Dates: Start Removal: Sept 28 1990 Finish Removal: Nov 9 1990
If previously reported; by: Phone (date) Telefax (date) Other (date)

Disposal Site: D.B. Wilson
Site Name: D.B. Wilson Landfill
Address: Rt 85 (Street) Centertown (City) KY (State) Phone: (502) 827-2561
Disposal Amounts: 0.2 material is 3" wide x 1" thick.
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Nov 9 1990 est.
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas K. Shaw (Signature) of Big Rivers Electric Corp (your company name)

Best Available Copy

Dept. for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

SEP 10 1990

9-10-90
Date

90-13
Notification Number

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections pencilled in.

OFFICE USE ONLY
I.D.# 077-1580-0003
LOG# N/A

Contractor: Big Rivers Electric Corp Coleman Unit 1
Address: 201 3rd St
City: Henderson State: KY ZIP: 42420
Phone: (502) 827-2561

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp.
Address: 201 3rd St
City: Henderson State: KY ZIP: 42420
Representative Tom Shaw Phone: (502) 827-2561
Age of Building(s): 19 Use of Building(s): Power Plant
Address: P.O. 325
City: Hawesville State: KY ZIP: 42348
Amount of Asbestos (l. ft.): 8 Abatement Technique: Glove Bag
Amount of Asbestos (s. ft.): _____ Abatement Technique: _____
Planned Renovation? ☒ _____ Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ X Demolition? ☒ _____
Contract Dates: Start Removal: 9-14-90 Finish Removal: 9-14-90
If previously reported; by: Phone 9-10-90 (date) Telefax _____ (date) Other _____ (date)
Notified Pat Baskins office on 9-10-90
Disposal Site: D. B. Wilson
Site Name: D.B. Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) Phone: (502) 827-2561

Disposal Amounts: 0.8
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Still waiting on Div of Waste to issue a permit/will notify when appro
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L. Shaw (Signature) of Big Rivers Electric Corp (your company name)

Best Available Copy

DEP 7036

Dept for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, Kentucky 40601

OCT 01 1990

90 - 15
Notification Number

10-1-90
Date

TEN DAY REPORT FORM FOR PRIOR NOTIFICATION OF ASBESTOS ABATEMENT ACTIVITIES

This form is to be filled out and filed with the Division for Air Quality at least ten (10) days before starting the asbestos abatement project (20 days for demolitions involving less than 160 square feet or 260 linear feet of friable asbestos material). For projects in Jefferson County, file with the Air Pollution Control District of Jefferson County.

Notifications should be numbered (top right), with the first two digits being the project year and the remaining digits being the project number (for example, first project in 1990 is number 90-1). After a notification is filed, if developments (e.g., changes in dates, amounts, locations) occur that will invalidate information provided on the form on file, then an amended form must be filed immediately. Amended removal or disposal schedules must be submitted at least one day prior to the removal/disposal date on file or the new removal/disposal date, whichever is earlier. The amended form can be a copy of the original form, with corrections penciled in.

W

OFFICE USE ONLY
I.D.# 077-3080-0069
LOG# 624

Contractor: Big Rivers Electric Corp D.B. Wilson
Address: P.O. Box 547
City: Centertown State: KY ZIP: 42328
Phone: (502) 827-2561 ext 2855

Facility Information:
Building Owner or Operator: Big Rivers Electric Corp
Address: 201 3rd St P.O. Box 24
City: Henderson State: KY ZIP: 42420
Representative Tom Shaw Phone: ( )
Age of Building(s): 9 Use of Building(s): Power Plant
Address: P.O. Box 547
City: Centertown State: KY ZIP: 42328
Amount of Asbestos (l. ft.): 65 ground insulation Abatement Technique: Soak and scrape
Amount of Asbestos (s. ft.): Abatement Technique:
Planned Renovation? ☒ x Is this part of a long-term notification?(Y/N) N
Emergency Renovation? ☒ Demolition? ☒
Contract Dates: Start Removal: Oct 11 1990 Finish Removal: Oct 31 1990 (Removal will not take place before this day)
If previously reported; by: Phone (date) Telefax 10-1-90 (date) Other (date)

Disposal Site: D.B. Wilson Ohio
Site Name: Wilson Landfill
Address: P.O. Box 547 (Street) Centertown (City) KY (State) Phone: (502) 827-2561

Disposal Amounts: 001
Enter total amount to be disposed of from entire project. Enter amount in cubic yards of asbestos waste.

Disposal Schedule: Oct 31 1990 to Oct 31 1990
Enter start and finish dates and estimated frequency (e.g., "daily," "Fridays," "once at end of project"). If disposal is not completed by "finish removal" date given above, attach explanation along with information regarding storage location, duration, and security.

Submitted by: Thomas L Shaw (Signature) of Big Rivers Electric Corp. (your company name)

BIG RIVERS ELECTRIC CORPORATION

RECEIVED
OCT 01 1990
COMPLIANCE BRANCH

October 1, 1990

Mr. Parker Moore
Department for Environmental Protection
Division for Air Quality
18 Reilly Road
Frankfort, KY 40601

Dear Mr. Moore:

Enclosed is a copy of a Ten Day Report Form for Prior Notification of Asbestos Abatement Activities.

If further information is needed, please feel free to contact me.

Sincerely,

Thomas L. Shaw

Thomas L. Shaw
Senior Environmental Scientist

sls
Registered/Return Receipt Requested

Best Available Copy

File Room

CARL H. BRADLEY
SECRETARY

WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

MEMORANDUM

TO: Don Curry, Supervisor
Columbia Field Office
Division of Waste Management

VIA: Hannah Helm, Manager
Compliance Branch
Division of Waste Management

FROM: Shelby C. Jett, Manager
Solid Waste Branch
Division of Waste Management

DATE: March 28, 1990

SUBJECT: Big Rivers Permit Renewal Request # 92.04
Application # 89-618
D.B. Wilson Landfill
Ohio County

In a letter dated October 19, 1989, Big Rivers requested renewal of their permit # 092.04, in Ohio County. Please schedule a site visit of this facility for a repermit inspection. Afterwards, report results to this Branch.

SCJ/EA/bjt

Best Available Copy

Central File

CARL H. BRADLEY
SECRETARY

WALLACE G. WILKINSON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

October 19, 1988

FILE IN APPROPRIATE
REPORT SECTION:

Mr. Thomas L. Shaw
Big Rivers Electric Corporation
201 Third Street
Henderson, KY 42420

Re: KYD-991-276-775: Big Rivers Electric Corporation, Robert Reid, Webster County
KYD-012-576-286: D.B. Wilson Power Plant, Ohio County
KYD-000-622-928: Big Rivers Electric Corporation, Kenneth C. Coleman, Station, Hancock County

Dear Mr. Shaw:

The Division of Waste Management received the 1987 Hazardous Waste Annual Report from your company at three locations indicated above. Our records indicate that those three locations are registered with the Division as limited quantity generators.

The limited quantity generators are not required to submit the Annual Reports. Therefore, no annual report requirements from those three locations. Only full quantity generators and small quantity generators are required to submit the Annual Reports.

If you have any questions concerning this matter, please call me at (502) 564-6716.

Sincerely,

Suda Vtl

Suda Veerasethakul
Annual Report Program

cc: Central File
Field Office File
Annual Report File

DIVISION OF WASTE MANAGEMENT
KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION

RECEIVED
FEB 18 1988
DWM/PROGRAM DEVELOPMENT BRANCH

1987 HAZARDOUS WASTE ANNUAL REPORT
FOR ~~SMALL~~ LIMITED QUANTITY GENERATORS

INSTRUCTIONS: All registered Small Quantity Generators must complete this report. The report covers hazardous wastes generated during 1987. Copies of the Hazardous Waste Manifests kept by your company for the calendar year 1987 should be used to prepare this report. The report must be typed or printed legibly. All information categories should be completed fully. All EPA ID Numbers should be checked to insure that they are accurate and contain twelve digits. Return the completed report with an original signature and date - copies of the signature are not acceptable. Instructions on this form are in italics. **THE REPORT MUST BE RECEIVED BY THE KENTUCKY DIVISION OF WASTE MANAGEMENT, 18 REILLY ROAD, FRANKFORT, KY 40601 BY MARCH 1, 1988.**

(1) **GENERATOR EPA ID NUMBER:** KYD01-257-6286
Write your company's EPA Identification Number as it appears on your Certificate of Registration. All EPA ID Numbers contain 12 digits. For example: K Y D - 0 0 0 - 0 0 0 - 0 0 0. Please check all EPA ID Numbers to insure that they are accurate and contain twelve digits.

(2) **COUNTY:** Ohio
Write the name of the county where your company is located.

(3) **GENERATOR NAME:** D.B. Wilson Power Plant
Write your company's name, as it appears on your Certificate of Registration.

(4) **GENERATOR MAILING ADDRESS:** 201 Third St.
Henderson, KY 42420
Write the complete mailing address for your company. Correspondence about your Annual Report will be sent to this address.

(5) **CONTACT PERSON:** Thomas L. Shaw
Write the person's name who can be contacted about your company's report.

(6) **CONTACT PERSON'S TELEPHONE NUMBER:** (502) 827-2561 Ext. 2855
Write the telephone number (please include area code) of the "contact person."

(7) **SIC CODES:** (1) 4911 (2) _____ (3) _____ (4) _____
Write up to four of the four-digit Standard Industrial Classification Code(s) which best describe your company's business. Use only four-digit codes. A list of SIC Codes are found on the back of this page. If you cannot find the right SIC Code for your company, call the Annual Report Coordinator at (502) 564-6716.

(8) **WASTE MINIMIZATION STATEMENT:** *Generators are required to try to reduce the quantity or toxicity of their hazardous waste. Some examples of waste minimization efforts would include incineration (volume reduction), solvent recovery (volume reduction), and neutralization (reduction of toxicity). Your hazardous waste minimization program can be done by your company (on-site) or by a waste management company (off-site) or both.*

☐ YES ☐ NO **IN 1987, AS A SMALL QUANTITY GENERATOR OF HAZARDOUS WASTE, MY COMPANY MADE A GOOD FAITH EFFORT TO MINIMIZE WASTE GENERATION AND SELECT THE BEST WASTE MANAGEMENT METHOD THAT WAS AVAILABLE AND AFFORDABLE.**

• IF YES, EXPLAIN BRIEFLY: (1) WHAT YOUR COMPANY DID IN 1987 TO REDUCE THE VOLUME AND TOXICITY OF WASTE GENERATED (SEE EXAMPLES ABOVE), AND (2) AN ESTIMATE OF HOW MUCH WASTE REDUCTION WAS ACHIEVED IN 1987.

Hazardous or toxic wastes was not produced at this facility during 1987.
Big Rivers is in the process of moving to a limited quantity generator status.

(9) **CERTIFICATION:**
I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS, AND THAT BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

Thomas L. Shaw	Thomas L. Shaw	2-12-88
PRINT OR TYPE NAME	SIGNATURE	DATE

PAGE NUMBER _____

this company notified HWD (87/12/02) but our HWD (88/07/11) as limited Q. after CY

(10) TRANSPORTATION SERVICES USED TO SEND WASTE OFF-SITE: REPORT YEAR: 1987

If your company sent hazardous waste off-site, complete each of the columns in the following table using your copies of the manifest forms. See instructions below for completing each column. If your company did not ship hazardous waste off-site, leave this section blank. An example is shown in the first line of the table.

PRIMARY TRANSPORTER (from the Manifest form)	NUMBER OF MANIFESTED SHIPMENTS TRANSPORTED	TOTAL QUANTITY	UNIT of volume	CONTAINER TYPES USED
ID NUMBER: *KYD-000-111-222* NAME: *Supertanker Truck Lines* ADDRESS: *123 North Main Street – Louisville, KY 40229*	*5*	*1523*	*G*	*DM, TT*
ID NUMBER: NAME: ADDRESS: NON-APPLICABLE				
ID NUMBER: NAME: ADDRESS:				
ID NUMBER: NAME: ADDRESS:				
ID NUMBER: NAME: ADDRESS:				

COPY EXTRA SHEETS AS NECESSARY TO SHOW ALL WASTE TRANSPORTED FROM YOUR COMPANY IN 1987.

INSTRUCTIONS FOR THE TABLE ON TRANSPORTATION SERVICES USED TO SEND WASTE OFF-SITE:

Primary Transporter: *List every transporter shown as a "Primary" or "#1" transporter on your copies of the manifest forms who transported waste from your company to an off-site treatment, storage or disposal facility. Write each Transporter's EPA ID Number, name and address.*

Number of Manifested Shipments Transported: *For each "Primary Transporter," count the number of manifested shipments that were transported and write this number in the space provided. Count each manifest form only once.*

Total Quantity: *Add together all hazardous wastes which were transported by each "Primary Transporter" for the calendar year 1987 and write the total amount of waste transported by that company in the space provided. Do not show individual quantities of waste by waste type or container type. When non-hazardous wastes were sent off-site with a manifest, the entire amount of waste should be reported. If non-hazardous wastes are reported, explain it in the "Comments" category (see item # 11 below).*

Unit of Volume: *Write the unit of measure for "Total Quantity" using the following codes:*

VOLUME:

- P = *Pounds*
- G = *Gallons*
- Y = *Cubic Yard*
- K = *Kilograms*
- L = *Liters*
- C = *Cubic Meter*
- T = *Tons (2000 pounds)*
- M = *Tonnes (1000 kg)*

DENSITY - FOR GASES ONLY:

- P/G = *Pounds per Gallon*
- T/Y = *Short tons (2000 lbs) per Cubic Yard*
- K/L = *Kilograms per Liter*
- M/C = *Tonnes (1000 kg) per Cubic Meter*

Container Types Used For Transporting: *Write every different container type shown on all the manifest forms which were used for transporting your waste off-site using the following codes:*

- DM = *Metal drums, barrels, kegs*
- DW = *Wooden drums, barrels, kegs*
- DF = *Fiberboard or plastic drums, barrels, kegs*
- TP = *Tanks, portable*
- CM = *Metal boxes, cartons, cases*
- TT = *Cargo tanks (tank trucks)*
- TC = *Tank cars*
- DT = *Dump truck*
- CY = *Cylinders*
- UN = *Unknown or unspecified on the manifest*
- CW = *Wooden boxes, cartons, cases*
- CF = *Fiber or plastic boxes, cartons, cases*
- BA = *Burlap, cloth, paper or plastic bags*
- OT = *Other, specify in "Comments"*

(11) COMMENTS: *Use this space to explain any item on this page.*

(12) GENERATOR EPA ID NUMBER: KYD-012-576-286

Write your company's EPA Identification Number. All EPA ID Numbers contain 12 digits. For example: KYD-000-000-000

(16) GENERATOR WASTE SUMMARY SHEET:

REPORT YEAR: 1987

See instructions on the back of the preceding page for completing the table. An example is shown in line number A.

LINE NO	WASTE DESCRIPTION	TOTAL QUANTITY	UNIT of VOL.	PHYSICAL STATE	EPA WASTE NUMBER(S)	ON-SITE HANDLING CODES	OFF-SITE HANDLING CODES	OFF-SITE RECEIVING FACILITY'S EPA ID NUMBER
A	MANIFEST: Hazardous waste liquid, n.o.s., NA 9188, GRM E EPA CONSTITUENT OR CHARACTERISTIC: D008	100	G	L	D008		S01 T21	KYD-111-222-333
	MANIFEST EPA CONSTITUENT OR CHARACTERISTIC: NOT APPLICABLE							
	MANIFEST EPA CONSTITUENT OR CHARACTERISTIC:							
	MANIFEST EPA CONSTITUENT OR CHARACTERISTIC:							
	MANIFEST EPA CONSTITUENT OR CHARACTERISTIC:							
	MANIFEST EPA CONSTITUENT OR CHARACTERISTIC:							
	MANIFEST EPA CONSTITUENT OR CHARACTERISTIC:							

COPY EXTRA SHEETS AS NECESSARY TO SHOW ALL WASTES GENERATED BY YOUR COMPANY IN 1987.

(17) COMMENTS: *Use this space to explain any item on this page.*

(18) GENERATOR EPA ID NUMBER: K Y D 1 1 1 2 2 2 3 3 3

Write your company's EPA Identification Number. All EPA ID Numbers contain 12 digits. For example, K Y D 0 9 0 0 0 0 0 0

(13) SUMMARY OF FACILITIES RECEIVING WASTE.

REPORT YEAR: 1987

See instructions below for completing table. An example is shown in the first line of the table.

RECEIVING FACILITY'S EPA ID NUMBER	RECEIVING FACILITY'S NAME	TOTAL NUMBER OF MANIFESTED SHIPMENTS SENT TO FACILITY	TOTAL QUANTITY OF WASTE SENT TO FACILITY	UNIT OF VOLUME
KYD-111-222-333	*Ace Waste Disposal Company*	*5*	*1523*	*G*
	NON-APPLICABLE			

COPY EXTRA SHEETS AS NECESSARY TO SHOW ALL FACILITIES WHICH RECEIVED WASTE FROM YOUR COMPANY IN 1987

INSTRUCTIONS FOR COMPLETING SUMMARY OF FACILITIES RECEIVING WASTE:

RECEIVING FACILITY'S EPA ID NUMBER: *Write the EPA ID Numbers of every facility to which your company sent waste for treatment, storage or disposal.*

RECEIVING FACILITY'S NAME: *Using the manifest forms, write the name of each facility where your company sent waste for treatment, storage or disposal. If your company operated an on-site treatment, storage, or disposal facility (i.e., storage for more than 180 days), and received waste in 1987, write your company's name in the space provided.*

TOTAL NUMBER OF MANIFESTED SHIPMENTS SENT TO FACILITY: *For each Receiving Facility, count the number of manifested shipments that were sent to each facility and write that number in the space provided. Count each manifest form only once.*

TOTAL QUANTITY OF WASTE SENT TO FACILITY: *Write the total quantity of waste sent to each facility in 1987 from your company. Do not identify individual quantities of waste by type or amount. When manifested shipments included non-hazardous wastes, the entire amount of waste should be reported. If non-hazardous wastes are reported, make a note of the quantity of non-hazardous waste in the "Comments" category (see item # 14 below).*

UNIT OF VOLUME: *Write the unit of measure for "Total Quantity" using the following codes:*

VOLUME:

- P = *Pounds*
- G = *Gallons*
- Y = *Cubic Yards*
- K = *Kilograms*
- M = *Tonnes (1000 kg)*
- L = *Liters*
- C = *Cubic Meters*
- T = *Tons (2000 pounds)*

DENSITY - FOR GASES ONLY:

- P/G = *Pounds per Gallon*
- T/Y = *Short Tons (2000 lbs) per Cubic Yard*
- K/L = *Kilograms per Liter*
- M/C = *Tonnes (1000 kg) per Cubic Meter*

(14) COMMENTS. *Use this space to explain any item on this page.*

(15) GENERATOR EPA ID NUMBER: [illegible]

Write your company's EPA Identification Number. All EPA ID Numbers contain 12 digits. For example: K Y D - 0 0 0 - 0 0 0 - 0 2 0

May 13, 1986

Ms. Ann Cole
U.S. EPA Region IV
345 Courtland Street, N.E.
Atlanta, Ga. 30365

Dear Ms. Cole,

Please review the information on the enclosed registration form and, if acceptable, assign an EPA RCRA Identification Number for the submitting firm. The applicant will be given the number while the original is maintained in our files.

If any discrepancies are noted on the application, please contact this office at (502) 564-6716 for the required information.

Sincerely,

Caroline Haddad Haight
Manager, Permit Review Branch
Division of Waste Management

CHH:bcg

Enc. copies

cc: Ken Gates, Area Supervisor
D.R. Wilson Power Plant, P.O. Box 247, Centertown, Ky. 42325

Attachment B:

CCR Properties Laboratory Testing

APPENDIX A

LABORATORY TESTING

TABLE 1

LABORATORY TESTING PROCEDURES

MIX 0 TRIAXIAL TEST RESULTS

MIX 3 TRIAXIAL TEST RESULTS

PROPOSED COVER MATERIAL PROCTOR CURVE

DIRECT SHEAR TEST RESULTS, MIX 4 WITH COVER MATERIAL

Table 1. Law Engineering Sludge Testing Summary
D.B. Wilson Plant
Law Engineering Project Number 702.92.242

Description	Mix 0		Mix 3	
Filter Cake Batch Number	3		3	
Composition (FA/FC)	0		0.6/1	
Lime Added (Bag)	0		0	
Free Lime (Flyash)	0		1.35	
Total Lime	0		1.35	
Sample Age (Days)	30	60	30	60
% Solids (Molding)	74.4		76.6	
% Moisture Content % at Molding	34.5		27.2	
Liner Testing	30.4	30	26.0	21.1
Density (Wet)	94.9	93.8	91.6	88.2
Density (Dry)	72.8	72.2	72.7	72.8
Unconfirmed Strength (psi)	17.4	18	32.7	35.4
Permeability	1.1	0.87	1.0	1.1
Leak Test	D	D	D	D
Consolidation	[3]	[11]	[3]	[3]
Triaxial Shear	[3]	768[10]	[3]	608[10]
Ø degrees	[3]	33.0[10]	[3]	26.2[10]
Effective Stress (psi)	[3]	120[10]	[3]	209[10]
Ø degrees	[3]	39.4[10]	[3]	36.2[10]

[1] - By weight basis % total	[7] - All samples compacted using standard Proctor Energy unless otherwise noted
[2] - D = Disintegrated; PD = Paritally Disintegrated	[8] - Sample swelled during back pressure saturation
[3] - Not performed	[9] - Stockpiled one day during mixing
[4] - Based on unconfined samples	[10] - Moisture content based on sample weight after testing

LABORATORY TESTING PROCEDURES

Unconfined Compression Tests: The unconfined compression test is an unconsolidated-undrained triaxial shear test with no lateral confining pressure. This test is used to determine the shear strength of clayey soils.

An unconfined compression test is performed according to ASTM D 2166 on a single section of a remolded sample extruded from a standard Proctor test mold. Incrementally increasing vertical loads are applied until the sample fails. Test results are provided in the form of a stress-strain curve or a value representing the unconfined compressive strength of the sample. No corrections for length to diameter ratios were made.

Triaxial Shear Tests: Triaxial shear tests are used to determine the strength characteristics and friction angle of a given soil sample. Triaxial tests are also used to determine the elastic properties of the soil specimen.

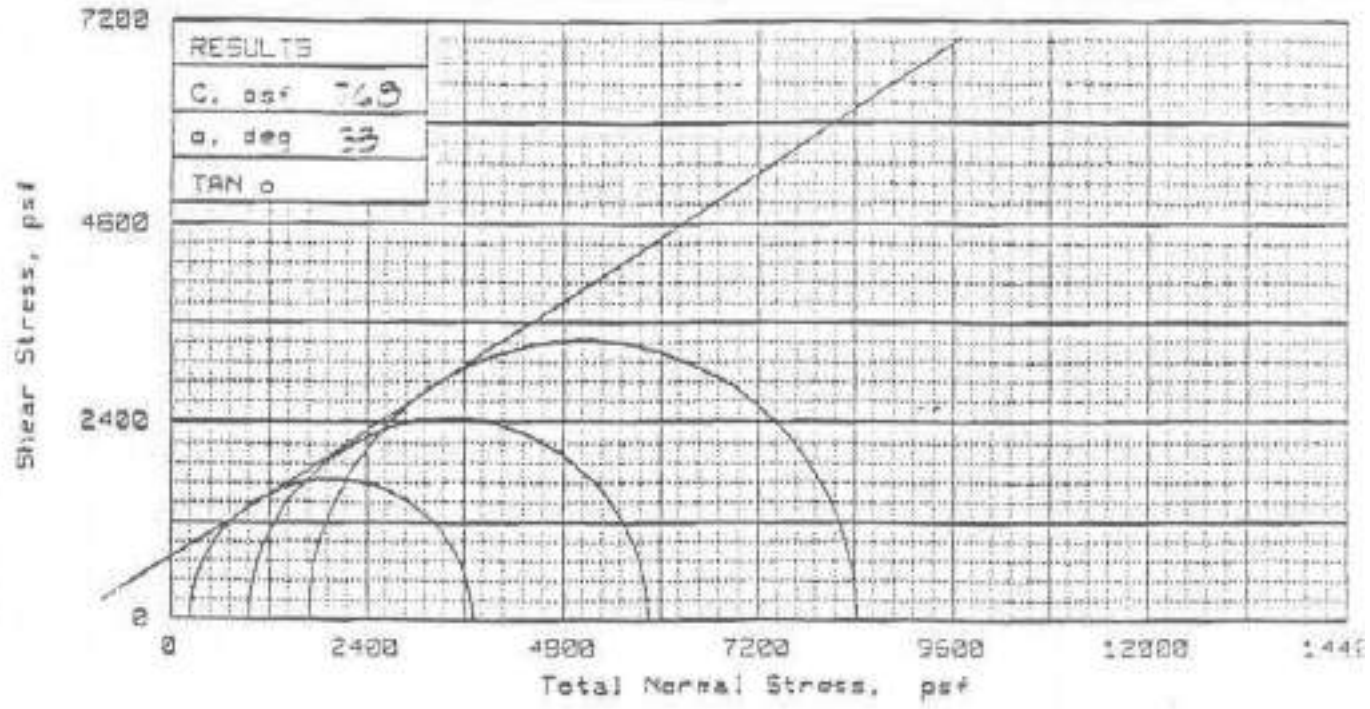
Triaxial shear tests are performed on several sections of a relatively undisturbed sample extruded from the sampling tube. The samples were extruded from 2.8 inches diameter tubes and encased in rubber membranes. Each is then placed in a compression chamber and confined by all around water pressure and back pressure saturated. Samples are then subjected to additional axial and/or lateral loads, depending on the soil and the field conditions to be simulated. The test results are typically presented in tabular form or in the form of stress-strain curves and Mohr envelopes or p-q plots. Consolidated-Undrained (Designated as a CU or R Test) with pore water measurements were performed.

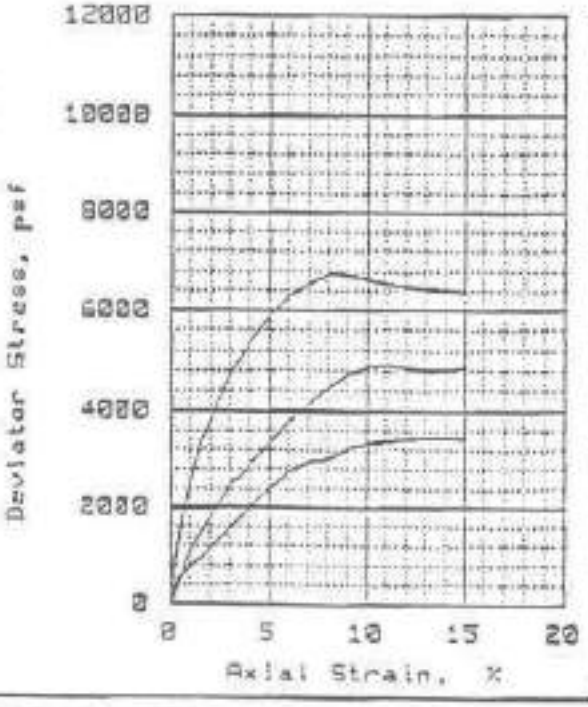
Consolidation Tests: Consolidation tests are conducted on representative soil samples to determine the change in height of the sample with increasing load. The results of these tests are used to estimate the settlement and time rate of settlement of structures constructed on similar soils.

A consolidation test is performed according to ASTM D 2435 on a single section of an undisturbed sample extruded from a sample tube. The sample is trimmed into a disc 2.5 inches in diameter and 0.75 inch thick. The disc is confined in a stainless steel ring and sandwiched between porous plates. It is then subjected to incrementally increasing vertical loads, and the resulting deformations are measured with a micrometer dial gauge. Void ratios are then calculated from these deformation readings. The test results are typically provided in tabular form or in the form of plots of void ratio versus applied stress (e-log p_{curve}v).

Permeability Tests: The permeability test is used to measure the ease with which water will flow through soil. The test was performed on remolded samples. The samples were placed in a triaxial cell and encased in a rubber membrane and sandwiched between porous plates. Water is forced to flow through the sample and the rate of flow is determined. Triaxial cell including back-pressure saturation were used for the sludge mixes.

Moisture Content: The Moisture Content is determined according to ASTM D 2216. A drying temperature of 135°F was used.





SAMPLE NO.		1	2	3
INITIAL	WATER CONTENT, %	30.4	31.0	30.6
	DRY DENSITY, pcf	74.7	73.7	73.1
	SATURATION, %	69.7	68.2	69.6
	VOID RATIO	1.090	1.139	1.121
	DIAMETER, in	2.87	2.88	2.86
	HEIGHT, in	4.00	4.00	4.00
AT TEST	WATER CONTENT, %	40.5	39.2	40.9
	DRY DENSITY, pcf	77.6	79.6	77.9
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	1.012	0.999	1.043
	DIAMETER, in	2.81	2.77	2.81
	HEIGHT, in	4.00	4.00	3.99
Strain rate, %/min		0.500	0.500	0.500
BACK PRESSURE, psf		548	548	548
CELL PRESSURE, psf		864	1384	2304
FAILURE STRESS, psf		3471	4900	6751
PORE PRESSURE, psf		-14	374	619
ULTIMATE STRESS, psf		3471	4900	6751
PORE PRESSURE, psf		-14	374	619
$\bar{\sigma}_1$ FAILURE, psf		4350	6109	8438
$\bar{\sigma}_3$ FAILURE, psf		879	1210	1685

TYPE OF TEST:
CU with pore pressures
SAMPLE TYPE: REMOLDED
DESCRIPTION: STRAIGHT MIX

LL= N/A PL= N/A PI=
SPECIFIC GRAVITY= 2.50
REMARKS:

CLIENT: BIG RIVERS ELECTRIC

PROJECT: D. B. WILSON LANDFILL

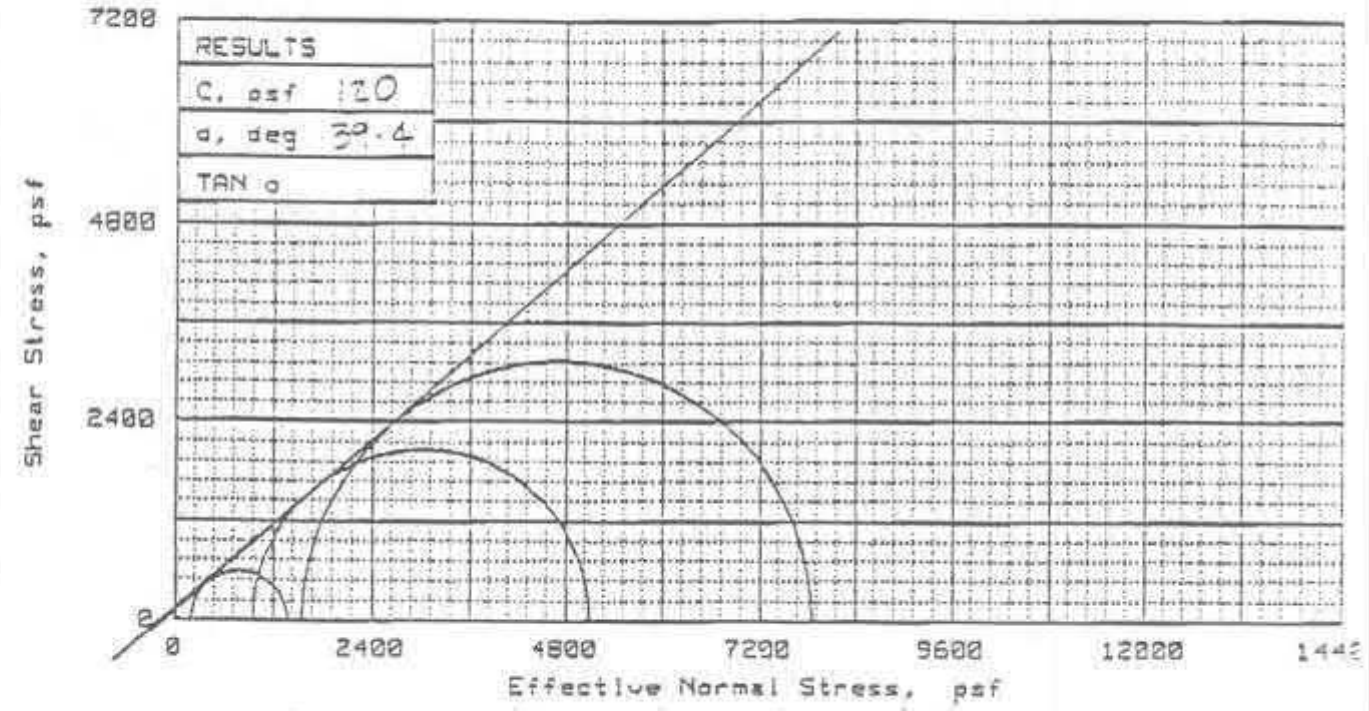
SAMPLE LOCATION: MIX 8 60 DAYS

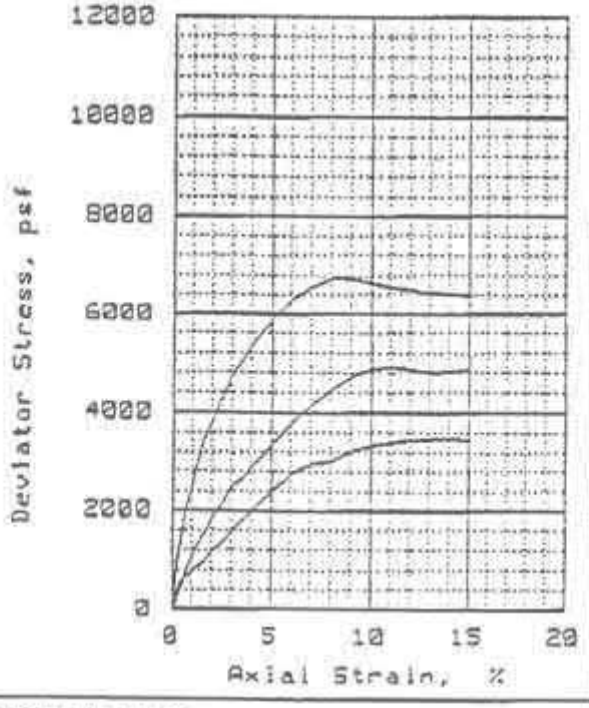
PROJ. NO.: 70292242 DATE: 4-14-93

TRIAXIAL SHEAR TEST REPORT

LAW ENGINEERING, INC.

FIG. NO. 8





SAMPLE NO.		1	2	3
INITIAL	WATER CONTENT, %	30.4	31.0	30.6
	DRY DENSITY, pcf	74.7	73.7	75.1
	SATURATION, %	69.7	68.2	69.6
	VOID RATIO	1.090	1.159	1.121
	DIAMETER, in	2.87	2.88	2.96
	HEIGHT, in	4.00	4.00	4.00
AT TEST	WATER CONTENT, %	40.5	39.2	40.9
	DRY DENSITY, pcf	77.6	79.6	77.9
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	1.012	0.999	1.043
	DIAMETER, in	2.81	2.77	2.81
	HEIGHT, in	4.00	4.00	3.99
Strain rate, %/min		0.500	0.500	0.500
BACK PRESSURE, psf		648	648	648
CELL PRESSURE, psf		864	1584	2304
FAILURE STRESS, psf		1182	4141	6289
PORE PRESSURE, psf		691	648	763
ULTIMATE STRESS, psf		3471	4900	6751
PORE PRESSURE, psf		-14	374	519
$\bar{\sigma}_1$ FAILURE, psf		1355	5077	7850
$\bar{\sigma}_3$ FAILURE, psf		173	936	1561

TYPE OF TEST:
CU with pore pressures
SAMPLE TYPE: REMOLDED
DESCRIPTION: STRAIGHT MIX

LL= N/A PL= N/A PI=
SPECIFIC GRAVITY= 2.50
REMARKS:

CLIENT: BIG RIVERS ELECTRIC

PROJECT: D. B. WILSON LANDFILL

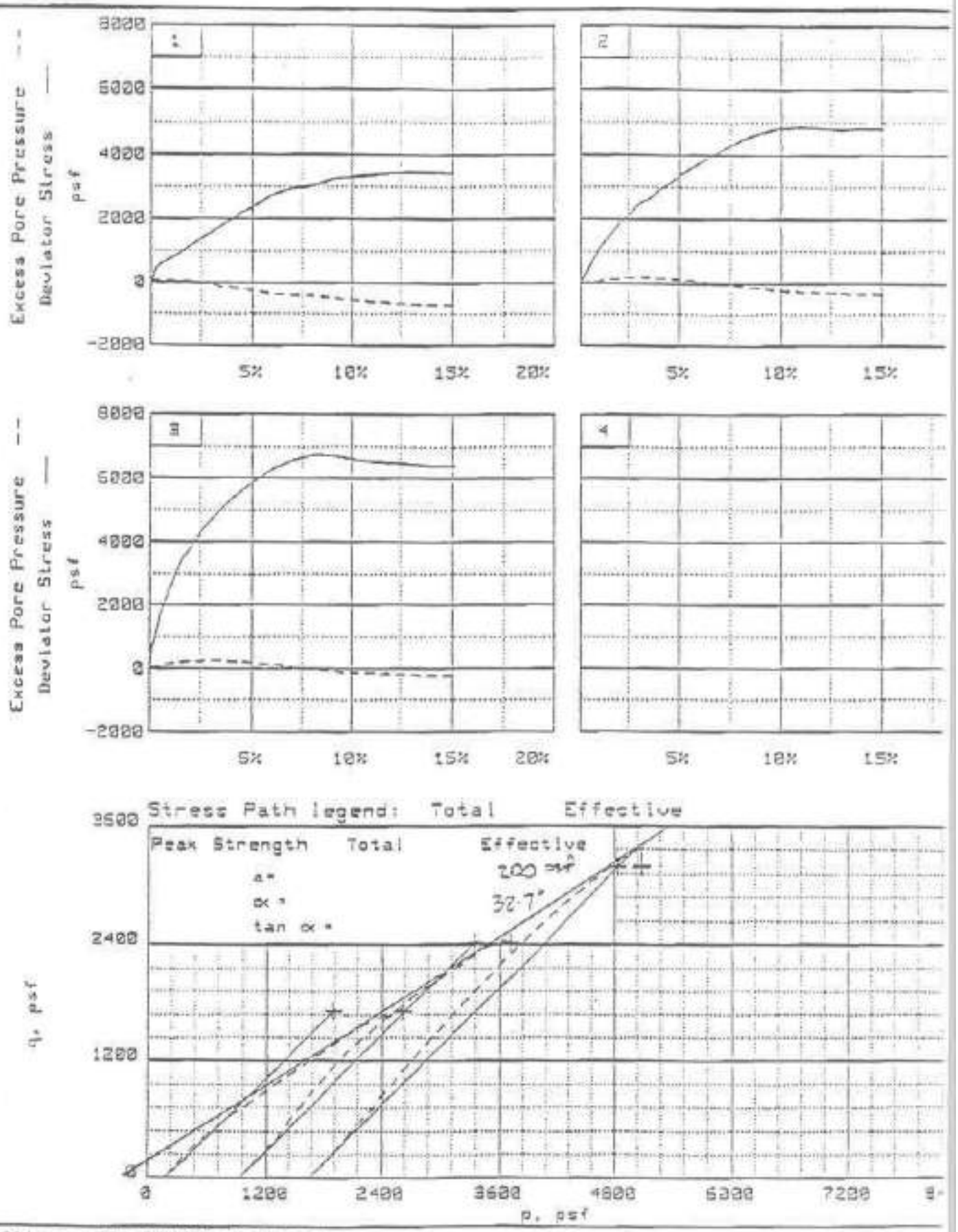
SAMPLE LOCATION: MIX 8 60 DAYS

PROJ. NO.: 70292242 DATE: 4-14-93

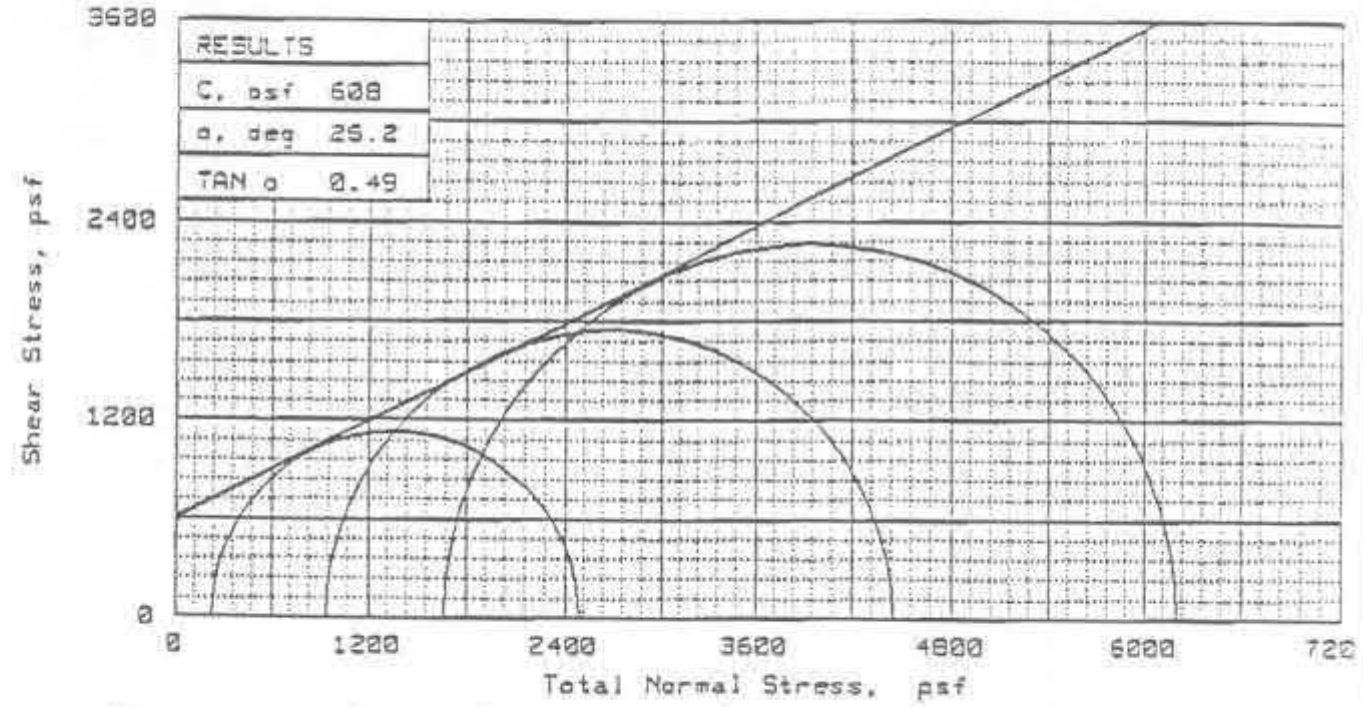
FIG. NO. 8

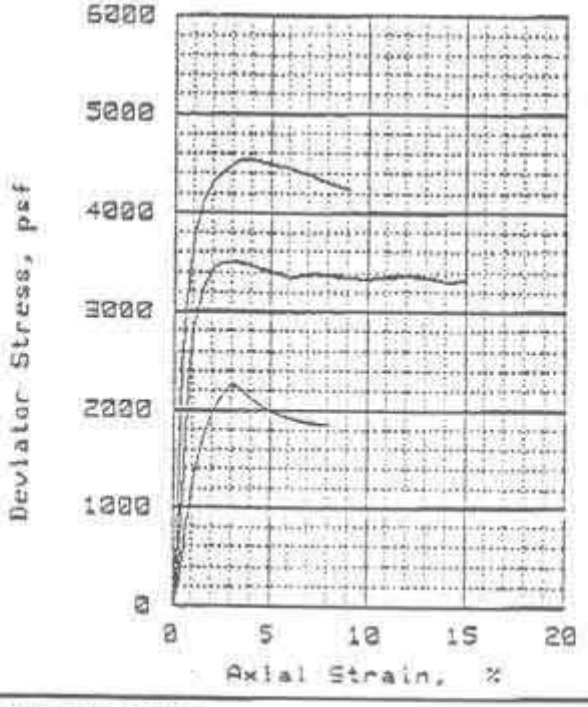
TRIAXIAL SHEAR TEST REPORT

LAW ENGINEERING, INC.



Client: BIG RIVERS ELECTRIC
Project: D. B. WILSON LANDFILL
Location: MIX 8 60 DAYS
File: BIG-R-M8 Project No.: 78232242 Page 2/2 Fig. No. 3





SAMPLE NO.		1	2	3
INITIAL	WATER CONTENT, %	11.4	10.1	10.9
	DRY DENSITY, pcf	70.2	69.9	69.4
	SATURATION, %	22.7	20.0	21.3
	VOID RATIO	1.303	1.312	1.330
	DIAMETER, in	2.87	2.87	2.87
	HEIGHT, in	3.99	4.00	4.02
AT TEST	WATER CONTENT, %	47.1	44.2	45.1
	DRY DENSITY, pcf	72.8	75.4	74.5
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	1.220	1.144	1.159
	DIAMETER, in	2.82	2.76	2.77
	HEIGHT, in	3.99	4.00	4.01
Strain rate, %/min		0.300	0.300	0.300
BACK PRESSURE, psf		720	648	648
CELL PRESSURE, psf		936	1584	2304
FAILURE STRESS, psf		2263	3501	4537
PORE PRESSURE, psf		504	691	965
ULTIMATE STRESS, psf		2263	3501	4537
PORE PRESSURE, psf		504	691	965
$\bar{\sigma}_1$ FAILURE, psf		2695	4394	5876
$\bar{\sigma}_3$ FAILURE, psf		432	893	1339

TYPE OF TEST:
CU with pore pressures
SAMPLE TYPE: REMOLDED
DESCRIPTION: .60 FA/FC

LL= N/A PL= N/A PI=
SPECIFIC GRAVITY= 2.59
REMARKS:

CLIENT: BIG RIVERS ELECTRIC

PROJECT: D. B. WILSON LANDFILL

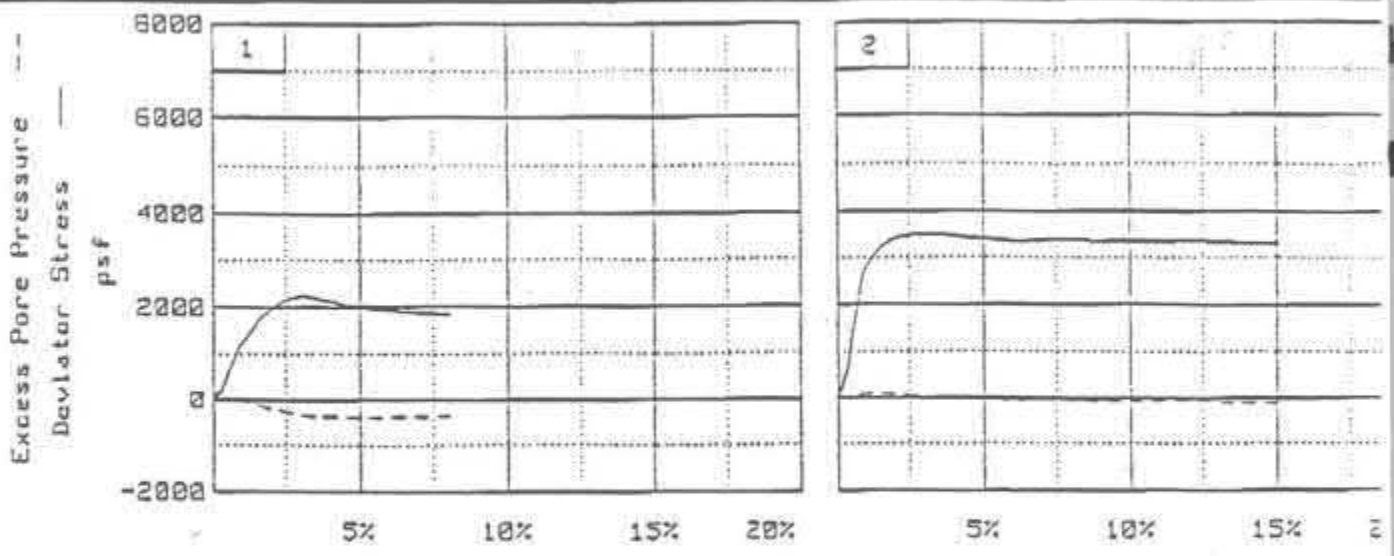
SAMPLE LOCATION: MIX 3 60 DAYS

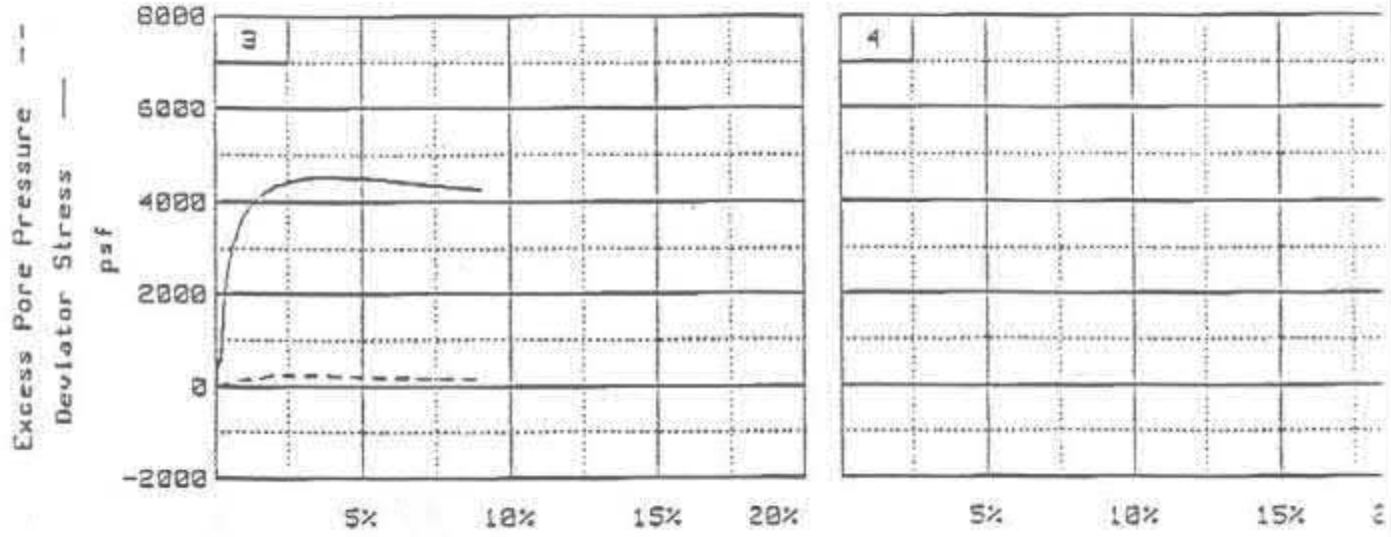
PROJ. NO.: 70292242 DATE: 4-25-93

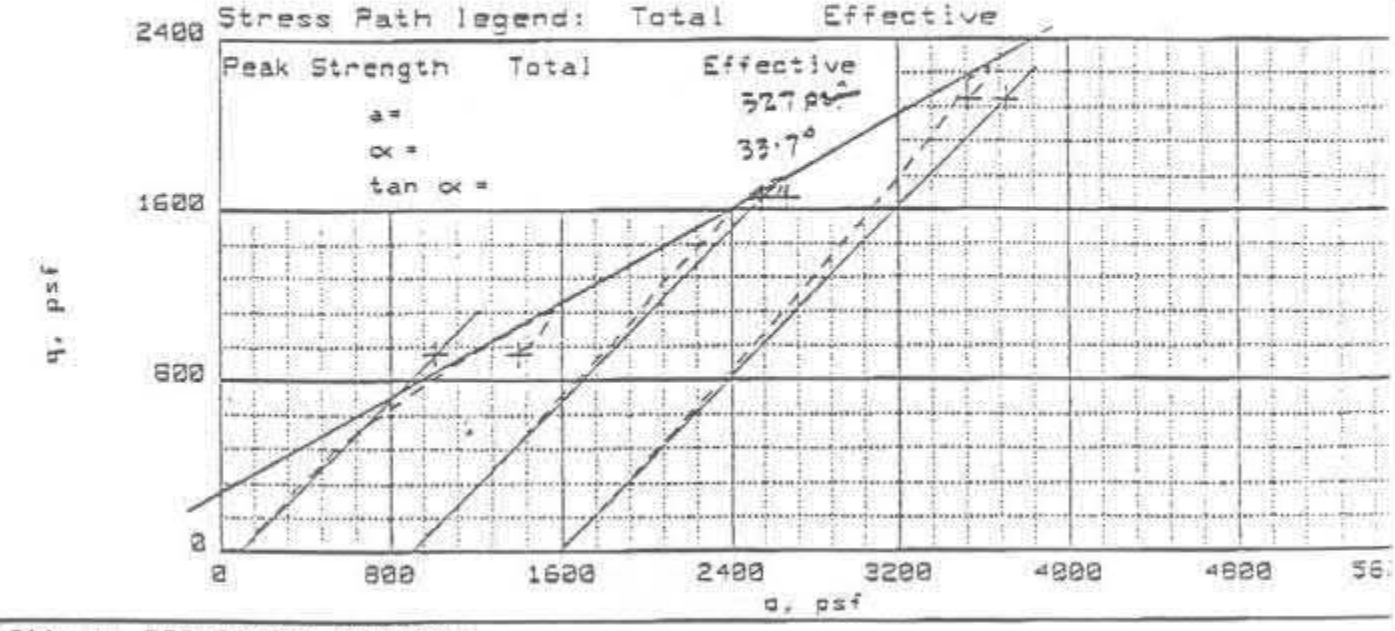
FIG. NO. 5

TRIAXIAL SHEAR TEST REPORT

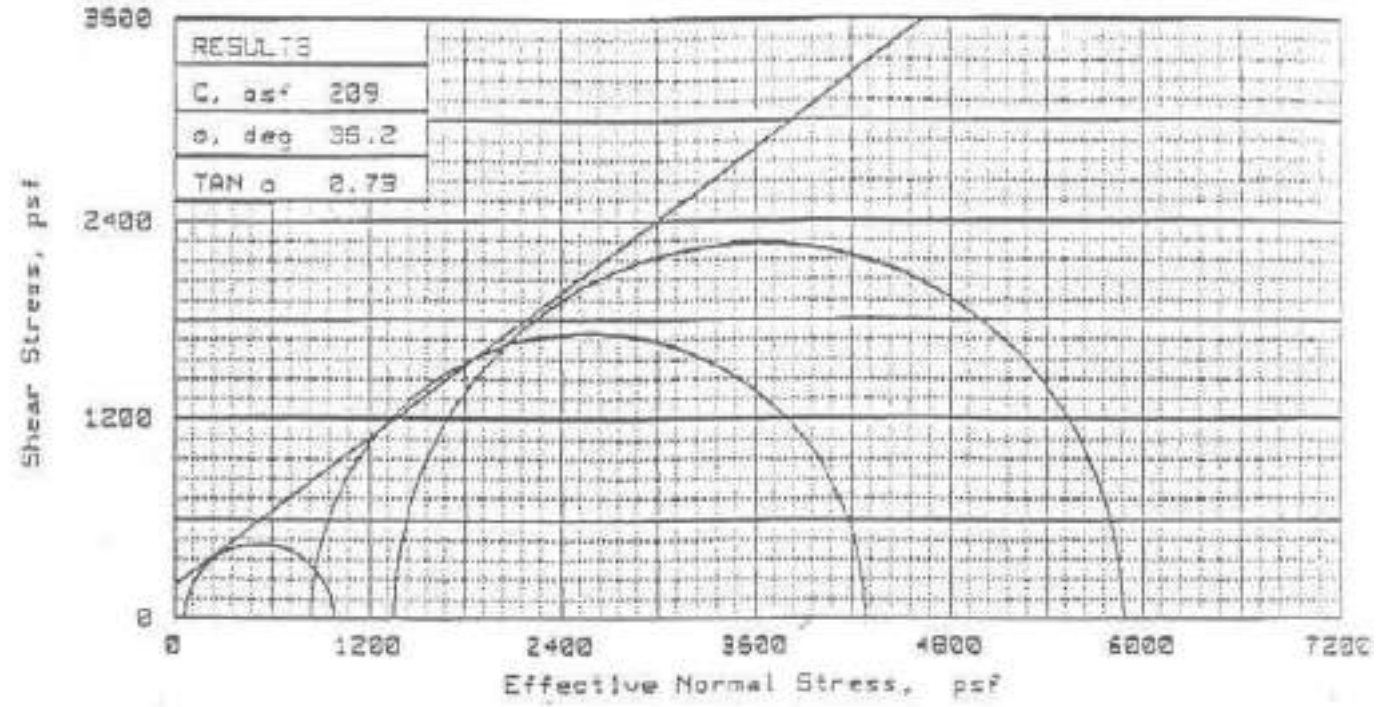
LAW ENGINEERING, INC.

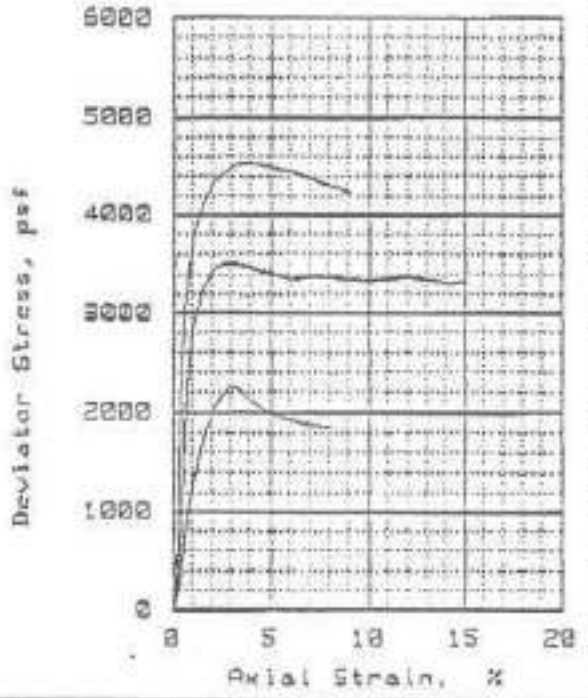






Client: BIG RIVERS ELECTRIC
Project: D. B. WILSON LANDFILL
Location: MIX 3 60 DAYS
File: BIG-R-M3 Project No.: 72292242 Page 2/2 Fig. No. 5





SAMPLE NO.		1	2	3
INITIAL	WATER CONTENT, %	11.4	10.1	12.9
	DRY DENSITY, pcf	78.2	69.9	69.4
	SATURATION, %	22.7	20.0	21.3
	VOID RATIO	1.309	1.312	1.330
	DIAMETER, in	2.87	2.87	2.87
	HEIGHT, in	3.99	4.00	4.02
AT TEST	WATER CONTENT, %	47.1	44.2	45.1
	DRY DENSITY, pcf	72.8	75.4	74.5
	SATURATION, %	100.0	100.0	100.0
	VOID RATIO	1.220	1.144	1.169
	DIAMETER, in	2.92	2.76	2.77
	HEIGHT, in	3.99	4.00	4.01
Strain rate, %/min		0.300	0.300	0.300
BACK PRESSURE, psf		720	648	648
CELL PRESSURE, psf		936	1584	2304
FAILURE STRESS, psf		917	3443	4537
PORE PRESSURE, psf		878	749	565
ULTIMATE STRESS, psf		2253	3581	4537
PORE PRESSURE, psf		504	691	565
$\bar{\sigma}_1$ FAILURE, psf		975	4278	5875
$\bar{\sigma}_3$ FAILURE, psf		58	835	1339

TYPE OF TEST:
CU with pore pressures
SAMPLE TYPE: REMOLDED
DESCRIPTION: .60 FA/FC

LL= N/A PL= N/A PI=
SPECIFIC GRAVITY= 2.59
REMARKS:

CLIENT: BIG RIVERS ELECTRIC

PROJECT: D. S. WILSON LANDFILL

SAMPLE LOCATION: MIX 3 60 DAYS

PROJ. NO.: 70292242 DATE: 4-26-93

TRIAXIAL SHEAR TEST REPORT

LAW ENGINEERING, INC.

FIG. NO. 3

D.B. Wi

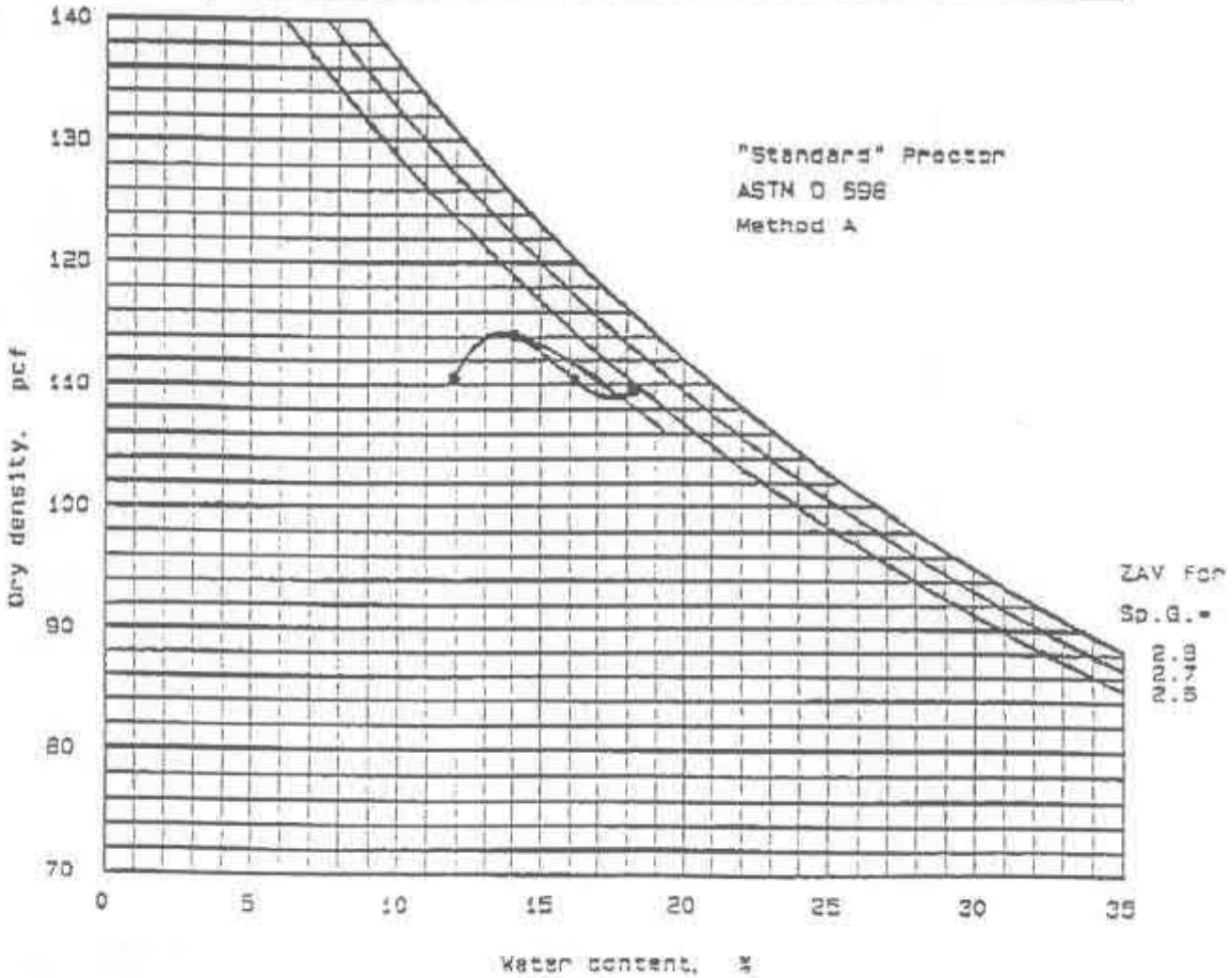
MOISTURE-DENSITY RELATIONSHIP

Project No.: EB10493901 Date: April 27, 1993
Project: Sludge Direct Shear Louisville
Location: Bag
N/A
Elev/Depth:
Remarks:
TESTED BY: HEJ REVIEWED BY RLB

MATERIAL DESCRIPTION

Description: Brown Sandy Silty Clay
Classifications: USCS: AASHTO:
Nat. Moist. = %
Sp.G. = 2.7 (assumed)
Liquid Limit =
Plasticity Index =

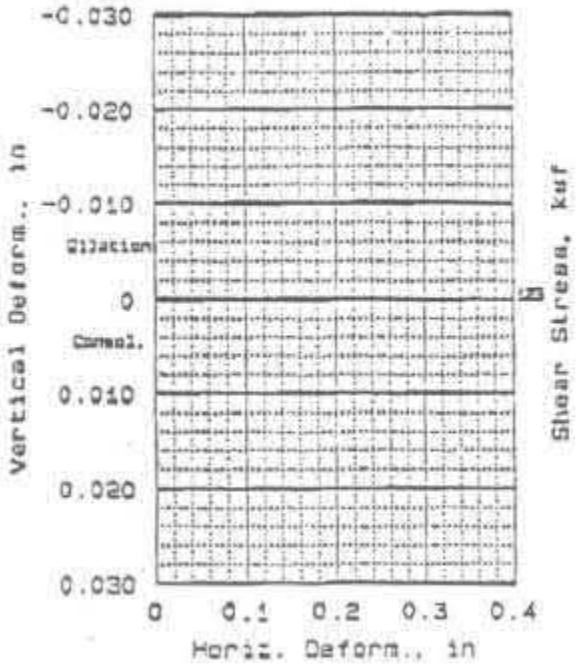
TEST RESULTS
Maximum dry density = 114.3 pcf
Optimum moisture = 13.6 %

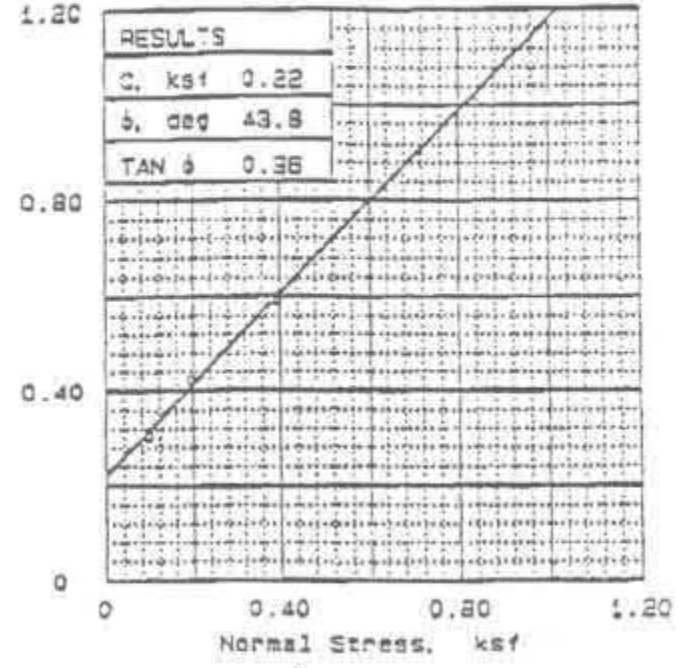


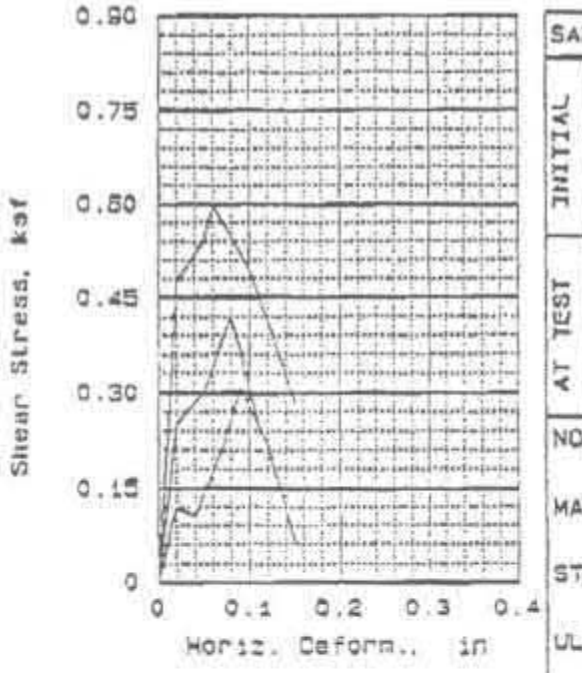
Prepare

LAW ENGINEERING, INC. Figure No. 1

D.B.







SAMPLE NO.		1	2	3
INITIAL	WATER CONTENT, %	16.2	16.2	16.2
	DRY DENSITY, pcf	100.6	100.6	100.6
	SATURATION, %	64.7	64.7	64.7
	VOID RATIO	0.675	0.675	0.675
	DIAMETER, in	2.50	2.50	2.50
	HEIGHT, in	0.81	0.81	0.81
AT TEST	WATER CONTENT, %	16.2	16.2	16.2
	DRY DENSITY, pcf	100.6	100.6	100.6
	SATURATION, %	64.7	64.7	64.7
	VOID RATIO	0.675	0.675	0.675
	DIAMETER, in	2.50	2.50	2.50
	HEIGHT, in	0.81	0.81	0.81
NORMAL STRESS, ksf		0.40	0.20	0.10
MAX. SHEAR, ksf		0.50	0.42	0.31
STRAIN RATE, %/min.		0.100	0.100	0.100
ULT. SHEAR, ksf				

SAMPLE DATA

SAMPLE TYPE: Remolded

DESCRIPTION:

LL= PL= PI=

SPECIFIC GRAVITY= 2.70

REMARKS: Tested by:

Reviewed by:

FIG NO. 1

CLIENT: Law Louisville

PROJECT: Sludge Direct Shear

SAMPLE LOCATION: S-4 and Soil

PROJ. NO.: 5910493901 DATE: April 29, 1993

DIRECT SHEAR TEST

LAW ENGINEERING, INC.

Prep

Attachment C:

Geologic Cross-sections and Groundwater Elevations

Document Path: G:\Cincinnati\DCS\GIS\ArcMap_GeoDB_Projects\ENV\60579935_BREC_WilCW920-GIS or Graphics\BREC_Figure2_Wilson_Monitoring Well and Piezometer Location Map.mxd

N

A
A'
B
B'
C
C'

MW-1
MW-3
MW-5
MW-6
MW-7
MW-10
MW-110
MW-105
MW-2
MW-102
MW-3
MW-4
MW-4D
MW-104
P9
P11

Legend

- Property Boundary
- CCR Phase 2 Fill
- Transect Line
- Bond Increment
- KAR Permit Area
- Downgradient CCR Monitoring Well Location
- Upgradient CCR Monitoring Well Location
- Characterization Monitoring Well Location
- Monitoring Well Location (Water Level Only)
- Piezometer Location (Water Level Only)

Dennis P. Conrad · Professional Geologist · Registered
Kentucky Board of Registration for Professional Geologists
PG 0197
2-24-2020

0 750 1,500
Feet

Wilson Station Landfill
Ohio County, Kentucky

FIGURE 2
MONITORING WELL AND
PIEZOMETER LOCATION MAP

DATE: 2/13/2020	SCALE: 1IN = 750 FEET
CREATED BY: BAW	
JOB NO. 60519848	

FSA, USDA, NAIP, 2017

A
NW

A'
SE

FOOTPRINT OF PHASE II LANDFILL - LOCATED WEST

MW-8

MW-5

Pre-construction Surface

MW-6

MW-7

Pre-construction Surface

MW-10

State Route 85

MW-110

424.87

TD = 64.05'

409.69

TD = 75'

389.77

TD = 54'

385.96

TD = 50.99'

385.31

TD = 23.08'

384.52

UNCONSOLIDATED

CARBONDALE FORMATION

FEET, MSL

475
450
425
400
375
350
325
300

0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500

FEET

Registered Professional Geologist
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
Division of Waste Management
Solid Waste Branch
PE 0197
2-24-2020

LEGEND

UNCONSOLIDATED MATERIALS:

- Mine Spoils
- Silty Clay
- Clayey Silt
- Sandy Silty Clay
- Clayey Sand
- Underclay

BEDROCK LITHOLOGIES:

- Sandstone
- Silty Sandstone
- Shale
- Interbedded Sandstone and Shale

Potentiometric Surface December 11, 2018

MW-8
MONITORING WELL LOCATION ID
RISER
MONITORING WELL SCREEN
BACKFILL / COLLAPSE

25 feet
500 feet
(Vertical Exaggeration = 20x)

Big Rivers

Wilson Station Landfill
Ohio County, Kentucky

FIGURE 5

CROSS-SECTION A-A1

DATE: 5/17/2019	SCALE:1 IN = 25 x 500 FEET
CREATED BY: MRH	
JOB NO. 60579935	

B

W

B'

E

FOOTPRINT OF PHASE I LANDFILL
(TO NORTH)

FOOTPRINT OF PHASE II LANDFILL

MW-5

PZ2-1
(proj)

P5
(proj)

P3
(proj)

P1
(proj)

P2

MW-2

Pre-construction
Surface

UNCONSOLIDATED

CARBONDALE FORMATION

MW-102

409.69

406.46

398.47

388.46

TD = 28'

TD = 37.5

TD = 36'

TD = 38'

FEET, MSL

525
500
475
450
425
400
375
350

0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000

FEET

Dennis P. Conrad
Registered Professional Geologist
PG 0197
2-24-2020

LEGEND

UNCONSOLIDATED MATERIALS:
- CCR Material
- Mine Spoils
- Fill

BEDROCK LITHOLOGIES:
- Interbedded Sandstone and Shale

Potentiometric Surface December 11, 2018

MW-5
- MONITORING WELL LOCATION ID
- RISER
- MONITORING WELL SCREEN
- BACKFILL / COLLAPSE

25 feet
500 feet
(Vertical Exaggeration = 20x)

Big Rivers	*Wilson Station Landfill* *Ohio County, Kentucky*
FIGURE 6 CROSS-SECTION B-B1	
DATE: 5/17/2019	SCALE:1 IN = 25 x 500 FEET
CREATED BY: MRH	
JOB NO. 60579935	

C

W

C'

E

FOOTPRINT OF PHASE I LANDFILL
(TO NORTH)

FOOT PRINT OF PHASE II LANDFILL
(TO NORTH)

Pre-construction
Surface

P-11

MW-7

MW-3

385.96

385.66

385.62

TD = 56.90'

TD = 69.13'

TD = 36'

UNCONSOLIDATED

CARBONDALE FORMATION

FEET, MSL

525
500
475
450
425
400
375
350

0
500
1000
1500
2000
2500

FEET

LEGEND

UNCONSOLIDATED MATERIALS:

CCR Materials

Mine Spoils

BEDROCK LITHOLOGIES:

Interbedded
Sandstone and Shale

Potentiometric Surface December 11, 2018

MW-7 MONITORING WELL LOCATION ID

RISER

MONITORING WELL SCREEN

BACKFILL / COLLAPSE

25 feet

500 feet

(Vertical Exaggeration = 20x)

Registered Professional Geologist
PG 0197
5-24-2020

BigRivers

Wilson Station Landfill I
Ohio County, Kentucky

FIGURE 7

CROSS-SECTION C-C1

DATE: 5/17/2019	SCALE:1 IN = 25 x 500 FEET
CREATED BY: MRH	
JOB NO. 60579935	

\\na.aecomnet.com\GFS\AMER\Cincinnati\DCS\Projects\ENV\60603363_BREC_WLACMW80-CAD-GIS\620-GIS or Graphics

Attachment D:
CQA Plan

BIG RIVERS D.B. WILSON GENERATING STATION – ISLAND, KENTUCKY

CCR LANDFILL CLOSURE

WILSON PHASE 1 LANDFILL CLOSURE PLAN

CONSTRUCTION QUALITY ASSURANCE PLAN

Prepared for
Big Rivers Electric Corporation
201 3rd Street
Henderson, KY 42420
August 4, 2021

Prepared by

AECOM
500 W Jefferson St, Suite 1600
Louisville, Kentucky 40208
502-569-2301

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Appendices

Appendix A Construction Documentation Forms
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1.0 INTRODUCTION

This Construction Quality Assurance/Quality Control Plan (CQA Plan) has been developed in support of the Permit application for a coal combustion residual (CCR) disposal facility cap to be located at Big Rivers Electric Corporation D.B. Wilson Generating Station in Island, Kentucky. The landfill is located in the Northwest corner of the generating station.

This CQA Plan has been developed in accordance with rules published by the applicable federal CCR Rule, OSHA and Kentucky Administrative Regulations (KAR). Big Rivers is requesting that KAR issue a permit for the construction and operation of the proposed CCR disposal facility as a residual landfill permit.

1.1 PURPOSE

The purpose of this Construction Quality Assurance (CQA) Plan is to outline the observation and testing requirements needed to document and verify the following:

- How each new constructed solid waste disposal facility unit(s) liner(s) and/or lateral expansion liner(s) and cover system(s) will be inspected and/or tested by a registered engineer as required by CCR Rule and KAR applicable regulations during construction or installation for uniformity, damage, and imperfections;
- How each constructed section of the liner system or final cover system will be certified by a registered engineer; and
- The engineered components meet the lines and grades shown in the construction drawings and conform to the specifications in CCR the construction documents.

1.2 CONTENTS

This CQA Plan details the personnel qualifications, material requirements, sampling and testing procedures, testing frequency, testing parameters and sampling locations, surveying, required documentation and the procedures to follow in the case of a test failure.

The construction related procedures addressed in the following sections are presented to direct construction personnel for development of the site. The CQA Plan has been organized into the following Sections as listed below:

SECTION	TITLE
1.0	Introduction
2.0	Project Description
3.0	QA/QC Program
4.0	Prequalification Testing
5.0	Earth Material
6.0	Aggregates
7.0	Final Cover System
8.0	Geomembrane
9.0	Geotextile
10.0	HDPE Pipe
11.0	Surface Water Control Systems
12.0	ClosureTurf

2.0 PROJECT DESCRIPTION

2.1 SITE LOCATION

The D.B. Wilson Generating Station is located at 5663 KY-85 near Centertown in Island, Kentucky. The generating station is located east of Green River. The existing CCR disposal facility is located in the northwest corner of the plant. Raymond Rail Rd borders the landfill at the northeast corner.

2.2 CURRENT CONDITIONS

Big Rivers Electric Corporation's D.B. Wilson Generating Station is a 417 MW coal-fired power plant. The plant was built in 1984 and disposes of coal ash and other CCR at the uncapped landfill. For phase 1, the 100-acre landfill is completely filled and awaiting capping. CCR material produced now is stored at a separate landfill west of the separating power line.

3.0 QA/QC PROGRAM

Although they are related, there is a significant difference between Quality Assurance and Quality Control. These elements are often confused and interchanged because they are interdependent. Quality Assurance (QA) relies on the Quality Control (QC) feedback and both work to deliver good quality products and services. Although this plan is focused on construction quality assurance, it necessarily also contains items associated with quality control.

3.1 QUALITY ASSURANCE

Quality Assurance starts at the beginning of the project during preparation of the engineering plans and specifications. At this stage, the CQA Plan outlines means and actions to be employed by the Owner to evaluate and measure conformity with the design, production (manufacture and fabrication), and installation of equipment and materials in accordance with this CQA Plan as well as with the plans and specifications.

3.2 QUALITY CONTROL

Quality Control includes actions taken by all parties including the designer, manufacturer, fabricator, and/or Contractor, to ensure that their methods, materials, and workmanship are accurate and correct and meet the project requirements, in accordance with the approved plans and specifications. QC is provided by each party for its own work, product, or service.

3.3 ROLES AND RESPONSIBILITIES

3.3.1 OWNER AND OPERATOR

The plant and its ancillary functions are owned and operated by the Big Rivers Electric Corporation (Owner). The Owner will be responsible for overall management of construction activities including contracting and administration. The Owner will designate an on-site representative to serve as Owner's Representative.

3.3.2 OWNER'S REPRESENTATIVE

An official representative of the Owner or Operator responsible for planning, organizing, and controlling construction activities.

3.3.3 CONTRACTOR

The Contractor for this project will be selected by the Owner. The Contractor is responsible for construction activities associated with this project including meeting all the requirements for project quality as defined in the construction plans and specifications for his/her work as well as that of his/her Subcontractors.

3.3.3.1 Construction Quality Assurance Professional of Record (POR)

The POR is an authorized representative of the Owner and has overall responsibility for CQA efforts and to confirm the project was constructed in

general accordance with site-specific specifications approved by the regulatory authority and contract documents. The POR must be licensed as a Professional Engineer in the State the project is located and experienced in geosynthetics.

3.3.3.2 Subcontractors

The Owner will subcontract with a construction material testing and inspection firm for field and laboratory testing as needed. The Owner will provide technicians for testing and observance including:

- Drilling and subsurface exploration
- Specialty geotechnical services
- Submersible pump installation
- Surveying services

Laboratory testing may include:

- Soil testing
- Concrete testing
- Geosynthetic testing

3.3.3.3 Stop Work Authority

The Owner will advise that the Contractor should stop work in situations of recognizable stability issues, deviations from design and significant cost or schedule impacts. In situations where personnel safety is concerned, the Owner will advise the Contractor to stop work as soon as possible of that action.

3.4 Project Meetings

To achieve a high degree of quality during installation, clear, open channels of communication are essential. The following meetings should be held when appropriate.

3.4.1 Pre-Construction Meetings

Following the completion of the contract documents, Pre-Construction Meeting may be held. At a minimum, the meeting should be attended by the Project Manager, the Owner's POR, the Owner's representative, the Geosynthetics Installer's Superintendent, the Earthwork Contractor's Superintendent, the Design Engineer, the Permitting Agency and other involved parties. Two Pre-Construction Meetings may be held, one prior to earthwork construction and one prior to geosynthetic placement.

3.4.2 Daily Meetings

A daily meeting will be held, as necessary, between the Owner, the Geosynthetic Installer, the Contractor, and other involved parties. Those attending will discuss, plan, coordinate the work, and CQA activities to be completed that day.

3.4.3 Progress Meetings

Progress meetings will be held weekly, or as determined to be necessary by the Owner. Attendees should include the Owner, the Geosynthetic Installer, the Contractor, and other involved parties. Those attending will discuss current progress, planned activities for the next week, submittals, and new business or revisions to the work. The Owner will log problems, decisions, or questions arising at this meeting.

3.4.4 Problem or Work Deficiency Meeting

A special meeting may be held when and if a problem or deficiency, which would impact the construction schedule or other project requirements, is present or likely to occur. At a minimum, the meeting should be attended by the affected Contractors, the Project Manager, and the Owner. The purpose of the meeting is to define and resolve the problem or work deficiency.

3.4.5 Safety Meetings

The Contractor will hold safety meetings in accordance with the Contractor's Site Health and Safety Plan. The Contractor's Site Health and Safety Plan must be submitted to the Owner for approval prior to commencing construction activities. Meetings will be held at the start of construction and then periodically as conditions change or as determined by the Owner's Representative.

3.4.6 Geosynthetics Pre-Construction Meeting

A meeting will be held at the project site prior to the installation of any geosynthetics components of the composite liner or final cover system. The Geosynthetics Pre-Construction Meeting will be attended by the Contractor, Geosynthetics Installer, or other representative of the Owner. These meetings will be held to discuss submittals, materials, installation procedures, and project coordination.

3.5 Documentation

An effective CQA plan depends largely on recognition of construction activities that should be monitored, and assigning monitoring responsibilities. This is most effectively accomplished and verified through quality assurance activities. The Owner will document that quality assurance requirements have been addressed and satisfied.

The Owner will prepare and provide periodic signed reports which summarize construction activities and the results of observations and tests including descriptive remarks, data sheets, and logs to verify that all quality assurance monitoring activities have been carried out.

Owner will provide two (2) day notice to DWM for conducting inspections at critical phases of construction including, but not limited to, the geosynthetics soil base placement, geomembrane installation, ClosureTurf installation, and final inspection.

DWM will be contacted when each cap component is completed so that a DWM representative may inspect the cap component prior to the next component being installed per 401 KAR 45:110 Section 5. Please provide DWM a minimum of a two (2) working day notice for the inspection to be scheduled.

3.5.1 REPORTS

Progress reports will be prepared at regular time intervals to document the status of the work by the Owner. Certifications will be prepared at the completion of major construction activities. At the completion of the work, final documentation will be prepared and will include a professional engineer's seal along with supporting field and laboratory test results.

Construction Progress Report shall contain all necessary conformance testing for each type of synthetic utilized per 401 KAR 45:110 Sections 2 and 5. This is to ensure the synthetic material used met project specifications.

3.5.1.1 Daily Summary Report

Standard reporting procedures must include preparation of a daily report which, at a minimum, will consist of:

- An identifying sheet number for cross referencing and document control
- Date, project name/number, location, and other identification
- A summary report including memoranda of meetings and/or relevant discussions with the Owner, and/or site contractors, observation logs, test data sheets, decisions reached, activities planned and their schedule
- Other forms of daily recordkeeping to be used as appropriate including construction problem and solution data sheets and photographic reporting data sheets

The daily summary report will also include the following information as needed:

- Weather conditions
- A reduced-scale site plan showing all proposed work areas and test locations
- Descriptions and locations of ongoing construction
- Descriptions and specific locations of areas, or units, of work being tested and/or observed and documented
- Locations where tests and samples were taken or reference to specific observation logs and/or test data sheets where such information can be found

- A summary of field/laboratory test results or reference to specific observation logs and/or test data sheets
- Calibrations or recalibration of test equipment and actions taken as a result of recalibration, or reference to specific observation logs and/or test data sheets
- Off-site materials received, including quality verification documentation
- Decisions made regarding acceptance of units of work, and/or corrective actions to be taken in instances of substandard quality
- The Owner's signature

This information must be regularly submitted to and reviewed by the Owner's Representative.

3.5.1.2 Observation Logs and Test Data Sheets

Observations of construction and QA-related activities will be recorded on project-specific logs and data sheets by the Owner. At a minimum, the logs and data sheets will include the following information:

- An identifying sheet numbered for cross referencing and document control
- Date, project name, location, and other identification; Description or title of activity monitored
- Location of activity and locations of samples collected
- Locations of field tests performed and their results
- Results of laboratory tests received
- Results of monitoring activity in comparison to specifications
- The Owner's signature

This information will be submitted with the Daily Summary Report during construction projects.

3.5.1.3 Construction Certification Report

At the completion of the work, a signed Construction Certification Report will be prepared by the Owner prepared in accordance with the project requirements.

The Construction Certification Report will be prepared and signed and sealed by a professional engineer skilled in the appropriate discipline(s) and registered in the state in which the work was performed.

At a minimum, the Construction Certification Report will include:

1. A narrative section that identifies the engineered components that were constructed that includes the following:

- A summary of the design and construction specifications and a comparison with the components that were constructed during the construction event
- A summary of how construction was impacted by weather and equipment limitations and other difficulties encountered

2. All alterations and other changes that relate to the installation of any of the components to be certified and presented as follows:
   - A listing of all applicable alteration requests/changes that were previously concurred with
   - All alteration requests/changes and supporting documentation which are proposed for concurrence
   - A list of any other changes made by the owner or operator which do not require regulatory concurrence but which affect construction or the record drawings

The alteration request will be equivalent or more protective than the applicable regulation or authorizing document.

3. Results of all tests and QA/QC data including manufacturers' certifications in accordance with the project specifications.
4. Results of all surveys in accordance with the project specifications. Unless otherwise specified, the survey data will be reported in a table(s) displaying the northing and easting for each designated survey point established to be no more than one hundred feet apart based on the grid system coincident with the design drawings. Additional points will be established at grade breaks and other critical locations.
5. Record drawings of the constructed facility components showing the following:
   - The location of all survey control points.
   - Plan views with topographic representation of all engineered components depicted along with critical elevations such as pipe inverts, sump elevations, ditch flow lines, tops and toes of berms, locations of repairs, etc.
   - The location and as-built detail drawings of all components to be certified.
   - If the Certification Report is submitted for the composite final cover system, cross sections showing the top elevations of the existing waste, top elevation of the composite cap system, and the elevations of the surface water management system. The cross sections will be taken at the same locations and using the same scale as in the approved permit to install. Otherwise, the cross sections will be taken at an interval no greater than every three hundred feet of length and width.

- If the Certification Report is submitted for establishment of facility survey marks, the following information summarizing the activities performed to construct and establish the facility survey marks:
    - An identification and description of the known control point(s) used to establish the horizontal and vertical coordinate(s) of the facility survey marks.
    - The horizontal and vertical coordinates of the known control point(s) and facility survey marks.
    - A summary of surveying activities performed in determining the coordinates of the facility survey marks.
    - A copy of the 7.5-minute series quadrangle sheet(s) used in establishing the survey marks with the known control point(s) and the location of the facility survey marks clearly identified.
    - A detailed drawing(s) illustrating the design of the facility survey marks, as constructed.

6. Qualifications of testing personnel that provided construction oversight and conducted all the testing on the engineered components for which the Certification Report is submitted including a description of the experience, training, responsibilities in decision making, and other relevant qualifications.
7. A notarized statement that, to the best of the knowledge of the owner or operator, the Certification Report is true, accurate, and contains all information required by this rule and by the CQA plan.

3.5.1.4 Progress Reports

Progress reports at time intervals established at the Pre-Construction Meeting will be completed. At a minimum, this report will include the following information:

- A unique identifying sheet number for cross-referencing and document control
- The date, project name, location, and other information
- A summary of work activities during progress reporting period
- A summary of construction situations, deficiencies, and/or defects occurring during the progress reporting period
- The signature of the Owner's representative

Copies of progress reports will be distributed as decided at the Progress Meetings and as determined necessary by the Owner's Representative.

3.5.1.5 Photographic Reporting Data Sheets

Photographic reporting data sheets, where used, will be cross-referenced with observation logs and test data sheets and/or construction problem and solution reports. These photographs will serve as a pictorial record of work progress, problems, and mitigation activities. These records will be presented to the Project Manager upon completion of the project.

3.5.2 DESIGN AND/OR SPECIFICATION CHANGES

Design and/or specification changes may be required during construction. In such cases, the Owner will notify the representative. The Owner's Representative will then determine the cause of the non-conformance and recommend appropriate changes in procedures or specifications. These changes will be submitted to the Permitting Agency if necessary.

When this type of evaluation is made, the results will be documented with a description of the changes by the Owner's Representative and cross-referenced to specific observation logs and test data sheets.

These reports must include the following information:

- An identifying sheet number for cross-referencing and document control
- A detailed description of the situation or deficiency
- The location and probable cause of the situation or deficiency
- How and when the situation or deficiency was identified or located
- Documentation of the corrective action taken to address the situation or deficiency
- Any measures taken to prevent a similar situation from occurring in the future
- The signature of the Owner's Representative and POR indicating concurrence

Design and/or specifications changes will be made only with the written agreement of the Owner, and will take the form of an addendum to the specifications.

3.5.2.1 Agency Approval

Once any field deviations or alterations that have been approved by the owner, DWM approval must be sought and obtained prior to commencing of the deviation or alteration work per 401 KAR 45:110 Sections 2 and 5. The Construction Progress Report may not be found acceptable if this action is not completed. All field deviations shall be specified in the Construction Progress Reports.

3.5.3 DOCUMENTATION MANAGEMENT

The Contractor and Owner's representative will submit project documentation to the Owner on a weekly basis or an alternate frequency established by the project requirements.

Complete project CQA documentation must be collected and maintained on-site by the Owner in a safe repository. This includes (but is not limited to):

- A complete set of construction drawings and specifications
- The CQA Plan
- Project checklists, test procedures, and standards
- Project test procedures, daily logs, pertinent regulatory documents, and other necessary documents.

3.5.4 Storage of Records and Records Retention

All data sheet originals related to the CQA and Certification process, test results, daily logs, memorandums, etc., will be stored by the Owner in a safe repository on-site during the construction project.

Upon completion of the construction project, records will either be retained at the facility or alternately stored at the Owner's or POR's office and be readily accessible by the facility if requested. Records will be maintained for a minimum period of three years from the project completion.

3.6 Failed Test Procedures and Alterations

A "failed test" occurs when a test performed on an engineered component yields a result that does not meet the specifications outlined in the applicable plans or specifications. Testing performed on an engineered component which does not meet the specifications is not considered a failed test if the engineered component is undergoing construction or installation at the time of testing and the testing is performed for the purpose of gauging the effectiveness or completeness of construction. Any failed area, where test results demonstrate that the area does not meet project specifications or regulatory requirements, must be reworked or repaired until the area passes per 401 KAR 45:110 Sections 2 and 5.

An "alteration" or "field change" is a change in construction materials, specifications, or CQA procedures from the project requirements that is necessary to perform the work or meet project requirements.

3.6.1 Failed Test Prior To Certification Report Submittal

If, prior to submission of the Construction Certification Report for the engineered component, the Owner determines that there is a "failed test," the Owner will perform all the following:

- Retest or otherwise assess the engineered component or portion of the facility to determine if construction is in compliance with the construction plans and

specifications or other project requirements and include the final results in the Certification Report.

- Implement measures to attain compliance with the construction plans and specifications or other project requirements. An area with a verified failure must be reconstructed. Reconstructed areas must be retested at a frequency acceptable to the Owner and at a frequency and location(s) sufficient to demonstrate that compliance has been achieved.

3.6.2 Alteration Prior to Submittal of Certification Report

If, prior to submission of the Construction Certification Report the Owner determines that an alteration or field change is necessary to the plans or specifications, the Owner will do all of the following:

- Include the applicable testing results and an assessment and justification for the necessary change(s) in an appropriate section of the Certification Report where the change is clearly identified.
- Provide a demonstration in the Certification Report that the change(s) are at least equivalent to the project requirements, the construction plans and specifications, and are at least as protective to human health and the environment.
- Submit the Certification Report as required by the Owner's Representative.

3.6.3 Detection of the Change after Submittal of the Certification Report

If, after submission of the Construction Certification Report the Owner's Representative determines that the Certification Report is in error due to improper documentation of an alteration or field change of the plans or specifications, the Owner will do all of the following:

- Notify the Owner's Representative as determined by the POR of the change within twenty-four hours after discovery, by phone and within seven days after discovery in writing.
- Within fourteen days of submitting the written notification required above, do either of the following:
  a. Implement the failed test procedures outlined above (3.6.1) and amend and resubmit the Construction Certification Report to explain the circumstances and how compliance was achieved.
  b. Submit the Alteration information outlined above (Section 3.6.2).

3.7 OWNER DOCUMENTATION

Appendix A of this CQA Plan includes examples of Construction Documentation Forms that will be generated by the Owner. These forms may be modified as deemed appropriate based on the requirements of the Owner's Representative .

3.8 SURVEYING

Surveying of lines and grades will be conducted on an ongoing basis during construction of soil layers, geosynthetics placement, and other engineered components. Surveying will be performed to provide documentation for record plans, verifying quantities, and assist the Contractor in complying with the required grades. Surveying conducted at the site must be part of the CQA program. The purpose of the survey is to verify that actual thickness and grades of the construction components are in accordance with the plans and specifications. Surveying of lines and grades will be conducted during construction of the soil layers. Review of the surveys conducted at the site will be part of the CQA program. The permanent benchmarks at the facility will be used for survey control. Surveying will be performed under the supervision of a qualified, professional Land Surveyor licensed in Kentucky.

Based on the control points provided by the Owner, the Contractor is to provide all temporary and permanent benchmarks, monuments, and increments needed to control work. If during the work, control points set by the Owner are disturbed by the Contractor, the Contractor will replace the control points.

3.8.1 SURVEY CONTROL

The permanent benchmarks at the facility will be used for survey control. One or more temporary benchmarks will be established for the site at a location convenient for daily tie-in. Temporary benchmarks are to be considered as accurate as third order benchmarks. The vertical and horizontal controls for this benchmark will be established within normal land surveying standards.

All benchmarks established at the facility will comply with the following requirements:

- At least three permanent survey marks, with each located on separate sides of the facility, will be established prior to any construction and within easy access to the limits of solid waste.
- Survey marks will be referenced to the same horizontal (BRF Plant Local Ground) and vertical datum (National Geodetic Vertical Datum of 1929) used on the design plans.
- Survey marks will be at least as stable as a poured concrete monument 10-inches in diameter installed to a depth of 42-inches below the ground surface. Each constructed survey mark will include a corrosion resistant metallic disk which indicates horizontal and vertical coordinates of the survey mark and will contain a magnet or ferromagnetic rod to allow identification through magnetic detection methods.

Survey control standards for the survey marks will be in accordance with the following:

- For the first facility survey mark established from the known control point, minimum horizontal distance accuracy will be one foot horizontal to two thousand five hundred feet horizontal (1' Horiz : 2500' Horiz).
- For each facility survey mark established from the first facility survey mark, minimum horizontal accuracy will be one-foot horizontal distance to five thousand feet horizontal (1' Horiz : 5000' Horiz).
- For the first facility survey mark established from the known control point and for each facility survey mark established from the first facility survey mark, minimum vertical accuracy will be one inch to five thousand feet horizontal (1" Vert : 5000' Horiz).

3.8.2 Precision and Accuracy

The survey instruments used for this work will be precise and accurate to meet the needs of the project. Survey instruments will be capable of reading to a precision of 0.01 of a foot (3.1 mm) and with a setting accuracy of 10 seconds.

A vertical tolerance of ±0.30 feet will apply to each of the following components as they are constructed:

- Top of sand infill layer
- Invert of pipes

Note: These tolerances are meant to assure that the required design intent can be met upon final certification. A Professional Surveyor registered in Kentucky will certify results of the survey. Results will be included in the Certification Report provided to the Owner.

3.8.3 Frequency and Spacing

Surveying will be performed as soon as possible after completion of a given installation to facilitate progress and avoid delaying the next installation. In addition, spot checks during construction will be necessary to assist the Contractor in complying with the required grades.

The as-built thickness of various components of the facility (protective covers and geosynthetic clay liners) will be determined by non-destructive methods, i.e., comparison of the survey data for the underlying materials with that of the component of interest. As-built survey data will be obtained at locations having a typical on center spacing of 100-feet maximum, at all toe, midpoint, and top of slope locations as well as grade breaks. Locations will be, to the maximum extent possible, at the same coordinates as the survey data for the underlying materials.

3.8.4 LINES AND GRADES

When required, the extent of the following components will be surveyed to determine the lines and grades achieved during construction:

- Original ground surface/Existing conditions
- Surface of excavation after stripping of vegetation
- Alignment and inverts of underdrain piping
- Final sand infill layer
- Geomembrane including anchor trenches, panel layout, destruct locations, repairs, and penetrations
- Geosynthetics (other than geomembrane) including anchor trenches
- Leachate collection and conveyance piping including alignment, inverts, valve box locations, and termination points.
- Surface water structure details including profiles, cross sections, and inverts for ditches, culverts, catch basins, swales, benches, ditches, and sedimentation basins
- Alignment and inverts of piping (both inside and outside the facility)
- As-built line and grade of all other piping structures
- Roads including profiles and cross sections with a minimum of one cross section for every 300 linear feet of waste containment area will be surveyed.

3.8.5 SURVEYING PERSONNEL

Surveying for construction certification and record documentation purposes will be performed under the supervision of a qualified, licensed Professional Land Surveyor registered in the state of Kentucky. The survey crew will consist of a Senior Surveyor and as many Surveying Assistants as required to satisfactorily undertake the work. Surveying personnel will be experienced in the provision of these services, including detailed, accurate documentation.

3.8.6 CERTIFICATION

Survey results will be certified by a licensed Professional Land Surveyor licensed in the state where the work is performed and submitted to the Owner for review.

3.8.7 SURVEYS BY OWNER OR ENGINEER

The Owner may request additional surveys to monitor, verify, or document the work.

3.9 PROJECT SCHEDULE

A detailed project schedule will be required to be provided by the Contractor to the Owner's Representative for review and approval prior to the preconstruction meeting. The schedule must

be generated using Primavera P6 software and composed of detailed activities logically tied together. The Contractor will construct the schedule to have the following attributes at a minimum:

- Schedule narrative describing the logic for the work planned
- Clearly defined starting point
- Clearly defined completion date
- Project Milestones
- Mobilization and demobilization activities
- Critical paths identified
- Tasks that represent the performance of the work, including tangible deliverables or products
- Specifies the resources required to perform the work (This will include labor, equipment, and materials)
- Can be easily measured during the performance of the detailed activity relating to the work

All details in the project schedule will be logically tied to other activities. As a general guideline for generating schedules, the duration of an activity should be limited to 14 calendar days. In no case should an individual work activity be scheduled for a duration longer than 45 calendar days without approval from Big Rivers. If any portion of the project is to be accomplished during a plant outage, those scheduled activities should be incorporated into a separate hourly schedule. The work should be broken down into sufficient enough detail to allow the maximum use of finish-to-start relationships. In addition, start-to-start, finish-to-finish, or start-to-finish relationships will be used at a minimum. In no case will negative lag values be allowed for any relationships. In all cases, any exceptions to the above criteria must have Big River's management's approval.

Individual activities in the project schedule requiring identifiable labor to complete the project will be resource loaded with all necessary engineering labor hours, project support labor hours and/or craft labor hours consistent with the Contractor's estimate, scope of work and work assignments. Progress for scheduled tasks will be tracked using physical percent complete. All significant reductions in physical percent complete will be reported in the weekly report along with an explanation.

4.0 PREQUALIFICATION TESTING

4.1 SUMMARY

The following section discusses the specific QA/QC requirements for prequalification conformance testing of the engineered components for the disposal facility.

4.2 PREQUALIFICATION CONFORMANCE TESTING

Prequalification testing is necessary to establish that the materials used for the engineered components conform to the minimum specifications contained in this document for each component. Some prequalification testing is generally necessary for any engineered component comprised in whole or in part of aggregate, recompacted clay, or geosynthetics. Conformance testing is performed on representative materials obtained from the location of origin and results submitted prior to arrival on site unless otherwise directed by the Owner's representative .

For this CQA Plan, prequalification conformance testing is divided between material characteristics testing and interface friction testing. Interface friction related testing shall be conducted per ASTM D5321 on appropriate geomembrane samples with all underlying soil/CCR types. Material characteristics testing is contained in Tables 3 through 7 as applicable for each engineered component. Soil and aggregate laboratory and field testing methods are located in Table 1A and 1B. Minimum testing requirements and frequencies for soils and aggregates are located in Table 3. Tables 4 through 8 contain testing requirements for geosynthetic components.

4.3 ENGINEERED COMPONENTS REQUIRING PREQUALIFICATION CONFORMANCE TESTING

Engineered components that require some measure of prequalification are noted in the individual specifications under submittals. These materials are summarized as follows:

- Geomembrane
- Engineered Synthetic Turf
- Geotextile
- HDPE Pipe
- Surface Water Structures

4.4 SUBMITTALS

Submit the results of all required prequalification testing including interface friction testing to the Owner for review and verification that the reported test results meet with project specifications at least 14 calendar days prior to use of the material at the job site unless otherwise directed by the Owner.

5.0 EARTH MATERIAL

5.1 SUBGRADE EXCAVATION AND COMPACTION OF IN-SITU MATERIALS

Subgrade or in-situ foundation refers to a surface exposed after stripping topsoil/fill material or excavating to grades. Structures or foundations, manholes, aggregate drainage materials, or aggregate surface materials are placed on the subgrade. Materials such as organics or soft/loose soils will be removed. All unsuitable soil located below the subgrade elevations shall be over-excavated to a competent, stable surface at a lower elevation and replaced with suitable fill material as directed by the Owner's Representative. In addition, any significant protrusions resulting from small cobbles and/or large boulders shall be removed and replaced with suitable fill as appropriate such that the final subgrade surface is relatively smooth. Proofrolling is not appropriate on the slopes of the closure cap.

In addition, any significant protrusions resulting from small cobbles and/or large boulders shall be removed and replaced with approved fill as appropriate such that the final subgrade surface is relatively smooth.

5.1.1 CONSTRUCTION

Where necessary, suitable backfill will be placed in horizontal loose-lifts that do not exceed 8-inches in thickness. Each lift shall be compacted using suitable equipment to achieve the minimum in-place density specified in Table 3. The contractor shall adjust the moisture content of the fill material as needed to meet the specified moisture/density requirements.

5.1.2 CONSTRUCTION TESTING

The Owner is responsible for pre-qualification testing of proposed sources of any backfill material. In-place testing shall consist of visual inspection by the installer and the owner/engineer in accordance with the requirements listed in Table 3.

6.0 AGGREGATES

Aggregates include materials used for the construction of the bedding/backfill of piping, slope and channel protection (rip rap), proposed access road, and under structures.

6.1 MATERIAL, CONSTRUCTION, AND DESIGN SPECIFICATIONS

Material and construction specifications for aggregates are set forth in Table 3.

6.2 PRE-CONSTRUCTION MANUFACTURER/CONFORMANCE TESTING

Aggregate materials for use shall be obtained from approved off-site borrow sources and shall satisfy the requirements in the Contract Documents throughout delivery and use of the materials. The contractor shall submit certified laboratory test reports for each proposed aggregate source or supplier stating that the material meets the requirements for aggregates as set forth in Table 3.

6.3 CONSTRUCTION

Aggregate materials shall be placed using equipment and methods that protect underlying pipe materials and geotextiles. Aggregates for bedding and backfill of pipes and structures should be placed to the thickness and elevations shown on the plans and tamped in place to achieve compaction.

Rip rap shall be placed in a manner that will produce a well-graded mass of stone with smaller stone fragments filling the space between the larger ones, so as to result in the minimum practicable percentage of voids. The final section of stone filling shall be in conformance with the lines, grades, and thicknesses as shown on the Construction Drawings. Rip rap shall not be placed or dropped from a height greater than 24". Riprap placed onto any Geosynthetics shall not be placed or dropped from a height greater than 12". The contractor is responsible for determining a riprap placement method that will not damage the underlying geosynthetics. Aggregates for the access road shall be spread in uniform loose lifts and compacted with a compactor until the specified density is reached or until the material passes a proofroll.

6.4 CONSTRUCTION TESTING

Observation of aggregate placement should document that the correct materials are utilized, and thicknesses of the layers are attained to meet the design intent. For aggregate used in bedding

and backfill of structures, the aggregate should be field observed to document that it meets the project requirements.

7.0 FINAL COVER SYSTEM

Prior to placement of the final cover system geomembrane, the intermediate cover soil layer shall be stripped of existing vegetation and any unsuitable materials removed from the surface of the intermediate cover soil. The surface shall be been rolled with a smooth steel wheel roller, pneumatic wheel roller, or other means to provide a surface free of irregularities, loose earth, and abrupt changes in grade.

Prior to placement of the final cover system geomembrane, the Owner's Representative shall:

- Observe that surfaces on which the geomembrane is to be placed are at the design line and grade and have been rolled with a smooth steel wheel roller, pneumatic wheel roller, or other means to provide a surface free of irregularities, loose earth, and abrupt changes in grade.
- Observe the prepared intermediate cover with the Geomembrane Contractor for approval. Receive an acceptance of the surface condition from the geomembrane installer.
- Observe that prepared subgrade is maintained in a smooth, uniform, and compacted condition during installation of the geosynthetic lining system. If drying, cracking, erosion, or other damage has occurred, observe that it is repaired before installing the liner.
- Observe that adequate drainage for the prepared subgrade is provided and maintained until the lining installation is completed. The geomembrane should not be placed if moisture prevents proper subgrade preparation, placement, or membrane seaming.

8.0 GEOMEMBRANE

8.1 GENERAL

8.1.1 SUMMARY

The following section discusses the specific QA/QC requirements for the testing and installation of this material. Geomembrane will serve as a low permeability barrier from overlying liquids. It must be placed on a stable subgrade and may be used in conjunction with other geosynthetics to act as a composite liner or barrier system. Geomembrane typically has extensive QA/QC requirements for the manufacturer, installer, and the Owner's Representative.

8.1.2 REFERENCES

GRI-GM13 - Geosynthetic Research Institute: "Test Methods, Test Properties and Testing Frequency for High Density Polyethylene (HDPE) Smooth and Textured Geomembranes"

GRI-GM14 - Geosynthetic Research Institute: "Selecting Variable Intervals for Taking Geomembrane Destructive Seam Samples Using the Method of Attributes"

GRI-GM17 - Geosynthetic Research Institute: "Test Methods, Test Properties and Testing Frequency for Linear Low Density Polyethylene (LLDPE) Smooth and Textured Geomembranes"

GRI-GM19 - Geosynthetic Research Institute: "Seam Strength and Related Properties of Thermally Bonded Polyolefin Geomembranes"

8.1.3 DESCRIPTION AND DESIGN REQUIREMENTS

The geomembrane (a.k.a. Flexible Membrane Liner or FML) is designed to function as a liquid barrier for infiltrating storm water to minimize the impact of leachate on groundwater. FML is a stable material and retains its strength and hydraulic conductivity properties even after being subjected to strain from differential settling or being exposed to leachate. LLDPE is ideally suited for disposal facility liner and final cover systems. For this project, LLDPE will be used in the final cover system and the liner system.

8.1.4 SUBMITTALS

Submit the results of the manufacturer's quality control testing in accordance with the test requirements outlined in Table 4 as applicable to the Owner for review and verification that the reported test results meet with project specifications at least 10 days prior to delivery of the liner material to the job site.

Submit the results of all required prequalification testing as required in Section 4, including interface friction testing, to the Owner for review and verification that the reported test results meet with project specifications at least 10 days prior to delivery of the geomembrane material to the job site.

Upon delivery at the site, submit all roll identification and quality control certificates issued by the manufacturer to the on-site Owner representative. Rolls without proper identification will be rejected.

Submit the results of the quality control testing performed during the deployment of the geomembrane. This will include at a minimum:

- Trial welds
- Subgrade Acceptance Form
- Panel placement logs
- Panel seaming logs
- Non-destructive test results
- Destructive test results
- Repair logs
- Daily Panel Placement Drawings

8.1.5 Quality Assurance

Prior to delivery of the rolls of geomembrane, the Owner will verify that representative samples are removed and forwarded to a qualified independent testing laboratory for testing to verify conformance with the test methods and values presented in Table 4 as applicable.

8.1.6 Delivery Storage and Handling

Handle the geosynthetic materials in accordance with manufacturer's recommendations and utilize handling equipment on-site that poses minimal risk of damage to the material.

8.2 Products

8.2.1 Material Requirements

FML Barrier Liner for the Disposal Facility Liner: Utilize 50-mil textured LLDPE geomembrane for the disposal facility liner system containing no fillers or extenders. The minimum acceptable physical, mechanical, and hydraulic properties of the LLDPE-manufactured sheet are outlined in GRI-GM17. In particular, this project requires a 50-mil minimum thickness LLDPE geomembrane.

FML Barrier Liner for the Final Cover: Utilize 50-mil textured LLDPE geomembrane for the final cover system containing no fillers or extenders. The minimum acceptable physical, mechanical, and hydraulic properties of the LLDPE-manufactured sheet are outlined in GRI-GM17 and in Table 4.

It is the responsibility of the Contractor to verify that the most current version of GRI-GM17 is adhered to.

8.2.2 Source Quality Control

Quality Control testing for the geomembrane will be performed by the manufacturer on the representative samples of the proposed material to demonstrate and verify the materials meet minimum requirements outlined in GRI-GM17.

8.3 Execution

8.3.1 Construction and Installation

A daily Prepared Subgrade Acceptance form is to be signed and submitted by the installer to the Owner's representative.

Install the geomembrane above a stable subgrade after receipt of approval of the subgrade from the Owner.

Complete all geosynthetics field installation in accordance with the manufacturer's recommended installation procedures and the construction specifications as outlined in this Section and to the lines and grades shown on the construction drawings.

Ensure the method and equipment used to unroll the panels has the following characteristics:

- Does not cause scratches or crimps in the geomembrane and does not damage the supporting soil
- Minimizes wrinkles and has adequate temporary anchors (e.g., sandbags, tires) to prevent wind damage

For fusion seaming, a rub sheet may be required directly below each overlap of geomembrane to be seamed in order to prevent any moisture build-up between the sheets.

For extrusion seaming, geomembrane is to be cleaned using a disc grinder or equivalent prior to seaming.

Record all construction details for all deployed geomembrane on individual forms acceptable to the Owner's representative. This includes at a minimum:

- Panel placement logs
- Trial weld logs
- Panel seaming logs
- Repair logs
- Non-destructive and destructive test result logs

Prepare panel layout drawings (field sketches) of the deployed and tested geomembrane for review by the Owner's representative.

Complete the installation such that the geomembrane is smooth, without wrinkles, tears, or holes, and covers the total surface of the disposal facility liner and/or cap system. Do not leave tools, debris, or surplus materials on the surface.

8.3.1.1 Trial Welds

Verify seaming conditions and techniques are adequate by performing daily trial welds on representative pieces of geomembrane in accordance with the following procedures for all combinations of seamer and seaming equipment:

- Perform trial welds once in the morning and once in the afternoon, when operator/machine combinations change, and when an apparatus is turned off and restarted
- Perform additional trial welds when the liner temperature changes by 36°F or more since the previous trial weld was performed

A passing trial seam must be made at the frequency noted above for each seaming device and technician prior to performing production seaming.

8.3.1.2 Seam Geometry

Seam in accordance with the following specifications:

- Orient seams parallel to the line of maximum slope, i.e., oriented along, not across, the slope
- Minimize the number of seams in corners and odd-shaped geometric locations
- Where horizontal seams are necessary and acceptable to the Owner's representative, stagger seams a minimum distance of 10-feet between adjacent seams
- Do not allow horizontal seams to be within 5-feet of the toe of slopes or areas of potential stress concentration unless otherwise approved by the Owner's representative

8.3.1.3 Ambient Temperatures and Weather Considerations

Do not deploy geomembrane during any precipitation, fog, snow, in areas of ponded water, or in the presence of excessive winds.

Measure sheet temperature prior to seaming by placing a thermometer on the surface of the sheet.

Do not perform seaming where measured surface temperatures are below 32°F or above 104°F for extrusion welding and 140°F for fusion welding. Deviations from these temperature criteria may only occur when authorized by the Owner and with the concurrence of the Owner's representative.

8.3.2 FIELD QUALITY CONTROL

During deployment and seaming of the geomembrane, perform the following quality control tests and record the results for review and concurrence by the Owner's representative:

- Trial welds
- Non-destructive test results
- Destructive test results
- Repair logs

Perform non-destructive testing on 100 percent of field seams over their full length using a vacuum test unit (for extrusion seams only), air pressure test, or other acceptable method in accordance with industry accepted standards and in accordance with manufacturer's recommendations.

Complete non-destructive testing of the seams as the seaming work progresses and any required repairs in accordance with industry standards and in accordance with manufacturer's recommendations.

Ensure all field-testing equipment is calibrated in accordance with Table 8.

8.3.2.1 Air Channel Testing

Unless otherwise specified, air pressure testing of the seamed channel will include inflating the test channel, closing the valve, and observing initial pressure after approximate air temperature and pressure have stabilized. The initial pressure will be set appropriately as indicated in Tables 5, and the test will last for 5 minutes after reading the initial test pressure. If pressure loss exceeds the allowable specification in the Tables 5 or if the pressure does not stabilize, locate the faulty area and repair as needed. Flap welding is not an acceptable repair for a failing air channel test. For passing tests, at the end of the 5-minute period, cut the far end of the seam and note the resultant pressure drop.

8.3.2.2 Vacuum Box Testing

Unless otherwise specified, vacuum testing will be required on all extrusion welded seams. To vacuum test, turn on the vacuum pump to reduce the vacuum box to approximately 5 psi. They will apply liquid soap and water solution to the area to be tested, place the vacuum box over the area to be tested and apply sufficient downward pressure to "seat" the seal strip against the liner. Once a tight seal is created, observe the seam through the window for a period of not less than 10 seconds. If no bubbles appear after 10 seconds, proceed to the next segment of seam to be tested. Mark and repair areas failing the test with a cap strip or other acceptable method.

8.3.3 FIELD QUALITY ASSURANCE

The Owner's representative will confirm the roll identification corresponds to quality control certificates issued by the manufacturer.

The Owner will document observations during installation including damage, seaming logs, repair logs, test results, and conformance to specifications. Other items that will be noted include:

- The method and equipment used to unroll the panels does not cause scratches or crimps in the geomembrane and does not damage the supporting soil
- The method used to place the panels for minimization of wrinkles and temporary loading utilized to prevent wind damage

All field testing will be performed in the manner and at the frequency identified in Tables 5.

8.3.3.1 Destructive Testing

Unless an alternative frequency is indicated, the Owner's Representative will choose locations for cutting samples by the Contractor for all destructive seam tests at a frequency no less than one per every 1000-feet of seam completed by a particular seamer/apparatus combination.

Cut the samples as the seaming progresses in order to have passing test results before the geomembrane is covered by the overlying materials. The Owner's Representative will:

- Assign a number to each sample, and mark it accordingly
- Observe sample cutting
- Record the sample location on the layout drawing
- Record the reason for taking the sample at this location, if not taken due to statistical routine
- Observe and record all test results

The sample will be divided into three specimens: one for field testing by the Contractor, one for independent laboratory peel and shear testing, and one to the Owner for archive storage.

Test the field specimen with a properly calibrated tensiometer for peel and shear and verify it meets the minimum requirements presented in Table 5. If any field test sample fails to meet the minimum requirements, the Owner's Representative will determine locations for additional destruct samples for testing a minimum of 10-feet on either side of the failed test location continually bounding the failing test(s) until two bounding, passing tests are recorded. Repair the interval between the passing test locations with a cap strip and test via vacuum box.

If the result is passing, then the Owner's Representative will transport an additional specimen for laboratory testing. Peel and shear destructive seam sample testing will be performed with a calibrated tensiometer. At least five specimens will be tested. If a sample fails laboratory testing, then additional samples will be collected in the field similar to the field testing procedures.

Repair all holes in the geomembrane resulting from destructive seam sampling immediately.

8.3.3.2 Alternative Destructive Testing Sampling Frequency

As the project continues and data is accumulated, the sampling interval may be varied according to the procedure set forth in GRI GM14. Following this procedure will result in three possible situations:

- Good seaming with fewer rejected test results than the preset historic average can result in a sequential increase in the spacing interval, i.e., one per greater than 500-feet.
- Poor seaming with more rejected test results than the preset historic average can result in a sequential decrease in the spacing interval, i.e., one per less than 1000-feet.
- Average seaming with approximately the same test results as the preset historic average will result in the spacing interval remaining the same, i.e., one per 500-feet.

Alternative frequency testing will be implemented at the discretion of the Owner's representative.

9.0 GEOTEXTILE

9.1 GENERAL

9.1.1 SUMMARY

The following section discusses the specific QA/QC requirements for the testing and installation of this material. Geotextile will serve as a permeable, separative, and protective fabric layer between soil, aggregate, geosynthetic, and waste materials. Geotextiles typically have several QA/QC requirements for the manufacturer, installer, and the Owner.

9.1.2 DESCRIPTION AND DESIGN REQUIREMENTS

The geotextile is designed to separate dissimilar subsurface elements without retarding drainage through the materials. Geotextile will be used to wrap the aggregate surrounding the leachate collection pipes to prevent the infiltration of fines into the gravel pack. Geotextile will also be employed between subgrade soils and aggregate base course of the facility's access, perimeter, and haul roads, and as a protective barrier above the geomembrane liner in the sedimentation basins.

9.1.3 SUBMITTALS

Submit the results of the manufacturer's quality control testing in accordance with the test requirements outlined in Table 6 to the Owner for review and verification that the reported test results meet with project specifications at least 14 days prior to delivery of the geotextile material to the job site.

Submit the results of all required prequalification testing as required in Section 4, to the Owner for review and verification that the reported test results meet with project specifications at least 14 days prior to delivery of the geotextile material to the job site.

Upon delivery at the site, submit all roll identification and quality control certificates issued by the manufacturer to the Owner. Rolls without proper identification will be rejected.

9.1.4 QUALITY ASSURANCE

Prior to delivery of the rolls of geotextile, the Owner will verify that representative samples are removed and forwarded to a qualified testing laboratory for testing to verify conformance with the test methods and values presented in Table 7 as applicable.

9.1.5 DELIVERY STORAGE AND HANDLING

Handle the geotextile materials in accordance with manufacturer's recommendations and utilize handling equipment on-site that poses minimal risk of damage to the material.

9.2 PRODUCTS

9.2.1 MATERIAL REQUIREMENTS

Geotextile for Leachate Collection System: Utilize geotextile fabric for the leachate collection system that meets the minimum material properties outlined in Table 7.

9.2.2 SOURCE QUALITY CONTROL

Quality Control testing for the geotextile will be performed by the manufacturer on the representative samples of the proposed material to demonstrate and verify the materials meet minimum requirements outlined in Table 6.

9.3 EXECUTION

9.3.1 CONSTRUCTION AND INSTALLATION

Complete all geosynthetics field installation in accordance with the manufacturer's recommended installation procedures and the construction specifications as outlined in this Section and to the lines and grades shown on the construction drawings.

Complete the installation such that the geotextile is smooth, without wrinkles, tears, or holes. Do not leave tools, debris, or surplus materials on the surface. Installation will be performed in such a manner as to minimize damage and will comply with the following:

- After the wrapping has been removed, a geotextile will not be exposed to sunlight for more than the time specified by the manufacturer.
- On slopes, the geotextiles will be securely anchored and then rolled down the slope in such a manner as to continually keep the geotextile panel in tension.
- In the presence of wind, geotextiles will be weighted with sandbags or the equivalent. Sandbags will be installed during the placement and will remain until replaced with the appropriate overlying material.
- Sandbags will be filled with the fine-grained material and must be handled with care to prevent rupture.
- Geotextiles will be kept continually under tension to minimize the presence of wrinkles in the geotextile.
- Geotextiles will be cut using an approved geotextile cutter only (i.e., an upward cutting hook blade). If in place, special care must be taken to protect other materials from damage which could be caused by the cutting of the geotextiles.
- Precaution will be taken to prevent damage to the underlying layers during placement of the geotextile.

- During placement of geotextiles, care will be taken not to entrap stones, excessive dust, or moisture that could damage the geotextile, generate clogging of drains or filters, or hamper subsequent seaming.
- After installation, the entire surface of the geotextile will be examined, and harmful foreign objects, such as needles, will be removed.

9.3.1.1 Seams and Overlaps

Geotextiles will be continuously sewn using thread, which is as chemically resistant and UV resistant as the geotextile. Thread will be approved by the Owner. Alternately, geotextile may be joined by heat bonding. Spot sewing is not permitted, except for repairs. Geotextiles will be overlapped a minimum of 4-inches prior to seaming or heat bonding. If sewing of geotextile seams is to be used, a flat (prayer) seam, "J" seam, or "butterfly-folded" seam is recommended, and ensure the seam is a two-thread, double-lock stitch, or a double row of single-thread, chain stitch.

Horizontal seams on side slopes should be avoided. However, if horizontal seams are necessary, at least 100-feet will be maintained between horizontal seams of adjacent panels.

Complete the installation such that the geotextile is smooth, without wrinkles, tears, or holes. Do not leave tools, debris, or surplus materials on the surface.

9.3.1.2 Repairs

Any holes or tears in the geotextile will be repaired as follows:

- Holes in the geotextile will be patched with geotextile of the same unit weight;
- Sufficient overlap will be provided to ensure a suitable seam can be produced, that will not come apart and, when used as a filter, will contain soil; and
- Patches will be sewn and not heat bonded without the approval of the Project Manager.

Care will be taken to remove any soil or other material which may have penetrated the torn geotextile.

9.3.1.3 Placement of Materials on Geotextiles

Material will be placed on the geotextile in a manner that causes no damage to the geotextile or supporting materials. Low ground-pressure equipment will be used to place the overlying material. The equipment will be operated on the full depth of the layer. Equipment used for placing the overlying material will not be driven directly on the geotextile.

9.3.2 Field Quality Assurance

In addition to reviews of QC documentation, the Owner's representative will visually inspect installed geotextile for damage and conformance with the Specifications.

The Owner's representative will confirm the roll identification corresponds to quality control certificates issued by the manufacturer.

The Owner will document observations during installation including damage, seaming logs, repair logs, test results, and conformance to specifications.

10.0 HPDE Pipe

10.1 General

10.1.1 Summary

The following section discusses the specific QA/QC requirements for the testing and construction of this material. HDPE pipe and associated fittings will be used to construct the toe drain.

10.1.2 Description and Design Requirements

HDPE is a thermoplastic piping material that is suitable for both gravity and pressure applications.

10.1.3 Submittals

Submit the results of the manufacturer's quality control testing to the Owner for review and verification that the reported test results meet with project specifications at least 14 days prior to delivery of the HDPE pipe and appurtenances to the job site for each batch/lot of pipe.

Submit the results of all required prequalification testing as required in Section 4, to the Owner for review and verification that the reported test results meet with project specifications at least 14 days prior to delivery of the piping to the job site.

Submit the results of the required prequalification testing to the Owner as summarized in Table 3 for approval prior to obtaining pipe annulus aggregate material for use.

10.1.4 Delivery Storage and Handling

Handle the HDPE pipe and fittings with due care and utilize handling equipment on-site that poses minimal risk of damage to the material.

10.2 Products

10.2.1 Material Requirements

HDPE piping will consist of Standard Dimension Ratio (SDR) pipe, as specified in the project specifications. HDPE pipe fittings will be furnished by the manufacturer of the pipe with which they are used and will conform to the requirements of ASTM D3261 for standard fittings.

Pipe joints will be fusion welded, using only manufacturer-approved methods and equipment, unless noted otherwise in the construction drawings.

Pipe annulus aggregate requirements are contained in Table 3.

10.2.2 Source Quality Control

Quality Control testing for the HDPE pipe will be performed by the manufacturer on the representative samples of the proposed material to demonstrate and verify the materials meet the project specifications.

The Owner's representative will confirm the pipe batch/lot identification corresponds to quality control certificates issued by the manufacturer.

10.3 Execution

10.3.1 Construction and Installation

Complete all HDPE pipe installation in accordance with the manufacturer's recommended installation procedures and the construction specifications as outlined in this Section and to the lines and grades shown on the construction drawings.

10.3.1.1 Leachate Collection Pipe

Leachate collection piping will be perforated as detailed in the construction drawings. The leachate collection piping will be placed at locations shown; bedded in, and surrounded by a pipe annulus aggregate; and then wrapped with a non-woven geotextile. Non-perforated piping will be pressure tested prior to certification by the Owner's

10.3.1.2 Fusion Process for Joints

Pipe joints will be fusion welded, using only manufacturer-approved methods and equipment, and in conformance with the procedures outlined below, unless otherwise specified.

- Delivered pipes and fittings will be examined to verify that pipes and fittings are not broken, cracked, or contain otherwise damaged or unsatisfactory material. Prior to fusing, verify that the fusion surface area is clean and free of moisture, dust, dirt, debris of any kind, and foreign material.
- Fusion of the HDPE joints will be performed at temperatures above 32°F, unless otherwise authorized in writing by the Owner's Representative.

10.3.1.3 Pressure Testing of Joints

The joints of non-perforated HDPE pipes will be tested using the pressure test procedures given in ASTM C924. Other non-destructive test methods may be used only when approved by the Owner. Test pipe in-place after installation and prior to backfilling.

Pipe and fused joint leaks identified during testing will be repaired by cutting out the leaking area and refusing the pipe. After all leaks are repaired, a retest will be performed.

A final test will be performed of the completed pipeline using the test procedure in ASTM C924. The completed system when tested should be in its proper trench location and allowed time to reach constant and/or ambient temperature before initiating the test.

10.3.2 Field Quality Assurance

During installation of the HDPE pipe, perform the following quality control tests and record the results for review and concurrence by the Owner's representative:

- Non-destructive pressure test results
- Pipe repair logs

The Owner will document observations during installation including damage, repair logs, test results, and conformance to specifications. The method and equipment used to fuse pipe joints will also be noted.

11.0 Surface Water Controls Structures

11.1 General

11.1.1 Summary

The following section discusses the specific QA/QC requirements for the construction of surface water control structures. Surface water control structures will be constructed to manage surface water runoff from the disposal facility.

11.1.2 Description and Design Requirements

Surface water control structures include channels, benches, ditches, letdowns, culverts, and catch basins. These structures are designed to manage surface water at the site. Precast concrete surface water control structures may also be designed to meet specified traffic loading requirements.

11.1.3 Submittals

Submit the results of the manufacturer's quality control testing to the Owner for review and verification that the reported test results meet with project specifications at least 10 days prior to delivery of the erosion control matting/turf control matting (ECM/TCM) and culvert pipe to the job site.

Submit the results of the required prequalification testing for riprap material to the Owner as summarized in Table 3 prior to obtaining riprap material for use.

Submit shop drawings and/or manufacturer's certification demonstrating the ability of precast concrete surface water control structures to meet traffic loading requirements as required by the project specifications or construction drawings.

11.1.4 Delivery Storage and Handling

Handle the ECM/TCM, precast concrete structures, and culvert pipe in accordance with manufacturer's recommendations and utilize handling equipment on-site that poses minimal risk of damage to the material.

11.2 Products

11.2.1 Material Requirements

Riprap materials will conform to the requirements of Section 703 of the KYTC "Standard Specifications for Road and Bridge Construction" for the riprap material classification specified in the project specifications or construction drawings.

11.2.2 Source Quality Control

Perform additional field or laboratory tests as often as is necessary to document the riprap material continues to meet the prequalification specifications contained in the Material Requirements section above.

11.3 Execution

11.3.1 Construction and Installation

Excavate channels to the lines and grades shown on the construction drawings. Install ECM/TCM in accordance with the manufacturer's recommended installation procedures and the construction specifications.

11.3.2 Field Quality Assurance

In addition to reviews of QC documentation, the Owner's representative will visually inspect installed surface water control structures for damage and conformance with the Specifications.

The Owner's representative will verify that proper burial depth and slope is maintained on pipe installed as part of the surface water control structures.

12.0 Cast-In-Place Concrete

12.1 General

Cast-in-place concrete shall be utilized in the areas shown on the Plans for Construction in accordance with the Technical Specifications.

12.2 Quality Control Requirements

The Contractor shall submit documentation regarding the acceptability of the subject materials for the project to the Owner. Required submittals are specified in the Technical Specifications and presented in Appendix B of this plan.

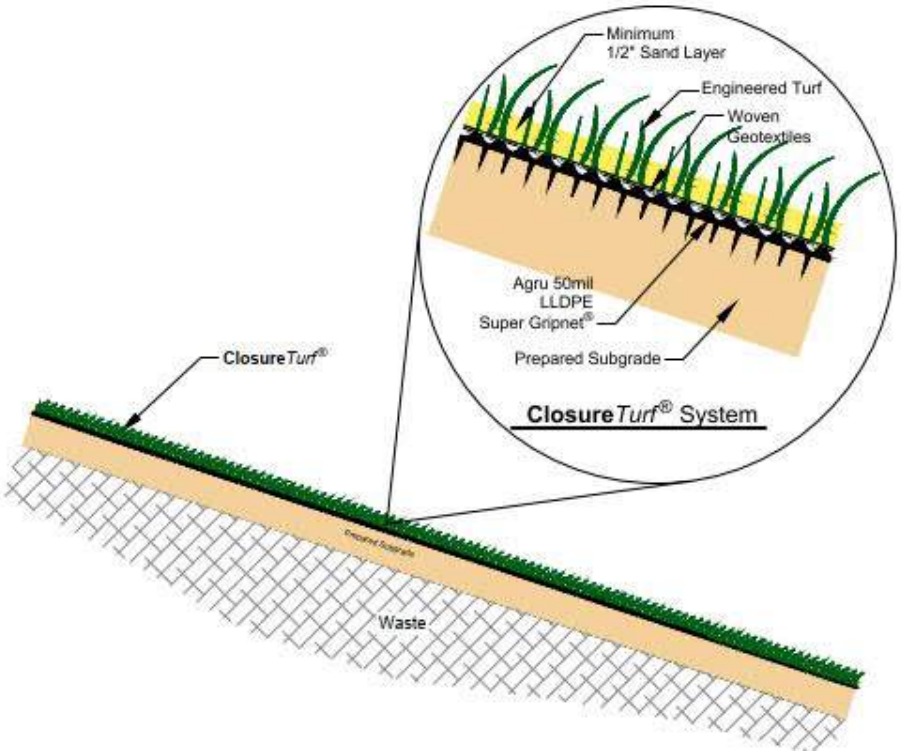
Standard tests of the material and concrete shall be performed as required by the Technical Specifications and at frequencies shown in the testing schedule in Table 9. Retests due to non-conformance of the materials shall be performed, as approved by the Owner.

Must administer epoxy coating and conduct hydrostatic leak test.

13.0 CLOSURETURF

13.1 GENERAL

ClosureTurf system consists of engineered synthetic turf with a sand layer on top of geotextile and studded geomembrane deployed above the prepared subgrade.



13.2 REQUIREMENTS

Equipment used to install Closure Turf synthetic components shall be as per the manufacturer's recommendations so as to not cause damage to any of the layer components. Equipment to be used may include tracked equipment such as a skid steer, forklift or other type of low ground pressure equipment.

See Appendix B for all ClosureTurf requirements.

TABLES

Table 1A. Laboratory Test Methods for the Evaluation of Aggregate

COMMON TEST NAME	PARAMETER DEFINED	STANDARD METHOD
Permeability: Constant Head	Permeability (Hydraulic Conductivity) of Aggregates	ASTM D2434
Carbonate Content	Carbonate Content of Aggregate	ASTM D3042

Notes:

1) Not all tests are required for this site; refer to Table 3 in the CQA Plan.
2) Latest version of the applicable ASTM International or USDA testing standards will be used when conducting tests.

Table 1B. Field Test Methods for the Evaluation of Soil and Aggregate

COMMON TEST NAME	PARAMETER DEFINED	STANDARD METHOD
Visual Classification	Maximum Particle Size, General Material Characteristics	ASTM D2488
USDA Classification	Classification of Ability to Support Vegetation	USDA Method
Nuclear Methods	In-Place Density and Moisture Content	ASTM D6938
Lift Depth Check	Thickness of Placed Soils or Aggregates	Visual Confirmation

Notes:

1) Not all tests are required for this site; refer to Table 3 in the CQA Plan.

2) Latest version of the applicable ASTM International or USDA testing standards will be used when conducting tests.

Table 2. Minimum Requirements and Test Frequencies for Shear Strength Prequalification

Item/Interface Description	Material Preparation	Required Tests	Material Selection	Frequency	Specification [1], [2]			Basis For Test	Certification
Baseliner Floor System (slopes <10%)									
					Peak Secant Angle (degrees)	Normal Stress (psf)	Peak Shear Stress (psf)		
Interim Soil Cover/Textured LLDPE	Soil is to be compacted to moisture and density expected during construction. All geosynthetics interfaces to be oriented same side to same side as in the in the field.	Interface Shear Strength ASTM D5321 over range of normal stresses anticipated	Representative samples of geosynthetics and specific soils/CCR in interim soil cover	Minimum twice prior to initial construction. More if additional soil/CCR variations are encountered in stripping the vegetation from the interim soil cover.	15.5	2,000	555	Deep seated translational failure analysis of final waste slopes	Results evaluated and approved as having met applicable specifications established by the slope stability analysis
						5,000	1387		
						10,000	2773		
						20,000	5546		

(1) In situations where a conformance test results falls below the specified minimum, review Figures 1 through 3 following these tables that depict acceptable combinations ϕ and c where c is greater than 0 for each loading scenario. In addition, the particular slope stability calculation can be repeated to determine if additional non-linear analyses and/or reasonable changes in assumptions show the material to be acceptable.

(2) Minimum peak shear strengths are provided in both friction angle and shear stress at specified normal loads. Shear stress (τ) is calculated using the equation $\tau = c + \sigma\tan\phi$ where c = cohesion or adhesion and σ = normal force. Exceeding either the required friction angle with cohesion/adhesion = 0 or the minimum shear stress at the required normal loads is acceptable. Minimum shear strength values given in the table are representative of expected mathematical results given the various normal stresses in the table. However, the minimum required shear strength is represented by the envelope developed utilizing the combination of all the points resulting from the laboratory testing. In some cases where the laboratory results are very close to the minimum required values, not all the minimum values are required to be exceeded as long as the overall envelope exceeds the minimum shear strength requirements over the range of normal stresses exhibited in the field. Engineering judgment must be utilized in these instances.

(3) The strength of these materials has been conservatively assumed in the slope stability analysis. These materials should be tested once prior to initial construction to verify the minimum assumed strength parameters are exceeded. Subsequent construction projects should have a geotechnical engineer verify the material characteristics are similar to those tested and verified as passing results. If different materials or a different borrow source are utilized, additional testing should be considered.

(4) The maximum allowable strain rate for geosynthetic to geosynthetic and geosynthetic to free-draining aggregate material interfaces shall be 0.04 inches per minute. The maximum allowable strain rate for geosynthetic to soil interfaces shall be 0.004 inches per minute.

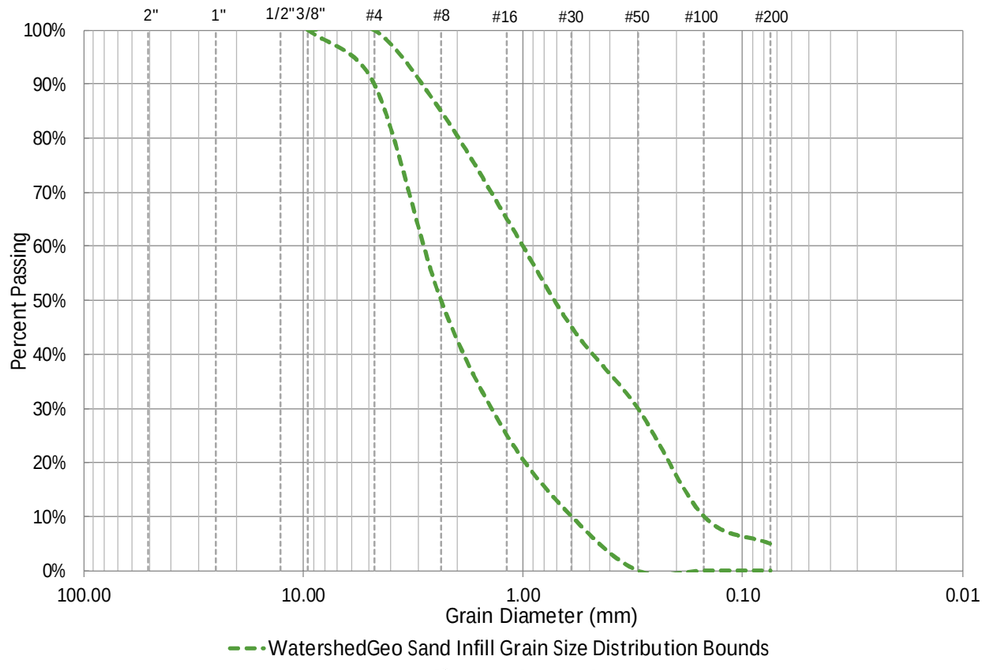
(5) The minimum residual value should be attained and maintained at or prior to deformation equaling 1.5 inches to meet the acceptable maximum deformation requirements for the cover system during the design earthquake. If this value is not met, the deformation analysis should be reevaluated by a qualified geotechnical engineer to determine if the laboratory results for residual strength are acceptable

Table 3. Minimum Requirements and Test Frequencies for Soil and Aggregate Materials

Component	Required Test	Minimum Frequency	Sample Size[1]	Acceptance Criteria
Undercut Subgrade Performance Testing [3]	Visual Observation	As required	N/A	Final surface: firm, smooth, and uniform.
	Lift Depth Check	As required	N/A	6 to 8 in compacted lift.
	Visual Observation	As required	N/A	Compacted with dozer tracks, sheep foot, or smooth drum roller.
Prepared Turf Subgrade Performance Testing [3]	Visual Inspection: The prepared subgrade shall be visually inspected by the installer and the owner/engineer.	Continuous.	N/A	Visual inspection, and approved subgrade acceptance form. Final surface shall be firm, smooth, and uniform, and free from debris. Rutting in excess of 3 inches shall be repaired to the satisfaction of the installer and owner's CQA representative.
Pipe Annulus Aggregate – Washed River Gravel Prequalification Conformance Testing [2]	Sieve Analysis (ASTM C136)	1 per source & 1 per 5,000 yd^3	5-10 lb	Meet Specifications for KYTC No. 57 gravel 100% passing 1-1/2 in. sieve; 95%-100% passing 1 in. sieve; 25% -60% passing 1/2 in sieve; 0%-10% passing #4 sieve; 0-5% passing #8 sieve.
Pipe Annulus Aggregate – Washed River Gravel Prequalification Conformance Testing [2]	Insoluble Residue Carbonate Test (ASTM D3042)	1 per source & 1 per 20,000 CY	Varies	<5% loss, by weight
Pipe Annulus Aggregate – Washed River Gravel Performance Testing [3]	Visual Observation	As required	N/A	Pipe satisfactorily supported by aggregate bedding haunched to pipe springline prior to backfill with aggregate.
Sand Infill Prequalification Conformance Testing [2]	Sieve Analysis (ASTM C136)	1 per source & 1 per 175 yd^3	50 lb	Refer to acceptable gradation curve provided in Graph below.
	ASTM C 1252 / AASHTO T 304, Standard Test Methods for Uncompacted Void Content of Fine Aggregate Method A.	1 per source & 1 per 2,000 yd^3		≥ 40%
	ASTM C 128 / AASHTO T 84, Standard Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate.	1 per source & 1 per 2,000 yd^3		≥ 2.40
	Constant Head Permeability	1 per source & 1 per 5,000 yd^3	50 lb	≥ $4.1x10^{-3}$ cm/sec
Riprap Prequalification Conformance Testing [2]	Gradation Analysis (ASTM D5519)	1 per source per riprap gradation	N/A	Quarry Submittal on gradation must meet specifications for KYTC "Standard Specifications for Road and Bridge Construction" Section 703

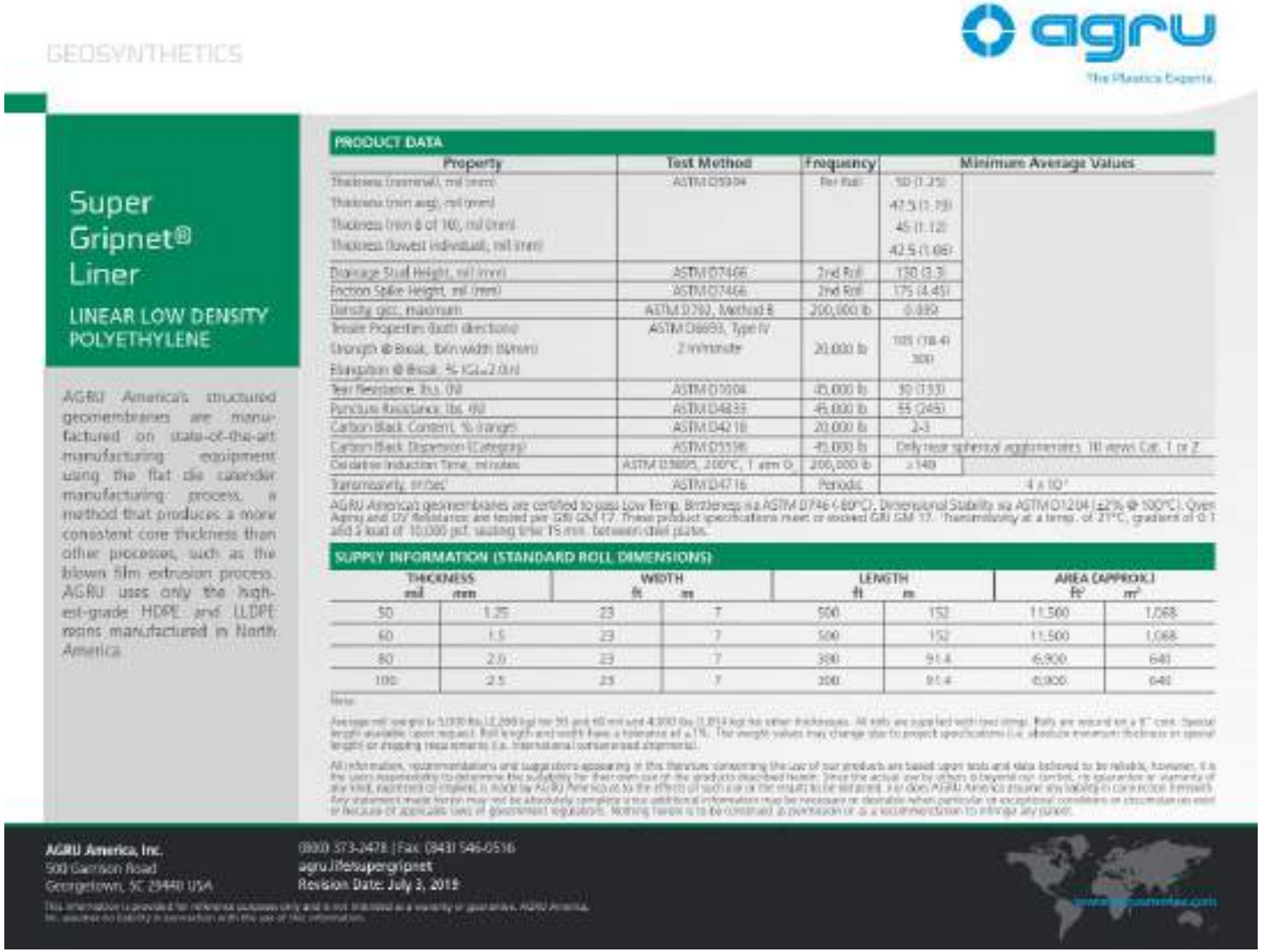
(1) In general, where the symbol "N/A" (not applicable) is used, the test is performed on in-place materials.
(2) Conformance testing is performed on borrow sources to ensure the minimum required values are met and the material remains consistent.
(3) Performance testing is performed on materials after placement is complete to ensure that the lift or layer meets design requirements.

Sand Infill Grain Size Distribution				
		3/8" (9.5 mm)	≤	100%
90%	≤	#4 (4.75 mm)	≤	100%
50%	≤	#8 (2.36 mm)	≤	85%
25%	≤	#16 (1.18 mm)	≤	65%
10%	≤	#30 (0.60 mm)	≤	45%
0	≤	#50 (0.30 mm)	≤	30%
0	≤	#100 (0.15 mm)	≤	10%
0	≤	#200 (0.075 mm)	≤	5%



ClosureTurf® Specified Infill Grain Size Distribution

Table 4. Required 50 Mil Textured LLDPE Geomembrane Properties – Manufacturing Quality Control



GEOSYNTHETICS

agru
The Plastics Experts.

Super Gripnet® Liner

LINEAR LOW DENSITY POLYETHYLENE

AGRU America's structured geomembranes are manufactured on state-of-the-art manufacturing equipment using the flat die calender manufacturing process, a method that produces a more consistent core thickness than other processes, such as the blown film extrusion process. AGRU uses only the highest-grade HDPE and LLDPE resins manufactured in North America.

PRODUCT DATA

Property	Test Method	Frequency	Minimum Average Values
Thickness (nominal), mil (mm)	ASTM D5994	Per Roll	50 (1.25)
Thickness (min avg), mil (mm)			47.5 (1.19)
Thickness (min 8 of 10), mil (mm)			45 (1.12)
Thickness (lowest individual), mil (mm)			42.5 (1.06)
Drainage Stud Height, mil (mm)	ASTM D7466	2nd Roll	130 (3.3)
Friction Spike Height, mil (mm)	ASTM D7466	2nd Roll	175 (4.45)
Density g/cc, maximum	ASTM D792, Method B	200,000 lb	0.939
Tensile Properties (both directions) Strength @ Break, lbs/in width (N/mm) Elongation @ Break, % (GL=2.0 in)	ASTM D6693, Type IV 2 in/minute	20,000 lb	105 (18.4) 300
Tear Resistance, lbs. (N)	ASTM D1004	45,000 lb	30 (133)
Puncture Resistance, lbs. (N)	ASTM D4833	45,000 lb	55 (245)
Carbon Black Content, % (range)	ASTM D4218	20,000 lb	2-3
Carbon Black Dispersion (Category)	ASTM D5596	45,000 lb	Only near spherical agglomerates, 10 views Cat. 1 or 2
Oxidative Induction Time, minutes	ASTM D3895, 200°C, 1 atm O2	200,000 lb	>140
Transmissivity, m²/sec	ASTM D4716	Periodic	4 x 10⁻⁷

AGRU America's geomembranes are certified to pass Low Temp. Brittleness via ASTM D746 (-60°C), Dimensional Stability via ASTM D1204 (±2% @ 100°C). Oven Aging and UV Resistance are tested per GRI GM 17. These product specifications meet or exceed GRI GM 17. Transmissivity at a temp. of 21°C, gradient of 0.1 and 5 load of 10,000 psf, seating time 15 min. between steel plates.

SUPPLY INFORMATION (STANDARD ROLL DIMENSIONS)

THICKNESS mil	THICKNESS mm	WIDTH ft	WIDTH m	LENGTH ft	LENGTH m	AREA (APPROX.) ft²	AREA (APPROX.) m²
50	1.25	23	7	500	152	11,500	1,068
60	1.5	23	7	500	152	11,500	1,068
80	2.0	23	7	300	91.4	6,900	640
100	2.5	23	7	300	91.4	6,900	640

Note:

Average roll weights: 5,000 lbs (2,268 kg) for 50 and 60 mil and 4,000 lbs (1,814 kg) for other thicknesses. All rolls are supplied with two strips. Rolls are wound on a 6" core. Special length available upon request. Roll length and width have a tolerance of ±1%. The weight values may change due to project specifications (i.e. absolute minimum thickness or special length or shipping requirements (i.e. international containerized shipments).

All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable, however, it is the user's responsibility to determine the suitability for their own use of the products described herein. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by AGRU America as to the effects of such use or the results to be obtained. AGRU America assumes no liability in connection therewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.

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Revision Date: July 3, 2019

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AECOM

ENGINEERED TURF COMPONENT (CT)

Product Data	Test Method	Values
Yarn Type	N/A	Polyethylene, Fibrillated
Yarn Color	N/A	Olive Green, Play Green, Tan
Yarn Weight (Total Product Weight)	ASTM D5261 (sample size, 1 yd²)	≥20 oz. / sq. yd. (≥ 32 oz. / sq. yd.)
Tensile Strength of Yarn	ASTM D2256	15 lbs. min.
CBR Puncture	ASTM D6241	1,500 lb. (MARV)
Tensile Product (MD/XD)	ASTM D4595	2,100 MD / 1,600 XD lb/ft (MARV)
Interface Friction between ClosureTurf CT and Super Gripnet®	ASTM D5321	35°, min. Peak
Engineered Turf Fiber UV Stability	ASTM G147	>60% retained tensile strength at 100 yrs. (projected)
Backing System UV Stability (Exposed)	ASTM G154 Modified Cycle 1., UVA340	110 lbs./ft. retained tensile strength at 6,500 hrs (projected)
Aerodynamic Evaluation	GTRI Wind Tunnel	120 mph with max. uplift of 0.12 lb/sf
Rainfall Induced Erosion	ASTM D6459	Infill Loss 0.1% at 6 in./hr. Rainfall
Steady State Hydraulic Overtopping (ClosureTurf® w/ HydroBinder®)	ASTM D7277/D7276	5 ft. overtopping resulting in 29 ft/s velocity and 8.8 psf shear stress for Manning's *n* value of 0.02
Full Scale Wave Overtopping Test Cumulative Volume (ClosureTurf® with HydroBinder®)	Colorado State University Wave Simulator	165,000 ft³/ft
Full Scale Wave Overtopping Test Discharge (ClosureTurf® with HydroBinder®)	Colorado State University Wave Simulator	4.0 ft³/s/ft
HydroBinder® Infill Mix	ASTM C387 / ASTM C109	3/4 in. infill 5,000 psi (min. at 28 days)

SUPPLY INFORMATION (Standard Roll Dimensions)

	Thickness		Width		Length		Area (approx.)		Weight (avg.)	
	mil	mm	ft.	m	ft.	m	ft²	m²	lbs	kg
Super Gripnet®	50	1.25	23	7	500	152	11,500	1,068	~5,000	~2,268
Turf Component	N/A	N/A	15	4.6	300	91.44	4,500	418	~1,000	~454

ClosureTurf®/and HydroTurf®/ products (US Patent No. 7,682,105, 8,585,322, 9,163,375, and 9,199,287; Canadian Patent No. 2,663,170; and other Patents Pending) and trademarks are the property of Watershed Geosynthetics LLC. All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.

(1) Minimum of ten readings must be equal to or greater than the specified thickness.

(2) Or as required to meet the interface shear requirements for the project. See Section 4 of the CQA Plan. Minimum of ten readings must average specified height. Eight of the readings must be ≥ 12 mils, and the lowest reading must be ≥ 8 mils. No visible variation across the width of the roll will be allowed.

(3) Carbon dispersion for 10 different views: 9 of 10 views will be Category 1 or 2 with one view allowed in Category 3.

(4) Manufacturer's Quality Control testing will be performed at a frequency of one test per every 50,000 ft^2 or one test per resin lot, whichever is more frequent. Thickness testing will be performed on each roll.

(5) Asperity Height measurements will be performed on every roll, alternating between measurements for top of sheet and bottom of sheet.

Table 5. Required 50-Mil Textured LLDPE Seam Properties

PARAMETER	TEST METHOD	TEST FREQUENCY		ACCEPTANCE CRITERIA FOR 50-MIL LLDPE (2)
		QC Testing	QA Testing	
Seam Shear Strength (PPI)	ASTM D 6392	1 per welder per machine prior to each seaming period	1 every 1000 feet of seam length	75 ppi and all tests film tear bond
Seam Peel Strength (PPI)	ASTM D 6392	1 per welder per machine prior to each seaming period	1 every 1000 feet of seam length	63 (wedge) and 57 (extrusion) ppi and all tests film tear bond
Air Pressure	GRI GM6	N/A	All fusion welds	Pressure to 30 to 35 psi for 5 minutes, ≤ 3 psi loss, note pres-sure drop when far seam is cut
Vacuum Box Testing	ASTM D 5641	N/A	All extrusion welds	Examine weld for 10 seconds through window of vacuum box at min. 3 psi

(1) For Shear Testing of both fusion and extrusion welds, the strength of 4 out of 5 specimens should meet or exceed the given value. The 5th can be as low as 80% of the tested value. Required laboratory seam testing will be performed by a geosynthetics testing laboratory at a frequency of one test per 500 linear feet of seam constructed for both extrusion and fusion welding equipment unless otherwise directed by the Owner's Representative.

(2) For Peel Testing of fusion welds, the strength of 4 out of 5 specimens should meet or exceed the given value. The fifth can be as low as 80% of the tested value. All specimens will fail due to non-film tear bond or with greater than 25% incursion of the weld (peel).

(3) For Peel Testing of extrusion welds, 1 out of 5 specimens may either achieve <52 lb/in. but be ≥41.6 lb/in. or exhibit greater than 25% incursion of the weld (peel). The remaining four specimens must meet the specified strength and have a maximum of 25% incursion of the weld (peel).

(4) For Air Channel Testing of fusion welds, specimen must maintain pressure for 5 minutes with no less than 3 psi pressure drop. Note pressure drop when far seam is cut.

(5) For Vacuum Box Testing of extrusion welds, examine weld for 10 seconds at the required test pressure through the vacuum box window for evidence of leaks.

Table 6. Required Properties For Nonwoven Geotextiles – Manufacturing Quality Control

Material Property	Value[(1)]	Units	Test Method	Manufacturer's Frequency
10 oz/sy Nonwoven Geotextile				
Mass/Area (min. avg.)	10	oz/sy	ASTM D 5261	100,000 SF
Permittivity	0.94	sec^{-1}	ASTM D 4491	750,000 SF
Grab Tensile	260	lb	ASTM D 4632	100,000 SF
Grab Elongation	50	percent	ASTM D 4632	100,000 SF
CBR Puncture Resistance	725	lb	ASTM D 6241	100,000 SF
Trapezoidal Tear	100	lb	ASTM D 4533	100,000 SF
Apparent Opening Size	100	U.S. Sieve	ASTM D 4751	750,000 SF
8 oz/sy Nonwoven Geotextile				
Mass/Area (min. avg.)	8	oz/sy	ASTM D 5261	100,000 SF
Permittivity	1.26	sec^{-1}	ASTM D 4491	750,000 SF
Grab Tensile	220	lb	ASTM D 4632	100,000 SF
Grab Elongation	50	percent	ASTM D 4632	100,000 SF
CBR Puncture Resistance	575	lb	ASTM D 6241	100,000 SF
Trapezoidal Tear	90	lb	ASTM D 4533	100,000 SF
Apparent Opening Size	80	U.S. Sieve	ASTM D 4751	750,000 SF
6 oz/sy Nonwoven Geotextile				
Mass/Area (min. avg.)	6	oz/sy	ASTM D 5261	100,000 SF
Permittivity	1.50	sec^{-1}	ASTM D 4491	750,000 SF
Grab Tensile	160	lb	ASTM D 4632	100,000 SF
Grab Elongation	50	percent	ASTM D 4632	100,000 SF
CBR Puncture Resistance	435	lb	ASTM D 6241	100,000 SF
Trapezoidal Tear	65	lb	ASTM D 4533	100,000 SF
Apparent Opening Size	70	U.S. Sieve	ASTM D 4751	750,000 SF

Notes:

(1) Minimum average roll values

Table 7. Required Properties For Nonwoven Geotextiles – Conformance Testing

Material Property	Value[(1)]	Units	Test Method	Frequency
10 oz/sy Nonwoven Geotextile				
Mass/Area (min. avg.)	10	oz/sy	ASTM D 5261	250,000 SF
Permittivity	0.94	sec^{-1}	ASTM D 4491	250,000 SF
Grab Tensile	260	lb	ASTM D 4632	250,000 SF
Grab Elongation	50	percent	ASTM D 4632	250,000 SF
CBR Puncture Resistance	725	lb	ASTM D 6241	250,000 SF
Trapezoidal Tear	100	lb	ASTM D 4533	250,000 SF
Apparent Opening Size	100	U.S. Sieve	ASTM D 4751	250,000 SF
8 oz/sy Nonwoven Geotextile				
Mass/Area (min. avg.)	8	oz/sy	ASTM D 5261	250,000 SF
Permittivity	1.26	sec^{-1}	ASTM D 4491	250,000 SF
Grab Tensile	220	lb	ASTM D 4632	250,000 SF
Grab Elongation	50	percent	ASTM D 4632	250,000 SF
CBR Puncture Resistance	575	lb	ASTM D 6241	250,000 SF
Trapezoidal Tear	90	lb	ASTM D 4533	250,000 SF
Apparent Opening Size	80	U.S. Sieve	ASTM D 4751	250,000 SF
6 oz/sy Nonwoven Geotextile				
Mass/Area (min. avg.)	6	oz/sy	ASTM D 5261	250,000 SF
Permittivity	1.50	sec^{-1}	ASTM D 4491	250,000 SF
Grab Tensile	160	lb	ASTM D 4632	250,000 SF
Grab Elongation	50	percent	ASTM D 4632	250,000 SF
CBR Puncture Resistance	435	lb	ASTM D 6241	250,000 SF
Trapezoidal Tear	65	lb	ASTM D 4533	250,000 SF
Apparent Opening Size	70	U.S. Sieve	ASTM D 4751	250,000 SF

Notes:

(1) Minimum average roll values

Table 8. Calibration Of Testing Equipment

Equipment	Required Test	Minimum Frequency	Acceptance Criteria
Nuclear Density Gauge	Radioactive Source Wipe Testing and Systems Electronics Check	Annually by Manufacturer or Specialty Testing firm qualified to inspect and calibrate nuclear source equipment	Certificate of Calibration and Safety by Testing Firm
Tensiometer	Tensile strength calibration to standard	Prior to arrival to project site. Tensiometer to be field verified at the discretion of the Engineer	+/- 3 psi
Air Pressure Gauges	Pressure in psi compared to standard	Prior to arrival to project site or documentation that the product is new	+/- 1 psi
Other	As Determined by the Engineer	As Recommended by the Manufacturer, or Required by State Auditor of Measurement Devices	As Guaranteed by the Manufacturer

Table 9. Minimum Requirements for Cast-In-Place Concrete

Material	Requirements	Minimum Frequency
Formwork	Supplier certification and all other available documentation to demonstrate that the supplied material meets project requirements.	1 / supplier / product
Concrete Materials	Supplier certification and all other available documentation to demonstrate that the supplied material meets project requirements.	1 / supplier / product
Design Mix	Supplier certification and all other available documentation to demonstrate that the supplied material meets project requirements.	1 / supplier / product
Steel Reinforcing Bar	Shop Drawings and supplier certification and all other available documentation to demonstrate that the supplied material meets project requirements.	1 / supplier / product
Mill Tests	Three copies of each test report; bars shall be properly tagged so as to permit identification of the heat number shown on the mill test report for any and all steel delivered to the Project Site	1 / supplier / product / 15 tons (or less) delivered
Ready-Mix Delivery Slips	Contractor shall keep a record of time and place of each batch of concrete, together with ready-mix delivery slips (batch tickets) certifying contents and proportions of each truck load delivered to the site. Records shall be available for inspection by the CQC Manager upon request.	Available upon Request, and submitted at completion of the work

PARAMETER	TEST METHOD	TEST FREQUENCY		ACCEPTANCE CRITERIA FOR 50-MIL LLDPE (2)
		QC Testing	QA Testing	
Thickness (mils)	ASTM D-5994	Each roll	1 per 100,000 sf	47.5 minimum average 42.5 minimum individual 45 minimum for at least 8 of 10 individual
Drainage Stud/Asperity Height (mils)	ASTM D7466	Every 2nd Roll (3)	1 per 100,000 sf	130 minimum average
Density (g/cm^3)	ASTM D1505/ D792	1 per 200,000 lb.	1 per 100,000 sf	0.939 minimum
Strength at Break (ppi) Elongation at Break (%)	ASTM D 6693 ASTM D 6693	1 per 20,000 lb 1 per 20,000 lb	1 per 100,000 sf 1 per 100,000 sf	≥ 105 ≥ 250%
Carbon Black Content	ASTM D 4218	1 per 45,000 lb.	1 per 100,000 sf	2.0% to 3.0%
Carbon Black Dispersion	ASTM D 5596	1 per 45,000 lb.	1 per 100,000 sf	9 in Category 1 or 2 and 1 in Category 3
Oxidative Induction Time (OIT)	ASTM D3895 or D5885	1 per 200,000 lb.	none	100 min. (ASTM D3895) or 400 min. (ASTM D5885)
Oven Aging at 85°C	ASTM D5721	Per each formulation	none	35% (standard) or 60% (high pressure)
UV Resistance	ASTM D5885	Per each formulation	none	35%
Pre-Construction Interface Testing	ASTM D 6243-98	Twice initially, once per construction event thereafter	Not required	Per Minimum Required Sheer Strength for Veneer Stability(3,4)See Attachment Figures
Transmissivity (8) (@ 240 psf normal load, gradient = 0.33)	ASTM D 4716	See Note 7	1 per 1,000,000 sq. ft.	5 x 10^{-4} m^2/sec

1) Acceptance criteria from GRI GM17 and GRI GM19 unless otherwise noted.
2) Alternate the measurement side for double sided textured sheet.
3) Tests will be performed on the entire liner system cross-section and over the range of normal stresses planned for application during shearing.
4) Interface Shear to be performed by the Owner for approval for use of the Contractor's proposed product. Interface Shear testing will be performed on the sample with the lowest asperity height from the QC testing, andthe lowest asperity height from the QA testing.
5) QC Testing to be provided by the manufacturer at the frequency noted.
6) QA Testing to be provided by the Owner.
7) At the manufacturer's recommended frequency unless noted otherwise.
8) Transmissivity shall be measured under the same boundary conditions (soil/geosynthetics) as those to beconstructed.

FIGURES

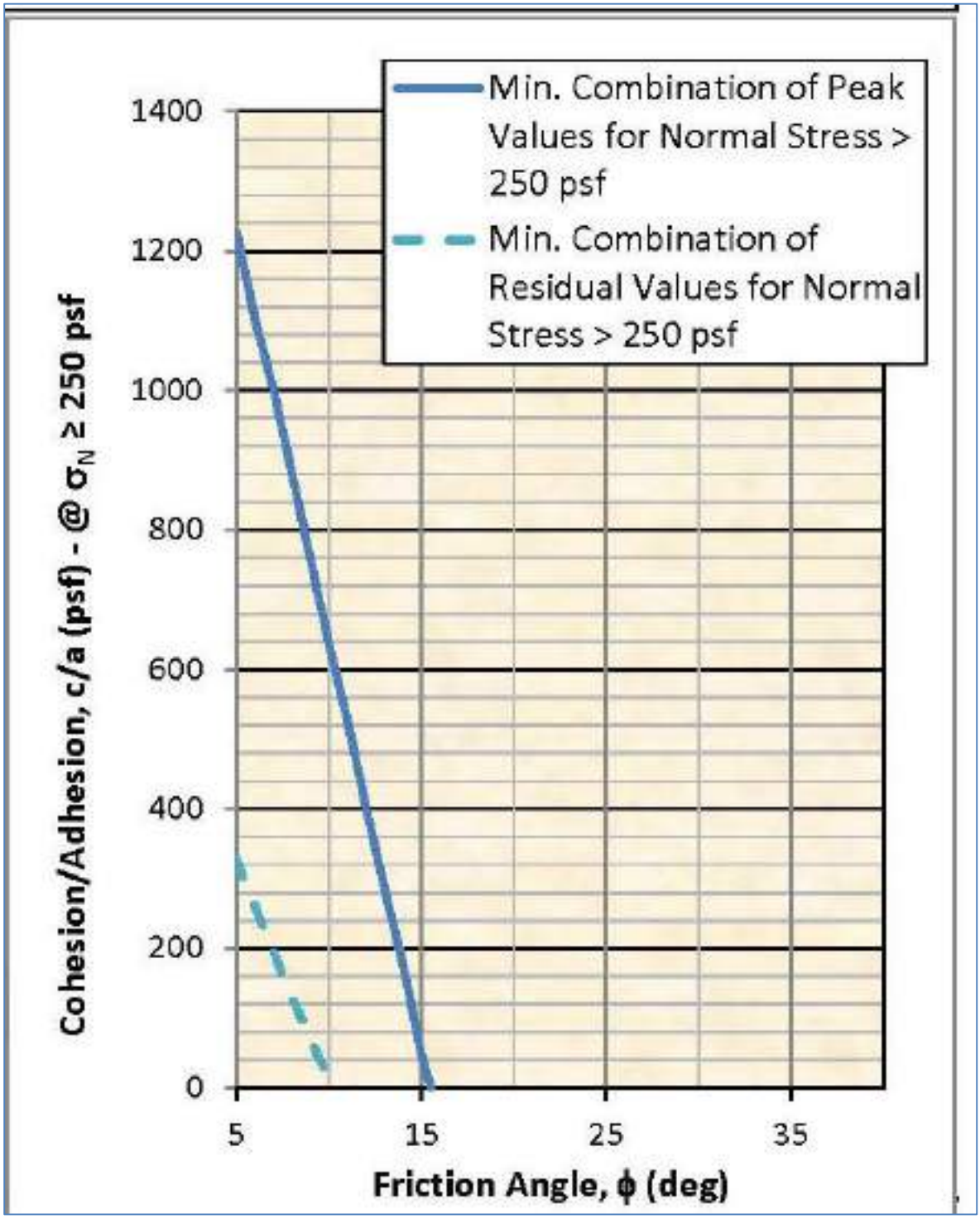

FIGURE 1: Minimum Acceptable Combinations of c and Φ
(BASELINER FLOOR SYSTEM - slopes <10% and loads ≥ 250 psf)

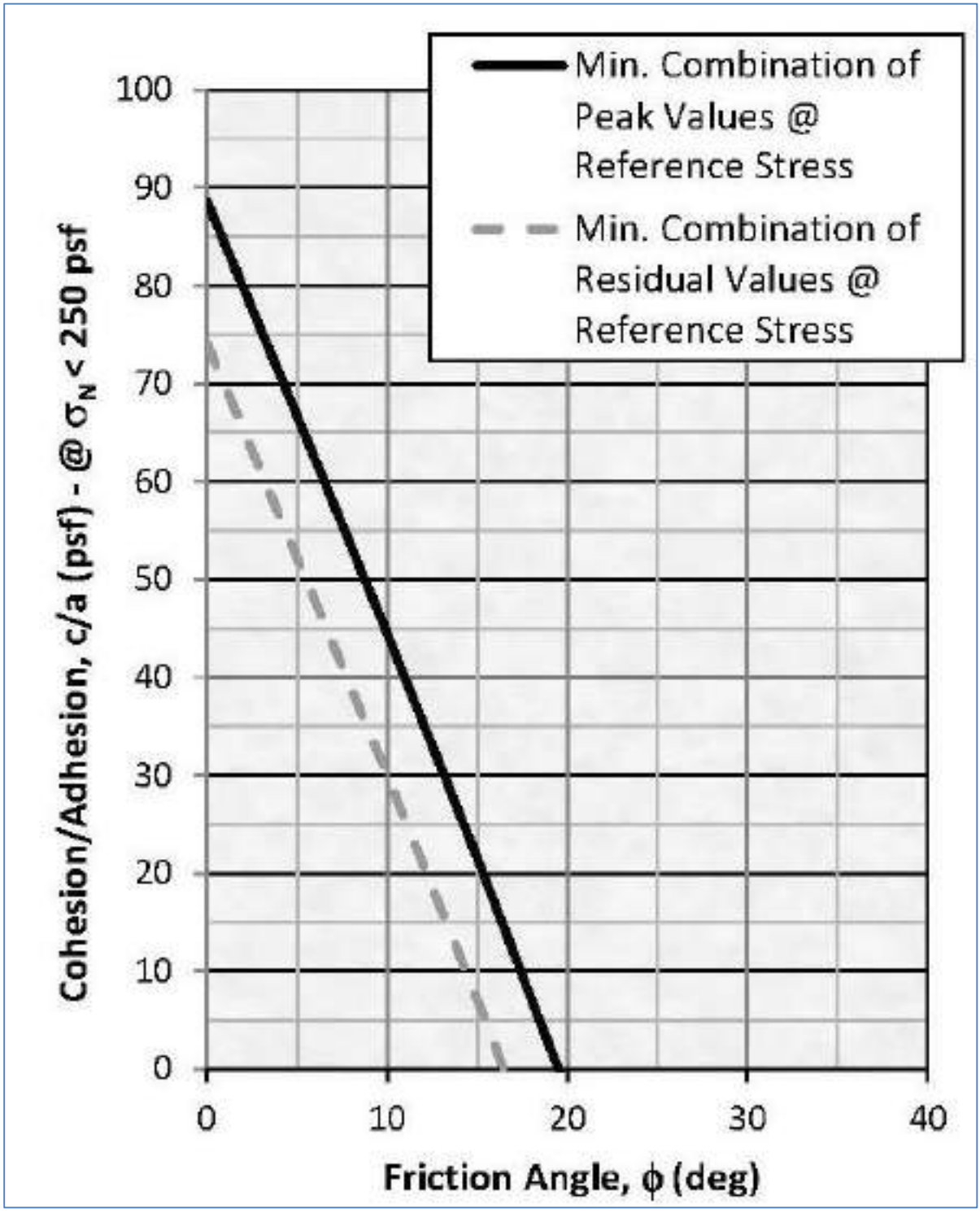

FIGURE 2: Minimum Acceptable Combinations of c and Φ
(BASELINER FLOOR SYSTEM - <10% slopes ≤ 33% and loads < 250 psf)

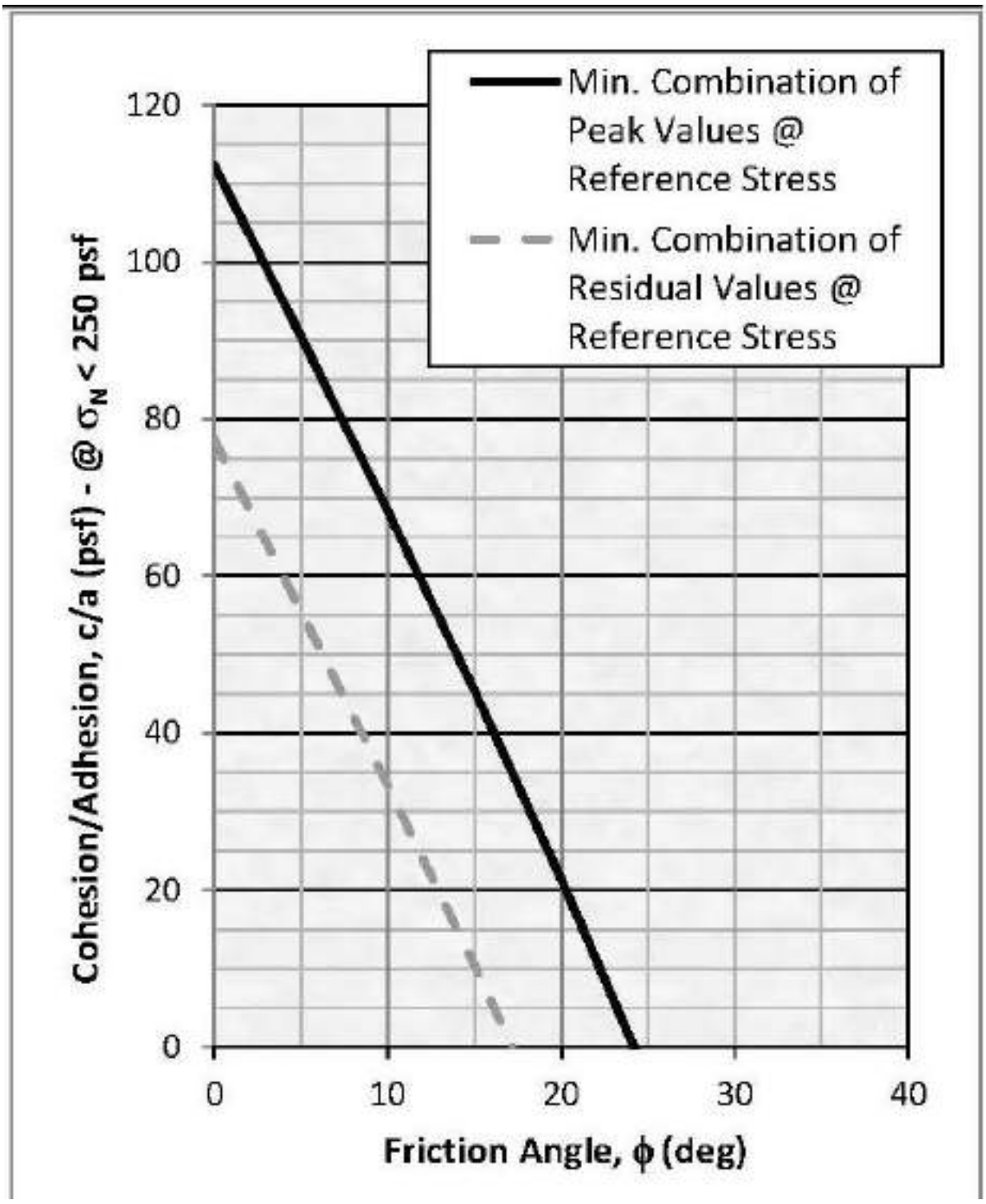

FIGURE 3: Minimum Acceptable Combinations of c and Φ
(FINAL COVER SYSTEM - slopes ≤ 33% and loads < 250 psf)

APPENDIX A

Construction Documentation Forms

AECOM

CONCRETE TESTING LOG

Project: _____
Contractor: _____
Owner: _____
URS Job No. _____

Specified Slump: _____
Specified Entrained Air: _____
Specified Compressive Strength: _____

Set Number	Sample Date	Ticket Number	Entrained Air (%)	Slump (inches)	Compressive Strength (psi)				Comments
					7 Day	28 Day	28 Day	56 Day	

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AECOM

Destructive Test Log

Project: _____ **Product:** _____
Contractor: _____ _____
Owner: _____ _____
URS Job No. _____ _____

Date Welded	Date Pulled	Sample ID #	Seam Number	Mach. Number	Seamer Initials	Test Mode	Test Results in LBS/IN Sample Number 1	2	3	4	5	Pass Fail
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
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						PEEL						
						SHEAR						

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AECOM

Non Destructive Testing Log

Project: _____ **Product:** _____
Contractor: _____ _____
Owner: _____ _____
URS Job No. _____ _____

Date	Seam Segment	Tester Initials	Pressure PSI Start	Pressure PSI End	Test Time Start	Test Time End	Pass Fail	V-Box Pass	Comments

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AECOM

Panel Placement

Project: _____ **Product:** _____
Contractor: _____
Owner: _____
URS Job No. _____

Date	Panel Number	Roll Number	Panel Length	Panel Width	Square Footage	Comments
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
					0.0	
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					0.0	
					0.0	
					0.0	
					0.0	

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Panel Seaming Form

Project: _____ **Product:** _____
Contractor: _____ _____
Owner: _____ _____
URS Job No. _____ _____

Date	Seam Number	Time	Seamer Initials	Machine Number	Seam Length (ft)	Comments

AECOM

Pipe Test Log

Project:

Contractor:

Owner:

URS Job No.

Date	Test Section	Length (feet)	Pipe Dia (inches)	Min Test Time (sec.)	Start Time	Start Press (psi)	End Time	End Press (psi)	Test length (sec)	Press Drop (psi)	Pass / Fail

time for 1 psi pressure drop: T = 0.085 DK/ 0.0015
K = 0.000419 DL, but not < 1
D = Diameter in inches
L = Length in feet

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REPAIR LOG

Project: _____ **Product:** _____

Contractor: _____ _____

Owner: _____ _____

URS Job No. _____ _____

Repair Number	Repair Date	Time of Repair	Location of Repair	Size of Repair	Repair Tech	Machine Number	V-Box Test	COMMENTS
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
13								
14								
23								
24								
25								
26								
27								
28								
29								
30								

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Trial Weld Log

Project: _____ **Product:** _____
Contractor: _____ _____
Owner: _____ _____
URS Job No. _____ _____

Date	Time	Mach. Number	Seamer Initials	Fusion Welder Wedge Temp	Fusion Welder Speed Ft/Min	Test Mode	Test Results in LBS/IN Sample Number 1	2	3	4	5	Pass Fail
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						

Date	Time	Mach. Number	Seamer Initials	Extrusion Welder Barrel Temp	Extrusion Welder Preheat Setting	Test Mode	Test Results in LBS/IN Sample Number 1	2	3	4	5	Pass Fail
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						
						PEEL						
						SHEAR						

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_____

APPENDIX B

ClosureTurf

This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 01 42 00

ClosureTurf® QUALITY REQUIREMENTS REFERENCES AND DEFINITIONS

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:

References and Definitions related to the ClosureTurf® product.

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

1.03 REFERENCES

A. Latest Version of American Society for Testing and Materials (ASTM) standards:

ASTM D 792 – Standard Test Method for Density and Specific Gravity (Relative Density) of Plastics by Displacement

ASTM D 1004 - Standard Test Method for Tear Resistance (Graves Tear) of Plastic Film and Sheeting

ASTM D 1204 - Standard Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature

ASTM D 1238 - Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer

ASTM D 1505 - Standard Test Method for Density of Plastics by Density-Gradient Technique

ASTM D 1603 - Standard Test Method for Carbon Black Content in Olefin Plastics

ASTM D 1693 - Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics

ASTM D 1907 - Standard Test Method for Linear Density of Yarn (Yarn Number) by the Skein Method

ASTM D 2256 - Standard Test Method for Tensile Properties of Yarns by the Single-Strand Method

ASTM D 3218 - Standard Specification for Polyolefin Monofilaments

ASTM D 3895 – Standard Test Method for Oxidative-Induction Time of Polyolefins by Differential Scanning Calorimetry.

ASTM D 4218 - Standard Test Method for Determination of Carbon Black Content in Polyethylene Compounds By the Muffle-Furnace Technique.

ASTM D 4833 - Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products

ASTM D 5261 - Standard Test Method for Measuring Mass per Unit Area of Geotextiles

ASTM D 5321 - Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method

ASTM D 5323 – Standard Test Method for Determination of 2% Secant Modulus for Polyethylene Geomembranes

ASTM D 5397 – Standard Test Method for Evaluation of Stress Crack Resistance of Polyolefin Geomembranes Using Notched Constant Tensile Load Test

ASTM D 5596 - Standard Test Method for Microscopic Evaluation of the Dispersion of Carbon Black in Polyolefin Geosynthetics

ASTM D 5617 – Standard Test Method for Multi-Axial Tension Test for Geosynthetics

ASTM D 5721 – Standard Practice for Air-Oven Aging of Polyolefin Geomembranes

ASTM D 5885 – Standard Test Method for Oxidative Induction Time of Polyolefin Geosynthetics by High-Pressure Differential Scanning Calorimetry

ASTM D 5994 – Standard Test Method for Measuring Core Thickness of Textured Geomembrane

ASTM D 6392 – Standard Test Method for Determining the Integrity of Nonreinforced Geomembrane Seams Produced Using Thermo-Fusion Methods

ASTM D 6693 – Standard Test Method for Determining Tensile Properties of Nonreinforced Polyethylene and Nonreinforced Flexible Polypropylene Geomembranes

ASTM D 6913 - Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis

ASTM D 7007 – Standard Practices for Electrical Methods for Locating Leaks in Geomembranes Covered with Water or Earth Materials

ASTM C 150 - Standard Specification for Portland Cement

ASTM C 387 - Standard Specification for Packaged, Dry, Combined Materials for Concrete and High Strength Mortar

ASTM D 1335 - Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings

ASTM D 1577 - Standard Test Methods for Linear Density of Textile Fibers

ASTM D 4595 - Standard Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method

ASTM D 5793 - Standard Test Method for Binding Sites per Unit Length or Width of Pile Yarn Floor Coverings

ASTM D 5823 - Standard Test Method for Tuft Height of Pile Floor Coverings

ASTM D 5848 - Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings

ASTM D 6241 - Standard Test Method for Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe

American Concrete Institute (ACI) - 306R-10 Guide to Cold Weather Concreting

B. Latest version of Geosynthetics Research Institute (GRI) testing methods:

GRI-GM11– Accelerated Weathering of Geomembranes Using a Fluorescent UVA Device.

GRI-GM12 –Measurement of the Asperity Height of Textured Geomembranes Using a Depth Gage

GRI-GM17 – Test Methods, Test Properties, and Testing Frequency and for Linear Low Density Polyethylene (LLDPE) Smooth and Textured Geomembranes

GRI-GM19 - Seam Strength and Related Properties of Thermally Bonded Polyolefin Geomembranes

1.04 DEFINITIONS

A. Definitions as related to the ClosureTurf® Product and the Construction Quality Assurance (CQA) Plan definitions for the product. Whenever the terms listed below are used, the intent and meaning will be interpreted as indicated.

Acclimation

Physiological/thermal adjustment. Required in the geomembrane deployment process.

ArmorFill®

Armor-Fill® Liquid Emulsion is a proprietary Polymer Emulsion product used to bind the ASTM-C33 sand infill component of the ClosureTurf® System.

ASTM

ASTM International, known until 2001 as the American Society for Testing and Materials, is an international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services.

ClosureTurf®

A patented 4 component system consisting of a Watershed Geosynthetics specific Gas Management System (if applicable), a Structured Geomembrane (LLDPE or HDPE), an Engineered Turf, and a specified grade of sand infill (or alternatively a HydroBinder® infill material).

Construction Quality Assurance (CQA)

Construction Quality Assurance includes but is not limited to observations and documentation of materials and workmanship necessary to show that a particular project is being constructed according to site-specific specifications and within regulatory guidelines.

Construction Quality Assurance (CQA) Personnel

Construction Quality Assurance (CQA) personnel are representatives of the Professional of Record (POR) who work under direct supervision of the POR. The CQA personnel are responsible for quality assurance monitoring, applicable conformance sampling and performing onsite tests and observations.

Construction Quality Assurance Professional of Record (POR)

The POR is an authorized representative of the Owner and has overall responsibility for CQA efforts and to confirm the project was constructed in general accordance with site-specific specifications approved by the regulatory authority and contract documents. The POR must be licensed as a Professional Engineer in the State the project is located and experienced in geosynthetics.

Construction Quality Control (CQC) Personnel

CQC Personnel are representatives of the Geosynthetics Installer who work under direct supervision of the Geosynthetics Installer. The Geosynthetics Installers' CQC Personnel are responsible for construction quality control, applicable conformance sampling and performing onsite tests and observations.

Contract Documents

Written, printed, or electronic matter that provides information or evidence that serves as an official record and are issued by the owner or operator. The documents include bidding requirements that include but are not limited to, contract forms, contract conditions, contract specifications, CQA plan, contract drawings, addenda, and contract modifications.

Contract Specifications

The requirements which are to be followed in the construction of the ClosureTurf® System. The standard specifications, supplemental specifications, special provisions, and all written or printed agreements and instructions that pertain to the method and manner of performing the work.

Contractor

One that agrees to furnish materials or perform services at a specified price, especially for construction work.

Design Engineer

An individual licensed to practice as a Professional Engineer or a Professional Service Firm that is responsible for the preparation of the project construction drawings and specifications.

Earthwork

A general engineering term relating to the relocation and utilization of soil during the process of construction.

Engineered Turf

A component of the ClosureTurf® System. A synthetic structured material consisting of one or more geotextiles tufted with polyethylene yarns that resemble grass blades.

Final Cover System Evaluation Report (FCSER)

Upon substantial completion of closure activities, the POR is responsible for the documentation of construction activities relating to the project, and any other inspections or verifications required by the regulatory authority. The FCSER will be signed and stamped by the POR and include documentation necessary for certification closure.

Fish Mouth

A semi-conical opening of the seam that is formed by an edge wrinkle in one sheet of the geomembrane component.

Geomembrane

A synthetic lining material that is a component of the ClosureTurf® System. Used as the primary barrier to infiltration and exfiltration of covered materials.

GSI

Geosynthetic Institute

475 Kedron Avenue

Folsom, PA 19033-1208 USA

TEL (610) 522-8440

FAX (610) 522-8441

HydroTurf®

A patented 3 component system consisting of a Structured Geomembrane Liner, a specialized Engineered Turf, and HydroBinder® infill material.

HydroBinder®

A proprietary pozzolanic infill utilized where higher surface water velocities may occur as well as in anchor trenches where specified.

Geosynthetics Contractor / Installer

The entity responsible for geosynthetic installation.

HDPE

High density polyethylene is a polyolefin material used to produce geomembranes.

Independent Testing Laboratory

An organization, person, or company that tests products and materials, etc. according to agreed requirements. The entity shall be independent of ownership or control by the Owner or any party to the construction of the final cover or the manufacturer of the final cover products used. The entity shall also have proper legal authority where required to issue opinions and document the results of tests requested by the Owner.

Installation Supervisor

The person on-site who works for the Geosynthetics Installer and is in charge of the Geosynthetics Personnel and following the site specifications for the installation of the geosynthetics.

LLDPE

Linear low density polyethylene is a polyolefin material used to produce geomembranes.

Manufacturing Quality Control (MQC)

A planned system of inspection and verification to ensure the quality of the final product.

Nonconformance

A deficiency in characteristics, documentation, or procedures that render the quality of an item or activity unacceptable or indeterminate. Examples of non-conformances include, but are not limited to, physical defects, test failures, and inadequate documentation.

Operator

The entity in control and responsible for the facility.

Owner

The entity that owns facility and land.

Owner's or Operators Representative

An official representative of the Owner or Operator responsible for planning, organizing, and controlling construction activities.

Panel

A general reference to a unit area of either the Structured Geomembrane (LLDPE or HDPE), or the Engineered Turf component of the ClosureTurf® System.

Quality Assurance

A planned and systematic pattern of procedures and documentation to ensure that items of work or services meet the requirements of the contract documents.

Quality Control

These actions provide a means to measure and regulate the characteristics of an

item or service to comply with the requirements of the contract documents.

Relief Valve

A mechanical device used specifically to relieve gas buildup pressure underneath the ClosureTurf® system.

Representative Sample

(With respect to geomembrane destructive testing) - A random specimen of either the Structured Geomembrane (LLDPE or HDPE) or the Engineered Turf component consisting of 1 or more cut pieces (commonly referred to as coupons) from the same rectangular portion of material, oriented along a seam that is removed for field or laboratory testing purposes.

Ripple

Smaller in nature than a wrinkle. A result of thermal/or manufacturing that cannot be folded over.

Snapping

A manual method to an open ended seam to remove tenting as a result of the welding of the geomembrane seams.

Spike

A systematic design for interface friction located on the bottom of the Super Gripnet®.

Specimen

(With respect to geomembrane destructive testing) - A specimen is the individual test strip (sometimes called coupon) from a sample location. A sample location can consist of many specimens.

Studs

A systematic design for drainage located on the top side of the Super Gripnet®.

Surficial Collection Foot

A manufactured device utilized specifically for collection of gas beneath the Super Gripnet®.

Surficial Strip

A strip of Super Gripnet® used for gas conveyance below the ClosureTurf® system.

Tenting

A vertical ridge that is caused by wedge welding geomembrane.

Wrinkle

A portion of the geomembrane that does not lay relatively flat and is not a result of subgrade irregularity and which can be folded over.

PART 2: PRODUCTS:

Not Used.

PART 3: EXECUTION:

Not Used.

END OF SECTION

This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 01 60 00

ClosureTurf® Super Gripnet® PRODUCT SPECIFICATION

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:

Product specifications for ClosureTurf® utilizing the SuperGripnet geomembrane component.

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

1.03 REFERENCES

A. See Section 01 42 00 – References and Definitions

PART 2: PRODUCTS:

2.01 MANUFACTURERS

A. ClosureTurf® is a patented system and is the intellectual property of Watershed Geosynthetics, LLC.

2.02 DESCRIPTION

A. ClosureTurf® is a 4 component system consisting of a Structured Geomembrane, an Engineered Turf, a Specified Sand or HydroBinder® Infill, and a Gas Pressure Relief System (if applicable).

1. Structured Geomembrane – See ClosureTurf w/ Super Gripnet® Product Data Sheet.
2. Engineered Turf - See ClosureTurf w/ Super Gripnet Product Data Sheet
3. Specified Infill – See Section 31 05 16
    a. Where required, the alternate to the specified sand infill component is the HydroBinder® infill (See Section 03 49 01).
4. Gas Pressure Relief System (if applicable):
    a. Minimum one pressure relief valve per acre or the quantity specified by the Engineer based on landfill gas generation rate, whichever is more. (See DRAWINGS).

PART 3: EXECUTION:

Not Used.

END OF SECTION

This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® product (US Patent No. 7,682,105, 8,585,322, 9,163,375 and 9,199, 287*; Canadian Patent No. 2,663,170; and other Patents Pending) and trademark are the property of Watershed Geosynthetics LLC. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.*

SECTION 01 73 19

ClosureTurf® INSTALLATION

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:

Specifications for the Installation of the ClosureTurf® System.

B. Products Installed but not Furnished under this Section.

1. ClosureTurf® System.

a. Include Sand Infill Component Installation.

b. Include Alternate HydroBinder® Infill Installation.

c. Include Alternate ArmorFill® Infill Installation

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

1.03 REFERENCES

A. See Section 01 42 00 - References and Definitions

1.04 SUBMITTALS

A. MANUFACTURER:

1. Pre-Production Manufacturer's Quality Control (MQC) Data - Geomembrane Component:

    a. Submit to the OWNER'S REPRESENTATIVE prior to ordering of geomembrane component.

1.) Certificate of Compliance that shows proposed material for this project will meet the project specifications.

a.) Indicate tentative product order date and manufacturer location.

2.) Provide representative manufacturer Product Data sheets.

3.) Provide four (4) representative project product samples.

4.) Provide manufacturer's quality control program, including test procedures and frequencies for this product.

2. Pre-Shipment Manufacturer Quality Control (MQC) Data – Geomembrane Component:

    a. Submit to the OWNER'S REPRESENTATIVE prior to shipment of geomembrane component:

        1.) A copy of the MQC results.

2.) Statement that MQC testing has been done in accordance with manufacturer's quality control program.

3.) Certificate of Compliance stating:

a.) Production dates and origin of resin.

b.) Reclaimed resin does not exceed 10 percent by weight.

c.) Any remaining MQC certifications required by the CONTRACT.

4.) MQC Certifications will include:

a.) Geomembrane roll numbers and identification;

b.) Sampling procedures; and

c.) Results of MQC tests, and the test methods used.

3. Conformance Testing - Geomembrane Component:

a. Sampling required at Manufacturer's Plant prior to shipment:

1.) OWNER'S REPRENTATIVE will collect samples at the specified interval and sizes listed below:

a.) OWNER'S REPRESENTATIVE may also have a 3rd party collect the samples and have them shipped to an INDEPENDENT TESTING LABORATORY for testing.

2.) Take samples across entire roll width.

3.) Sample size: 15 inches x roll width.

a.) Indicate machine direction.

b.) indicate roll identification number.

c.) assign a unique conformance test number to the sample.

d.) mark sample with date listed above.

4.) Conformance samples:

a.) Obtain for each resin lot; and

b.) Each 100,000 sq. ft. of geomembrane.

5.) Forward samples to the Independent Testing Lab for the following tests as they relate to Section 01 60 00 - ClosureTurf® PRODUCT SPECIFICATION – Article 2.03:

a.) Density (ASTM D 792, Method B)

b.) Carbon black content (ASTM D 4218)

c.) Carbon black dispersion (ASTM D 5596)

d.) Thickness (ASTM D 5994)

e.) Tensile properties (ASTM D 6693/Type IV Specimen)

4. Limitations:

   a. No material will be delivered to the site until Independent Testing Lab results show conformance with the products specifications.
   b. The DESIGN ENGINEER will inform the INDEPENDENT TESTING LABORATORY in writing if additional test procedures are required.

5. MQC Testing – Engineered Turf Component:

   a. Provide inspection records of the tufting procedures for every 300,000 sq.ft. of Engineered Turf Include;
   b. Inspection records that indicate the following properties as they relate to Section 01 60 00 - ClosureTurf® Product Specification including;

      1.) Tufting Gauge;

2.) Pile height;

3.) Roll length and roll numbers;

4.) Total product weight

5.) CBR Puncture ASTM D6241

6.) Tensile Strength Product (lbs./ft.) (MARV) ASTM D 4595

7.) Tensile Strength of Yarn (lbs.) (MARV) ASTM D 2256

6. Conformance Testing – Engineered Turf

   a. Obtain one Engineered Turf sample for every 400,000 sq. ft. of material supplied to the site.

b. Forward samples to the INDEPENDENT TESTING LABORATORY and test for the following:

i. Total product weight
ii. CBR Puncture ASTM D6241
iii. Tensile Strength Product ASTM D 4595
iv. Tensile Strength of Yarn ASTM D2256

B. GEOSYNTHETICS INSTALLER

1. Prior to beginning the installation of the ClosureTurf® System, GEOSYNTHETICS INSTALLER shall submit the following to the OWNER'S REPRESENTATIVE as it relates to the Geomembrane Component and the Engineered Turf component:

a. The company will be an approved ClosureTurf Installer.
b. Shop drawings indicating panel layout and field seams 14 calendar days prior to installation of geomembrane component.
c. ClosureTurf® Installation schedule.
d. Installation capabilities, including:

1.) Information on seaming, testing and deployment equipment proposed for this project;
2.) Average daily production anticipated for this project; and
3.) Construction Quality Control (CQC) procedures.
4.) Submit to OWNER'S REPRESENTATIVE:

a.) Signed Subgrade Acceptance Certificates for each area to be covered by the geomembrane component.
b.) A flow chart showing GEOSYNTHETICS PERSONNEL responsible positions for this project and include;

c.) Resumes of: (Include date hired and duration of employment)

i. Project designated GEOSYNTHETICS SEAMING SUPERVISOR;

ii. CQC SUPERVISOR if other than above;

iii. All personnel who will perform seaming operations; including

iv. date hired and duration of employment.

d.) Verify in writing that GEOSYNTHETICS INSTALLER'S PERSONNEL have the following experience:

i. CQC SUPERVISOR and the MASTER GEOMEMBRANE SEAMER:

i.) Shall have installed at least 5,000,000 square feet of like geosynthetics components.

ii. CQC SUPERVISOR and the ENGINEERED TURF FUSION SEAMER

ii.) Shall have installed at least 5,000,000 square feet of geomembrane materials.

iii.) Engineered Turf Fusion Seamers shall be factory trained by DemTech.

iii. GEOTEXTILE SEAMERS:

iv.) Shall have installed at least 1,000,000 square feet of like materials.

iv. All other GEOSYNTHETICS INSTALLER SEAMING PERSONNEL:

v.) Shall have seemed at least 1,000,000 s.f. of polyethylene geomembrane.

vi.) Personnel who have seemed less than 1,000,000 s.f. of polyethylene geomembrane will be allowed to seam only under the direct supervision of the MASTER GEOMEMBRANE SEAMER or CQC SUPERVISOR.

e.) OWNER'S REPRESENTATIVE shall be responsible for approving resumes and qualifications of GEOSYNTHETICS INSTALLER PERSONNEL.

f.) GEOSYNTHETICS INSTALLER PERSONNEL shall attend ClosureTurf® orientation prior to the job beginning if this is their first ClosureTurf® installation.

C. SAND INFILL INSTALLER:

1. SAND INFILL INSTALLER shall submit to ClosureTurf® manufacturer a 10 pound sample of sand infill utilized.

2. SAND INFILL INSTALLER shall submit particle size data sheets approved by the POR for:

   a. Sand infill used as a ClosureTurf® Component; and
   b. Every 175 CY delivered thereafter.

      1.) Sand Infill Testing Parameters:
      See SECTION 31 05 16 ClosureTurf® SAND INFILL COMPONENT

D. CLOSEOUT SUBMITTALS:

1. GEOSYNTHETICS INSTALLER shall furnish to the OWNER upon completion of the project:

   a. 1-year warranty against defects in workmanship.
   b. As-built Geomembrane Panel Drawings.
   c. As-built Drawings will include:
   d. panel locations;
   e. panel identification numbers;
   f. geomembrane roll numbers for each panel;
   g. seam caps;
   h. destructive sample locations; and
   i. location of large repairs.
   j. Any other documentation required under Section 01 73 19 – G

E. PRODUCT DATA

1. See Section 01 60 00 PRODUCT SPECIFICATION – Article 2.03

F. CERTIFICATES

i. CONTRACTOR will provide a set of as-built record drawings and a QC data package when the project is completed, for submittal to the agency. All construction methods and test procedures documented on the project will be in accordance with project specifications.

ii. Surveying and documenting various aspects of the as-built package (location of destruct samples, etc.) will be the CONTRACTOR'S responsibility.

1.05 DELIVERY, STORAGE AND HANDLING

A. Conform to the manufacturer's recommendations to prevent damage.

B. Deliver materials to the site only after the OWNER'S REPRESENTATIVE and the OWNER approve required submittals.

1. CQA PERSONNEL shall observe and document that all rolls of geomembrane delivered to the site have been properly identified (at the manufacturer's location) with the following for each component:

a. Delivery and Acceptance Requirements –Geomembrane Component:

1.) Manufacturer's name
2.) Product identification
3.) Lot number
4.) Roll number
5.) Roll dimensions

b. Delivery and Acceptance Requirements –Engineered Turf Component:

1.) Manufacturer's name
2.) Product identification
3.) Lot number
4.) Roll number
5.) Roll dimensions

2. CQA PERSONNEL shall observe and document the following with regard to each component:

a. Engineered Turf is wrapped in rolls with protective covering;
b. Components are protected from any outside source that could degrade or damage the product.

A. Storage and Handling Requirements:

1. On-Site Storage

a. Store in space allocated by the OWNER.
b. Store on level prepared surface (not on wooden pallets) graded to drain away from ClosureTurf® components.
c. Stack per Manufacturer's recommendation but no more than three rolls high.

2. On-Site Handling:

a. The GEOSYNTHETICS INSTALLER is responsible for storage and transporting material from storage area to installation area
b. Use appropriate handling equipment approved by the OWNER'S

REPRESENTATIVE.

c. Dragging panels on ground surface will not be permitted.

d. Do not fold geomembrane component material;

3. Packaging and Waste Management

a. GEOSYNTHETICS INSTALLER shall be responsible for proper containment, collection and disposal of:

1.) Waste and packaging;

2.) All waste products produced by the installation of the ClosureTurf® System.

1.06 SITE CONDITIONS

A. Ambient Conditions

1. In excessive heat or cold, ambient temperatures less than 35°F and greater than 104°F will require additional testing as indicated below.

2. The acceptable ambient temperature range may vary from parameters shown in Article 1.06A-1 only if field test seams can pass at the specific ambient temperature welding will take place.

B. Existing Conditions

1. See Section 31 23 13 for Subgrade Preparation Specifications

PART 2: PRODUCTS

2.01 OWNER FURNISHED PRODUCTS

A. Fabricated and Geosynthetic components of the ClosureTurf® System.

1. Geomembrane Component.

    a. Manufacturer: AGRU America, Inc.

2. Engineered Turf Component.

    a. Shaw Industries, Inc.

B. Gas Vents.

    a. Watershed Geosynthetics, Inc.

C. SUBSTITUTIONS

    a. None

2.02 PRODUCTS NOT FURNISHED BY OWNER

A. Sand Infill Component. (Section 31 05 16)
B. Alternate HydroBinder® Infill Component. (See Section 03 49 01)

2.03 EQUIPMENT

A. GEOSYNTHETICS INSTALLER shall demonstrate that welding equipment and accessories meet the following requirements:
    1. Wedge welding machines are a low profile machine with a vertical height (wedge height) not to exceed 3 inches, measured from flat surface to top of heating wedge.
    2. Welding machines are equipped with gauges showing temperatures both in apparatus and at nozzle (extrusion welder) or at wedge (fusion welder).
    3. Adequate numbers of welding apparatus are maintained to avoid delaying work.
    4. Use power source generators capable of providing constant voltage to all required equipment under combined-line load.

5. Provide secondary containment to catch spilled fuel under equipment where applicable.

B. Provide calibrated tensiometer capable of quantitatively measuring geomembrane component strength for the following parameters:

    a. Tensiometer to be equipped with gauge accurate to +/- 2 lbs per inch of geomembrane width; and
    b. capable of pulling at 2 inches per minute up to 20 inches per minute.

C. Provide one inch die for cutting sample specimens.
D. Provide certificate of tensiometer calibration within the past 12-months.

2.04 PRODUCT OPTIONS

A. Infill Component Option will be noted on the DRAWINGS:

1. Sand Infill. See Specification 31 05 16 – Sand Infill Specifications; or

2. HydroBinder® Infill. 03 49 01 – Alternate HydroBinder® Infill.

2.05 MANUFACTURER QUALITY CONTROL (MQC)

A. Tests and Inspections

1. See Section 01 73 19 - 1.04 SUBMITTALS for MQC requirements.

2. See Section 01 73 19 - 3.02 FIELD TRIAL SEAM TESTING for field testing requirements.

2.06 CONSTRUCTION QUALITY CONTROL

A. GEOSYNTHETICS INSTALLER shall:

1. Designate a full-time construction quality control (CQC) SUPERVISOR; who

2. Shall be responsible for supervising and/or conducting the construction

quality control program; and

3. May not be replaced without written authorization by the OWNER.

4. Meets resume requirements Section 01 73 19 – 1.04 B

PART 3: EXECUTION:

3.01 INSTALLERS

A. Must be approved through Watershed Geosynthetics, LLC.

3.02 EXAMINATION

A. VERIFICATION OF CONDITIONS:

1. OWNER'S REPRESENTATIVE:

a. Verify provisions set forth in Section 31 23 13 – SUBGRADE PREPARATION.
b. Verify SUBMITTALS and forms have been completed.

B. PRE-INSTALLATION TESTING

1. FIELD TRIAL SEAM TESTING – TRIAL WELDS: GEOMEMBRANE

a. Prior to geomembrane component welding, CQA personnel shall observe and document the following:

1.) Welding apparatus (both wedge and extrusion welder) are tested;
a.) at daily start-up; and
b.) immediately after any break; or
c.) anytime the machine is turned off for more than 30 minutes.

b. Procedures:

1.) If at any time, the CQA PERSONNEL believe that an operator or welding apparatus is not functioning properly, a Field Trial Seam Test must be performed.

2.) Any dispute concerning proper installation techniques or the proper function of welding equipment shall be resolved by the OWNER'S REPRESENTATIVE.

3.) The trial weld must be allowed to cool to ambient temperature before testing.

a.) Trial Sample Test Results:

4.) Trial weld samples must comply with "PASSING CRITERIA FOR WELDS" included in Section 3.13.

5.) Field Seam Test Failure:

a.) Unacceptable locus-of-break codes per their description in ASTM D6392:

i. Hot Wedge: AD and AD-Brk>25%

ii. Extrusion Fillet: AD1, AD2, AD-WLD (unless strength is achieved)

b.) There will be no apparent weld separation (i.e., greater than 25% of weld width)

c.) The INDEPENDENT TESTING LABORATORY strength tests must;

i. meet the manufacturer's specifications for the sample sheets; or

ii. percentage of the manufacturer's parent sheet strength as determined by the manufacturer.

iii. For dual-track fusion welds, both sides (the inner and outer weld) must meet the minimum requirements for a satisfactory peel test.

c. Additional Field Seam Testing Requirements - GEOMEMBRANE

1.) A trial weld will also be obtained prior to welding tie-ins.

2.) The trial weld sample must be 3 feet long and 12 inches wide, with the seam centered lengthwise.

3.) If a welding apparatus exceeds 5 hours in the second half of the day, another trial seam must be performed.

4.) Minimum required number of specimens per trial weld:

i. Two coupons for shear and two coupons for peel.

ii. Both the inner and outer welds of dual track fusion welds:

vii.) must be tested for each peel test coupon; or

viii.) additional coupons will be required.

d. CQA documentation of trial seam procedures will include the following:

1.) The names of the seaming personnel;

2.) The name of the welding technician;

3.) the welding apparatus number, time, date;

4.) ambient air temperature; and

5.) welding apparatus temperature.

2. FUSION SEAMING METHOD TRIAL SEAM REQUIREMENTS – ENGINEERED TURF

a. Prior to turf component welding, CQA personnel shall observe and document the following:

1.) Turf welding apparatus are tested;
2.) at daily start-up; and
3.) immediately after any break; or
4.) anytime the machine is turned off for more than 30 minutes.

b. Procedures:

1.) If at any time, the CQA Personnel believe that an operator or fusion welding apparatus is not functioning properly, a Field Trial Seam Test must be performed.
2.) Any dispute concerning proper installation techniques or the proper function of fusion welding equipment will be resolved by the OWNER'S REPRESENTATIVE.

c. The trial weld must be allowed to cool to ambient temperature before seam snapping or panel adjustments are applied.

1.) Trial Sample Test Results:

i. Trial weld samples must comply with "VISUAL PASSING CRITERIA" Visual passing criteria is verified when a manual peal/pull test is performed, and the top turf panel tufts transfer to the bottom turf panel. The transfer of approx. 75% of the tufts constitutes a passing trial weld.

2.) Field Seam Test Failure:

i. Less than approx.75% of the top turf panel tufts transfer to the bottom turf panel.

3.) Additional Trial Sample Testing Requirements:

i. Two consecutive trial welds meet the visual passing criteria.

4.) The trial weld sample must be a minimum of 3 feet long and 12 inches wide, with the seam centered lengthwise.

5.) If a welding apparatus exceeds 5 hours in the second half of the day, another trial seam must be performed.

6.) CQA documentation of trial seam procedures will include the following:

ii. The names of the seaming personnel;

iii. The name of the fusion seaming technician;

iv. the welding apparatus number, time, date;

v. ambient air temperature; and

vi. welding apparatus temperature.

3.03 INSTALLATION

A. ClosureTurf® GEOMEMBRANE COMPONENT DEPLOYMENT

1. Geomembrane Component will not be deployed:

    a. During precipitation;
    b. In the presence of excessive moisture as determined by the CQA Personnel onsite;
    c. In areas of ponded water;
    d. In the presence of excessive winds (sustained winds greater than 25 MPH) or at the discretion of the POR.

2. CQA PERSONNEL shall observe the following while the geomembrane component is being deployed:

    a. Use equipment which will not damage geomembrane.
    b. Observe that personnel working on geomembrane do not engage in activities that could damage ClosureTurf® Components.
    c. Smoking on the liner is prohibited.
    d. Clamps and other metal tools are not tossed or thrown.
    e. Geomembrane component has had adequate time to acclimate to ambient temperature prior to welding.
    f. Panels are deployed with the spike down and the stud side up.
    g. The deployment method will protect both the geomembrane component as well as the underlying subgrade.
    h. Adequate anchoring techniques are placed to prevent uplift by wind.
    i. Anchoring techniques are used that will not damage the geomembrane component.
    j. Continuous sand bags are used along leading edges of the geomembrane to reduce wind flow under panels.
    k. Panels will be deployed perpendicular to slope elevation contours.
    l. Generation of seams will be reduced where possible.
    m. Protect geomembrane in heavy traffic areas using methods approved by the POR.
    n. Rubber tired ATV's are acceptable if specified wheel pressure limitation is

specifically observed and provided to the POR by the GEOSYNTHETICS INSTALLER in writing.

o. The bottom and side anchor trenches are left open until the engineered turf and sand infill placement are complete.

p. Top anchor trenches are backfilled as soon as practical to avoid creeping of the geomembrane.

q. Verify that the ClosureTurf® system is properly deployed into the anchor trench prior to backfilling.

r. Where possible, anchor trenches are filled when temperatures are coolest to reduce bridging of the geomembrane component.

s. Material placed in anchor trenches are placed in uniform lifts, not to exceed 12 inches loose thickness and are compacted.

t. In-place moisture/density tests in anchor trenches may be taken at the discretion of the POR.

u. Slightly rounded corners will be provided in anchor trenches.

3.04 WRINKLES

A. The CQA PERSONNEL shall:

1. Inspect geomembrane for wrinkles; and

2. Notify the GEOSYNTHETICS INSTALLER if wrinkles are present above the maximum tolerance level as described below.

3. Document corrective actions taken to reduce the wrinkles.

4. Observe that wrinkles are reduced prior to field seaming.

5. Observe that snapping procedures described in Article 3.06 SPECIAL TECHNIQUES are followed.

B. Any wrinkles that can fold over must be repaired if:

1. Overnight temperature reduction does not contract the geomembrane to an

acceptable level as determined by the CQA PERSONNEL.

C. Time constraints do not allow for an overnight wait time to observe whether wrinkles were reduced adequately.

3.05 ClosureTurf® GEOMEMBRANE COMPONENT FIELD SEAMING

A. CQA PERSONNEL must observe the following:

1. Prior to geomembrane seaming operations:

a. Panel layout drawing has been accepted by the POR.
b. A seam numbering system has been incorporated agreed upon by the POR and GEOSYNTHETICS INSTALLER prior to the start of seaming operations.
c. The GEOSYNTHETICS INSTALLER shall have a previously agreed upon number of welding apparatus and spare parts necessary to perform the work.
d. Verify that equipment used for welding will not damage any ClosureTurf® system components.
e. The extrusion welding machine is purged to remove heat degraded extrudate.
f. Seam grinding has been completed less than one hour before seam welding; and
g. The upper sheet is beveled (extrusion welding only).
h. The ambient temperature requirements (Section 1.06 SITE CONDITIONS), are met.
i. The contact surfaces of the sheets are clean, free of dust, grease, dirt, debris, and moisture prior to welding.
j. The weld area is substantially free of dust, rocks, and other debris.
k. The seams are overlapped a minimum of 3 inches for extrusion and hot wedge welding, or in accordance with manufacturer's recommendations, whichever is more stringent.
l. Panels will be overlapped (shingled) in the downgrade direction.

m. No solvents or adhesives are present in the seam area.
n. The procedure used to temporarily hold the panels together does not damage the panels and does not preclude CQA testing.
o. The panels to be welded are in accordance with the plans and site specific specifications.
p. There is no obvious free moisture in the weld area.
q. Measure and document surface sheet temperature every two hours.
r. At the end of each day or installation segment, unseamed edges are anchored with sandbags or other approved anchoring device.

2. During Geomembrane Seaming Operations:

a. At the end of previously placed welds, (with a cooling time longer than 5 minutes), grinding is required to expose new material before restarting a weld (extrusion welding only).

3.06 SPECIAL TECHNIQUES

A. During field seaming operations special attention will be taken for the following:

1. GEOMEMBRANE COMPONENT:

a. Once two panels have been seamed together or at the approx. 1/3 seaming process, a seam snapping process should be applied.

1.) Perform with manual labor by utilizing 3-4 technicians on the open side of the panel applying a pulling pressure to snap out the tented welded seam.

2. ENGINEERED TURF COMPONENT:

a. CQA PERSONNEL shall verify that:

2.) Engineered Turf tufts are not excessively pulled out by the installation process.
3.) See Section 01 73 19 – Article 3.07 for further information.

3.07 ENGINEERED TURF COMPONENT DEPLOYMENT

A. Prior to installation of Engineered Turf Component, the CQA PERSONNEL must observe the following:

1. ClosureTurf® geomembrane component has been seamed, tested, approved, and is released for further component deployment by the POR.

2. The supporting surface (e.g., the geomembrane) is substantially free of debris or large scraps.

B. During deployment of Engineered Turf, the CQA personnel must observe the following:

1. Observe the turf as it is deployed and record defects and disposition of the defects (i.e., panel rejected, patch installed, etc.).

2. That repairs are made in accordance with the specifications.

3. Equipment used does not damage the turf or underlying geomembrane.

4. That all panels are deployed from the top of the slope in a way that the Engineered Turf filaments are pointing upslope after deployment is complete.

5. That the turf is anchored to prevent movement by the wind (the GEOSYNTHETICS INSTALLER is responsible for any damage resulting to or from windblown Engineered Turf).

6. That the turf remains substantially free of contaminants.

7. That the turf is laid substantially smooth.

8. That on slopes, the turf is secured with sandbag anchoring at the top of the slope after deployment.

9. That the first panel deployed has the turf filaments facing upward.

10. That subsequent panels are deployed turf side down, and on top of the previous panel. (Sewing Method Only)

11. That after seaming each panel, it is flipped onto the geomembrane component with care to avoid pulling of tufts in the drainage studs. (Sewing Method Only)

12. A single stitch prayer type seam is constructed using a Newlong sewing machine or equivalent. (Sewing Method Only)

13. The thread will be 207 Polyester or equivalent.

14. Sewing will occur between the 1st and 2nd row of tufts on both sides of panel.

3.08 ENGINEERED TURF COMPONENT FUSION SEAMING METHOD:

A. Techniques for Fusion Seaming Engineered Turf will be as follows:

1. Engineered Turf fusion seaming device will be a DemTech VM20/4/A fusion welder only.

2. Fusion seams require a minimum of 5 inches of overlap.

3. Frayed or loose geotextile strands will be cut off or removed.

4. Prior to starting the production fusion seaming, trial seams must be performed as outlined in Section 3.02.

5. Demonstrate the preparation methods and equipment utilized for removal of the selvage from the outside edge of the rolls of turf (i.e. trimming & cutting devices).

6. Mechanical or hot knife trimming and cutting devices will be utilized for salvage trimming.

7. Demonstrate and control the fraying of geotextile strands when performing the

removal of selvage.

8. Any damage that occurs due to production seaming will be repaired as outlined in WG Installation Guidance Documents.

9. Any defects will be repaired as outlined in Section 3.14.

3.09 EQUIPMENT ON THE TURF:

A. During Construction:

1. On slopes exceeding 15%:

   a. No equipment will be allowed until Sand Infill is in place.

2. On slopes less than 15%:

   a. ATV type vehicles will be allowed prior to infill placement if the tire /track ground contact pressure is less than 5 psi.

B. Post construction (full specified sand infill thickness)

1. On slopes exceeding 15%

   a. Temporary or transient loads, allowable tire/track ground contact pressures will be limited to less than 35 psi
   b. Regularly trafficked areas will be designed and approved by the POR and/or CQA Engineer

2. On slopes less than 15%:

   a. Temporary or transient loads, allowable tire/track ground contact pressures will be limited to less than 85 psi
   b. Regularly trafficked areas will be designed and approved by the POR
   c. Allowable tire/track ground contact pressures may be increased with the written approval of the POR and/or CQA Engineer.

C. Any activity that may be identified during the course of construction by the POR, OWNER'S REPRESENTATIVE, or CQA PERSONNEL as being a possible danger to the integrity of the ClosureTurf® system will prohibited regardless of any prior approval.

3.10 SAND BALLAST INFILL PLACEMENT

A. Sand infill that is placed between the tufts of the Engineered Turf Component:

1. The sand infill layer will be placed to a ½ inch minimum thickness not to exceed ¾ inch thick.

2. Will consist wholly of sand meeting Section 31 05 16, ClosureTurf® SAND INFILL COMPONENT.

3. CQA PERSONNEL shall check final thickness of sand infill at a rate of approximately 20 times per acre.

B. ClosureTurf® Sand Infill Grain Size Parameters are shown in Section 31 05 16 – Table 1.

1. CQA PERSONNEL shall observe that the following requirements regarding Sand Infill are met:

   a. Installation of sand infill will only be performed by a Watershed Geosynthetics' licensed and approved installer.
   b. Areas that are to receive sand infill must be accepted by the POR or CQA PERSONNEL before placement of sand infill takes place.

C. CQA PERSONNEL shall observe:

1. The sand infill is worked into the Engineered Turf between the synthetic yarn

blades.

2. Conveyor systems and/or Express Blowers will be used to spread and place the sand infill.

3. Sand Infill Installer has explained with detail in the pre-construction meeting the method of sand infill deployment to be used.

4. That previously installed ClosureTurf® components are not displaced or damaged as a result of the sand infill component installation.

5. That Sand infill placement does not occur with snow or ice on the Engineered Turf component.

6. The method for measuring the Sand Infill thickness will be performed utilizing a digital caliper, or a POR approved alternate measuring device.

3.11 ALTERNATE INFILL – HYDROBINDER® PLACEMENT

A. See Section 03 49 01 ALTERNATE HydroBinder® INFILL for Product Specification
B. The HydroBinder® infill layer may be placed using any appropriate equipment capable of completing the work.

1. Manual hand spreading is acceptable when equipment isn't practical.

C. CQA PERSONNEL shall verify the following:

2. GEOSYNTHETICS INSTALLER shall explain in detail in the pre-construction meeting the method of HydroBinder® infill deployment.

3. Installation of HydroBinder® infill will only be performed by a Watershed Geosynthetics' licensed and approved installer.

4. Additional information concerning various Installation Techniques can be found in the ClosureTurf® Installation Guidelines Manual.

5. The HydroBinder® will be installed into the turf while it is in a dry state.

6. The HydroBinder® will be worked into the tufts so the tufts are in an upright position.

7. The HydroBinder® infill layer will be placed to a ¾ inch minimum thickness not to exceed 1 inch thick.

8. Multiple passes will be required so the tufts can be more readily freed from the weight of the HydroBinder® on each pass before hydration takes place.

9. Engineered Turf Tufts will be free and upright before the hydration process begins.

10. HydroBinder® thickness will be checked using a caliper or other approved measuring device.

    a. Take thickness measurements of the dry HydroBinder at a rate of 20 samples per acre.
    b. The desired HydroBinder® infill thickness will be achieved prior to the hydration process.

11. Do not backfill horizontal or vertical anchor trenches until turf has been infilled with HydroBinder® infill.

12. The hydration process must occur the same day as the HydroBinder® infill placement.

    c. Check to assure HydroBinder® is hydrated thoroughly through the full thickness, without causing excessive runoff using the following methods:

        1.) Check each completed hydration area for full saturation using a probe before moving on the next area.
        2.) Check hydration with probe at a rate of 1 per 100 sq. ft..
        3.) Check for full hydration by tapping on hydrated surface forcing water to be visually

seen pooling at the surface.

    d. The estimated application rate is 0.20 gallons of water per sq. ft.

1.) Rate may change according to ambient temperature and humidity.

e. After 24 hrs.;

1.) Check completed HydroBinder to ensure the hardening process is taking place.

a.) Note that the dustless version of HydroBinder® may take longer than 24 hrs to reach an obvious hardness to the touch.

f. The 28 day compression strength of the HydroBinder® is verified by the manufacturer of the HydroBinder® before the mix is delivered to the site.

D. Cold Weather Placement and Curing of HydroBinder®.Follow Procedure shown in American Concrete Institute (ACI) 306 – Guide to Cold Weather Concreting.

1. At the time of HydroBinder placement;

a. both the subgrade and the surface of the Engineered Turf will be at a temperature of at least 36 degrees.

b. Ambient temp will be rising.

3.12 ALTERNATE INFILL – ARMORFILL® EMULSION

A. See also Section 31-32-13.17 -ArmorFill® -Polymer Emulsion Specification

B. INSTALLERS

1. Installation of ArmorFill® will be completed by an installer approved by Watershed Geosynthetics.

C. EXAMINATION

1. ArmorFill® should be shipped to site within one (1) month of anticipated use.

2. Apply ArmorFill® under dry weather conditions and when precipitation is not expected for at least 72 hours after installation.

3. ArmorFill® cure time is dependent on ambient temperature, humidity and any rainfall that may occur while product is curing.

4. Apply ArmorFill® on a previously installed ClosureTurf® system that is free of

leaves and other material that may inhibit the penetration of the ArmorFill® into the sand component.

5. Apply ArmorFill® only after approval of the finished ClosureTurf® product installation.

6. Construction Quality Control (CQC) personnel will document ArmorFill® and water mix ratio by logging volume mixed of each component.

7. Construction Quality Control (CQC) personnel will verify that ArmorFill® has fully saturated the sand by inserting a probe and displacing a 1 sq. inch area of sand.

    a. Check saturation randomly at a rate of 20 probes per acre.

8. Verify proper application rate by marking a known area and applying the proper volume to that area.

    a. Adjust delivery rate to match the delivery volume per area.

D. SPECIAL TECHNIQUES

1. Mix in a hydraulic conveyance system such as a water truck, HydroSeeder or portable tank.

    a. Place the water component in the tank, then add the full strength ArmorFill® .

    b. Mechanically agitate initially, and each day prior to use.

    c. Do not utilize continuous agitation techniques that may introduce excess air into the system.

2. ArmorFill® application equipment will have a hose with a spray adjustment nozzle and cut off function in the nozzle head.

3. Reduce the number of equipment set-ups required and take care with the application hose so as previously applied ArmorFill® is not displaced by dragging of the hose.

4. Spray product evenly.

5. Apply marking features to edge of sprayed area to assure proper overlap of material.

6. Each stopping point will require visual marking locations to assure the continued application has the proper overlap.

7. Deploy catch cups at a rate of 20 per acre to help determine if proper application rate is being achieved.

8. Apply ArmorFill® at a rate of approximately 3400 gallons of the mixed product per acre (Approx. 90 ounces per square yard)

9. Do not apply ArmorFill® in inclement weather or in freezing temperatures.

10. One Thousand Six Hundred Fifty (1650) gallons of water per Two Hundred Seventy Five (275) gallon ArmorFill® tote is the proper mixture for a 6:1 ratio.

E. CLOSE OUT ACTIVITIES

1. At the completion of ArmorFill® placement activities, clean the equipment thoroughly and purge the tank and hoses of the product.

2. All waste product will be disposed of in accordance to site regulations and specifications.

3. Left over mixed product may be evenly sprayed over previously applied ArmorFill® areas.

4. Avoid unnecessary foot traffic on the applied product for 48 hours.

5. No vehicle traffic is allowed on the applied product for 7 calendar days.

3.13 TESTING CONCURRENT WITH INSTALLATION:

A. DESTRUCTIVE AND NON-DESTRUCTIVE TESTING:

1. NON-DESTRUCTIVE SEAM TESTING – Geomembrane Component:

a. GEOSYNTHETICS INSTALLER shall:

1.) non-destructively test field welds for continuity over their full length using vacuum, air pressure or spark test units; and

a.) Perform concurrently with seaming work progress.

b.) Repair seam defects in accordance with Article 3.14 REPAIR PROCEDURES.

2.) Non-destructive testing procedures:

a.) apparatus used to test the field seams for continuity:

i. Vacuum box testing equipment for extrusion welds will have:

ii. A rigid housing;

iii. transparent viewing window;

iv. a soft rubber gasket attached to bottom of housing; and

v. porthole or valve assembly; and

vi. a vacuum gauge.

vii. be capable of applying 2 psi gage pressure of vacuum to the box.

viii. Soapy solution.

b.) Vacuum Box testing procedures:

i. Clean window, gasket surfaces, and check for leaks.

ii. Energize vacuum pump and reduce tank pressure to approximately 2 psi.

iii. Wet a strip of geomembrane approximately 12 inches by 30 inches (or length of box) with soapy solution.

iv. Place box over wetted area and compress.

v. Close bleed valve and open vacuum valve.

vi. Ensure that a leak tight seal is created.

vii. Examine length of weld through viewing window for presence of soap bubbles for a period of not less than 10 seconds.

viii. If no bubbles appear after 10 seconds, close vacuum valve and open bleed valve, move box over next adjoining area with minimum three inches overlap and repeat process.

c.) Defects:

i. Mark with a defect code;

ii. repair the area in accordance with Section 01 73 19 Article 3.14 REPAIR PROCEDURES; and

iii. retest the repaired area.

d.) Air Pressure Testing equipment for double fusion seams:

i. An air pump, equipped with pressure gauge having an accuracy of 1 psi, capable of generating and sustaining a pressure between 25 to 30 psi and mounted on a cushion.
ii. Rubber hose with fittings and connections.
iii. Sharp hollow needle or other pressure feed device approved by the Owner.

e.) Air Pressure testing procedures:

i. Seal both ends of the seam to be tested.
ii. Insert a needle or other approved pressure feed device into tunnel created by double hot wedge seaming and insert a protective cushion between air pump and geomembrane.
iii. Energize air pump to 25 to 30 psi, close valve, and sustain pressure for a minimum of five minutes.
iv. If loss of pressure exceeds 2 psi or does not stabilize, locate faulty area and repair in accordance with Article 3.14 REPAIR PROCEDURES.
v. Release pressure at opposite end of seam from gauge to verify that the seam is not blocked.
vi. Remove approved pressure feed device and seal penetration holes by extrusion welding.

b. DESTRUCTIVE SEAM TESTING Geomembrane Component:

a. GEOSYNTHETICS INSTALLER shall:

1.) cut destructive samples 12 inches wide by 48 inches long with seam centered lengthwise.

2.) Repair holes in geomembrane resulting from obtaining destructive samples and vacuum test patches.

3.) Obtain two 1-inch wide specimens from each side of the sample, test for peel and shear in the field.

i. Provide OWNER'S REPRESENTATIVE with the following:

(i) one sample per 500 feet of seam length per welding apparatus prior to completion of liner installation;

b. OWNER'S REPRESENTATIVE shall:

1.) mark destructive samples with:

a.) consecutive numbering;

b.) location;

c.) apparatus I.D.;

d.) technician I.D.;

e.) Engineer I.D.;

f.) apparatus settings; and

g.) date;

2.) record, in written form:

a.) weld and test date;

b.) time;

c.) location;

d.) seam number;

e.) ambient temperatures;

f.) machine settings;

g.) technician I.D.;

h.) apparatus I.D.; and

i.) pass or fail description.

c. Additional Destructive Testing Procedures:

1.) Cut ten 1-inch wide specimens from one piece.

2.) Test five specimens for peel and five for shear.

3.) Test results will meet requirements of Section 01 73 19 - INSTALLATION OF ClosureTurf® - Article 3.13.B – PASSING CRITERIA FOR WELDS.

4.) Failing Destructive Tests:

a.) GEOSYNTHETICS INSTALLER'S CQC REPRESENTATIVE shall;

a.) track the failure immediately.

b.) Cut the remaining sample into three 14-inch long pieces and distribute as follows:

i. To the Owner's Representative for destructive testing; and

ii. To the Owner's Representative for archive; and

iii. To the Geosynthetics Installer for their use.

c.) In the event of failure, the procedures for failed seam tracking are:

i. Retrace welding path 10 (ten) feet in both directions from the failed test location and remove (at these locations) a one inch wide specimen for testing.

ii. Obtain destructive samples from each side of the welding path and give samples to the OWNER'S REPRESENTATIVE for destructive testing.

iii. Repeat process if additional tests fail.

iv. Reconstruct seam between passing test locations to satisfaction of the OWNER'S REPRESENTATIVE.

v. Reconstruction may be one of the following:

(ii) Cut out old seam, reposition panel and re-seam.

(iii) Add cap strip.

(iv) Cut additional destructive samples from reconstruction at discretion of OWNER'S REPRESENTATIVE.

(v) If additional destructive sample results are not acceptable, repeat process until reconstructed seam is judged satisfactory by the OWNER'S REPRESENTATIVE.

5.) Final seaming inspection:

a.) check the seams and surface of geomembrane for:

i. Defects;

ii. Holes;

iii. Blisters;

iv. Undispersed raw materials; or

v. Signs of contamination by foreign matter.

b.) Brush, blow, or wash geomembrane surface if dirt inhibits observation.

c.) The OWNER'S REPRESENTATIVE shall decide if cleaning of geomembrane surface and welds is needed to facilitate inspection.

B. PASSING CRITERIA FOR WELDS

1. Passing criteria are established by Geosynthetic Institute Test Method GM-19 for geomembrane seams.

a. An extrusion or fusion-welded seam will pass when the following values are met:

1.) Shear and peel strengths are for 4 out of 5 test specimens (the 5th specimen can be as low as 80 percent of the listed values)

2.) Shear strength (lb./in) 100

3.) Shear elongation at break (%) 50

4.) Peel strength (lb./in) 75 (65 extrusion weld)

5.) Peel separation (%) 25

6.) A geomembrane seam sample passes the field testing when:

a.) the break is a film tear bond (FTB); and

b.) the seam strength meets the required strength values for peel and shear given previously in Section 01 60 00 -

c.) For dual track welds, both welds must pass.

7.) Elongation measurements should be omitted for field-testing.

3.14 REPAIR PROCEDURES

A. GEOMEMBRANE COMPONENT:

1. The GEOSYNTHETICS INSTALLER shall be responsible for repair of damaged or defective areas.

B. Agreement upon the appropriate repair method will be decided between the OWNER'S REPRESENTATIVE and the GEOSYNTHETICS INSTALLER.

1. Procedures available include:

a. Patching:

1.) Used to repair holes (over 1/4-inch diameter), tears (over 1/4 inch long), undispersed raw materials, and contamination by foreign matter.

2.) Grinding and welding:

a.) Used to repair pinholes, and blemishes.

3.) Capping:

a.) Used to repair large lengths of seams.

4.) Removing the seam and replacing with a strip of new material.

b. The CQA Personnel will observe and document the following:

1.) The surface of the geomembrane component is clean at the time of inspection.

2.) Non-conforming geomembrane component is removed and replaced;

3.) Any portion of the geomembrane component exhibiting a flaw identified as defective by the POR or CQA PERSONNEL is replaced;

4.) Repair areas are distinctively marked and the required type of repair is indicated.

c. Repair Methods:

1.) Geomembrane surfaces to be repaired will be abraded (extrusion welds only) no more than 1/2 hour prior to the repair.
2.) All geomembrane surfaces will be clean and dry at the time of repair.
3.) The repair procedures, materials, and techniques will be approved in advance of the specific repair by the OWNER'S REPRESENTATIVE.
4.) Patch Requirements:
a.) will be a minimum of 12 inches in diameter with all corners rounded; and

b.) Will extend at least 6 inches beyond the edge of the defect.
c.) Temporarily bond the patch to the geomembrane with an approved method;
d.) Extrusion weld the patch; and
e.) Vacuum test the repair.

d. Repair Verification:

1.) CQA PERSONNEL shall number and log each patch repair
2.) CQC REPRESENTATIVE shall non-destructively test each repair using methods specified in Article 3.13.
3.) Provide daily documentation of non-destructive and destructive testing to the OWNER'S REPRESENTATIVE.
4.) The documentation will identify;
a.) Seams that initially failed the test; and
b.) Include the evidence that these seams were repaired and retested successfully.

C. ENGINEERED TURF COMPONENT:

A. When Repairs and Tie-Ins of Engineered Turf occur, the CQA PERSONNEL must observe the following:

1. Repairs to Engineered Turf are completed by using a heat-bonded seam.

2. All tie-in seams along flatter slopes (i.e. 15% or less) with length greater than

25 feet will use an approved heat bonded seam so as consistent pressure is achieved throughout the seam.

3. A hand held heat gun with a pressure wheel will be used in smaller/concentrated areas.

4. GEOSYNTHETICS INSTALLER may also demonstrate techniques and practices for Watershed Geosynthetics' approval.

    a. Field demonstration and approval by the OWNER'S REPRESENTATIVE is required before incorporating any alternative technique.

3.15 INSTALLATION ACCEPTANCE

A. The Geosynthetics Installer retains all ownership and responsibility for the ClosureTurf® system until acceptance by the Owner.

1. After all ClosureTurf® components are deployed, seamed, has passed required testing successfully, and any repairs are made;

    a. The completed installation will be inspected by the OWNER'S REPRESENTATIVE and the GEOSYNTHETICS INSTALLER'S CONSTRUCTION QUALITY CONTROL SUPERVISOR.
    b. Damage and/or defects found during this inspection will be repaired by the GEOSYNTHETICS INSTALLER.
    c. The installation will not be accepted until it meets the requirements of these specifications and any applicable State, Federal or Local Regulations.

B. Installation of the ClosureTurf® system will be accepted by the POR only when the following has been completed:

1. The installation is complete.

2. Seams have been observed and documented by the CQA PERSONNEL and

accepted by the POR.

3. Required independent testing laboratory and field tests have been completed, reviewed and approved.

4. Required GEOSYNTHETICS INSTALLER supplied documentation has been received, reviewed and approved.

5. As built record drawings have been completed and verified by the POR.

6. Any other requirements shown in Section 01 73 19 – 1.04 D CLOSEOUT SUBMITTALS are complete and accepted by the POR.

END OF SECTION

This HydroBinder® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. HydroBinder® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 03 49 01

HydroBinder® INFILL COMPONENT

PART 1: GENERAL

SUMMARY

A. Section Includes:

Specifications for the Alternate HydroBinder® Infill Component of the patented ClosureTurf® System.

RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

PART 2: PRODUCTS

2.01 DESCRIPTION

A. HydroBinder® is a proprietary cementious product used as an alternate infill component of the ClosureTurf® system.

2.02 MATERIALS

A. The infill will be HydroBinder® Cementitious Infill. The infill material may be delivered in either pallet form of 80 lb. bags or 3,000 lb. bulk super sacks.

B. Cement, except as otherwise specified herein, will be a brand of Portland Cement, meeting ASTM C 150 and will be Type I or Type II.

C. Only one brand of cement will be used throughout the duration of this Contract.

D. The cementitious infill mix design will conform to the requirements of ASTM C 387 for high strength mortars.

E. The cementitious infill mix will have a minimum 28 day compressive strength of 5,000 psi per ASTM C 109 / C 109M.

1. Verification of the compressive strength will be completed by the manufacturer and a certified test report supplied with each batch/lot of HydroBinder® material delivered to the site.

PART 3: EXECUTION:

Not Used.

END OF SECTION

This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site-specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 31 05 16

ClosureTurf® SAND INFILL COMPONENT

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:

Specifications for approved Sand Infill Component of the patented ClosureTurf® System.

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

PART 2: PRODUCTS

2.01 DESCRIPTION

Sand Infill Component of the ClosureTurf® System shall meet the fine aggregate angularity, specific gravity and grain size distribution as specified by WatershedGeo in this Specification.

A. Fine aggregate angularity shall be tested in accordance with ASTM C 1252 / AASHTO T 304, *Standard Test Methods for Uncompacted Void Content of Fine Aggregate (as Influenced by Particle Shape, Surface Texture, and Grading). Method A.* Method A uncompacted void content shall be greater than or equal to 40%.

B. Sand infill specific gravity shall be tested in accordance with ASTM C 128 / AASHTO T 84, *Standard Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate.* Bulk oven-dry specific gravity shall be greater than or equal to 2.40.

C. Sand infill grain size distribution shall be tested in accordance with ASTM C 136 / AASHTO T 27, *Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.* The grain size distribution shall be as prescribed in Table 1 and presented in Figure 1.

Table 1. Sand Infill Grain Size Distribution

		3/8" (9.5 mm)	≤	100%
90%	≤	#4 (4.75 mm)	≤	100%
50%	≤	#8 (2.36 mm)	≤	85%
25%	≤	#16 (1.18 mm)	≤	65%
10%	≤	#30 (0.60 mm)	≤	45%
0	≤	#50 (0.30 mm)	≤	30%
0	≤	#100 (0.15 mm)	≤	10%
0	≤	#200 (0.075 mm)	≤	5%

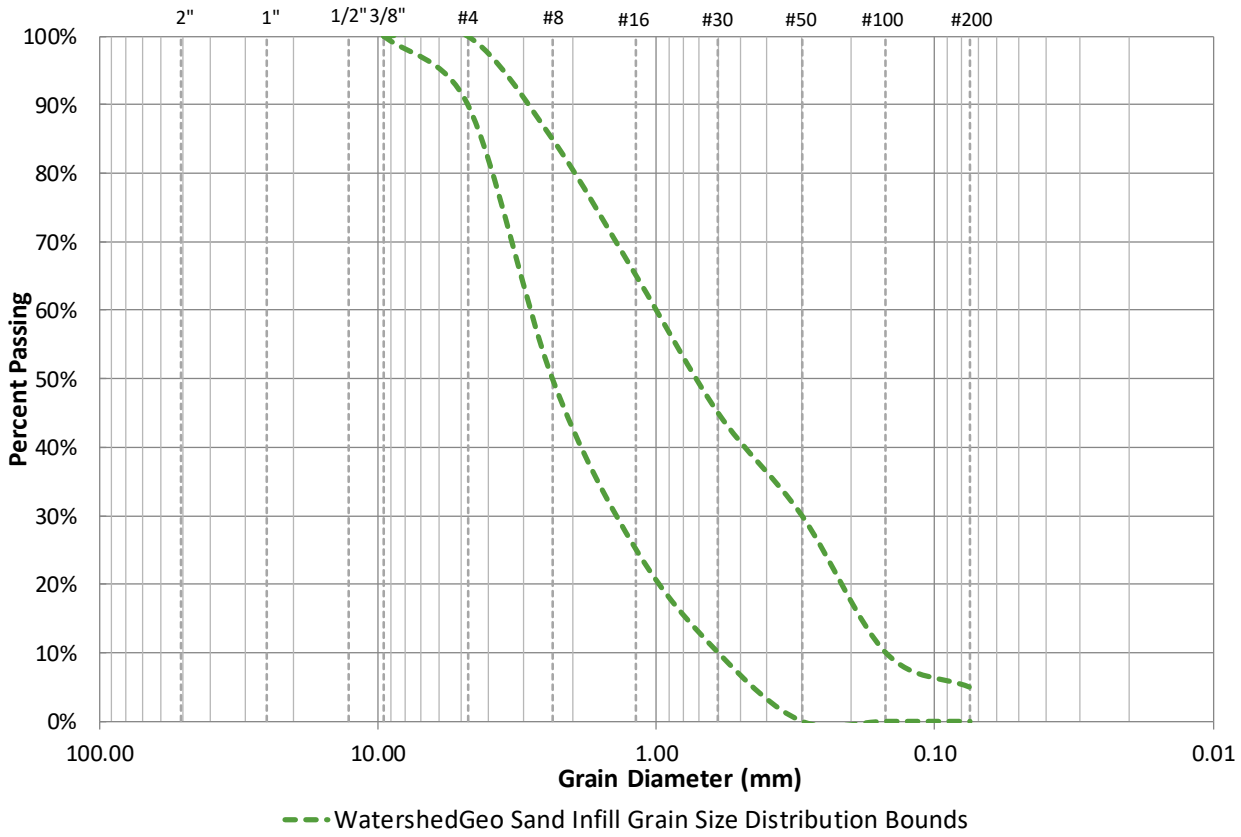

Figure 1: ClosureTurf® Specified Infill Grain Size Distribution

D. Documentation of sand infill conformance with ASTM C 136 / AASHTO T 27, ASTM C 128 / AASHTO T 84 and ASTM C 1252 / AASHTO T 304 shall be submitted to the specified CQA personnel.

E. Subsequent to initial verification of specification conformance, sand infill shall have grain size distribution conformance verified and documented for each 175 cubic yards to be installed.

PART 3: EXECUTION:

Not Used. See Section 01 73 19 ClosureTurf® Installation Specifications.

END OF SECTION

This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 31 23 13

ClosureTurf® SUBGRADE PREPARATION

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:
Specifications for approved subgrade below the ClosureTurf® System.

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

1.03 REFERENCES

A. See Section 01 42 00 - Quality Requirements - References and Definitions

PART 2: PRODUCTS

Not Used.

PART 3: EXECUTION:

3.01 EXAMINATION

A. Evaluation and Assessment:

Responsibilities for the approval and maintenance of the subgrade are as follows:

1. OWNER'S REPRESENTATIVE:
   a. Verify in writing that the surface on which the geomembrane component will be installed is acceptable.
2. GEOSYNTHETICS INSTALLER:
   a. Keep the accepted subgrade surface in a condition conducive to the deployment of all ClosureTurf® components.
   b. Subgrade acceptance is determined when the deployment of the geomembrane component begins.
   c. Maintain the previously accepted subgrade.
   d. Identify any part of the subgrade that becomes non-compliant to the specifications during the course of construction.
   e. Timely submission to the OWNER'S REPRESENTATIVE of subgrade acceptance certificates.

3.02 PREPARATION

A. Surface Preparation:
   1. Subgrade will be substantially smooth, uniform, firm and free from rocks or other debris.
   2. No rocks or protrusions greater than 1 inch in diameter will be exposed

at the subgrade surface.

3. Approved subgrade to be capable of supporting the weight of geosynthetics installation equipment.
4. Daily evaluation to show no changes have occurred that would render the subgrade unacceptable.

B. Non-Conforming Work

1. Subgrade not meeting specifications either before or during deployment of the ClosureTurf® components will be reported to the OWNER'S REPRESENTATIVE and corrected as required.

END OF SECTION

agru
The Plastics Experts.

Super Gripnet® Liner

LINEAR LOW DENSITY POLYETHYLENE

AGRU America's structured geomembranes are manufactured on state-of-the-art manufacturing equipment using the flat die calender manufacturing process, a method that produces a more consistent core thickness than other processes, such as the blown film extrusion process. AGRU uses only the highest-grade HDPE and LLDPE resins manufactured in North America.

PRODUCT DATA

Property	Test Method	Frequency	Minimum Average Values			
Thickness (nominal), mil (mm)	ASTM D5994	Per Roll	50 (1.25)	60 (1.5)	80 (2.0	100 (2.5)
Thickness (min avg), mil (mm)			47.5 (1.19)	57 (1.43)	76 (1.9)	95 (2.38)
Thickness (min 8 of 10), mil (mm)			45 (1.12)	54 (1.35)	72 (1.8)	90 (2.25)
Thickness (lowest individual), mil (mm)			42.5 (1.06)	51 (1.28)	68 (1.7)	85 (2.13)
Drainage Stud Height, mil (mm)	ASTM D7466	2nd Roll	130 (3.3)	130 (3.3)	130 (3.3)	130 (3.3)
Friction Spike Height, mil (mm)	ASTM D7466	2nd Roll	175 (4.45)	175 (4.45)	175 (4.45)	175 (4.45)
Density, g/cc, maximum	ASTM D792, Method B	200,000 lb	0.939	0.939	0.939	0.939
Tensile Properties (both directions)	ASTM D6693, Type IV					
Strength @ Break, lb/in width (N/mm)	2 in/minute	20,000 lb	105 (18.4)	126 (22.1)	168 (29.4)	210 (36.8)
Elongation @ Break, % (GL=2.0in)			300	300	300	300
Tear Resistance, lb,s. (N)	ASTM D1004	45,000 lb	30 (133)	40 (178)	53 (236)	64 (285)
Puncture Resistance, lbs. (N)	ASTM D4833	45,000 lb	55 (245)	70 (311)	90 (400)	110 (489)
Carbon Black Content, % (range)	ASTM D4218	20,000 lb	2-3	2-3	2-3	2-3
Carbon Black Dispersion (Category)	ASTM D5596	45,000 lb	Only near spherical agglomerates: 10 views Cat. 1 or 2			
Oxidative Induction Time, minutes	ASTM D3895, 200°C, 1 atm O_2	200,000 lb	≥140	≥140	≥140	≥140
Transmissivity, m^2/sec[1]	ASTM D4716	Periodic	4×10^{-3}			

AGRU America's geomembranes are certified to pass Low Temp. Brittleness via ASTM D746 (-80°C), Dimensional Stability via ASTM D1204 (±2% @ 100°C). Oven Aging and UV Resistance are tested per GRI GM 17. These product specifications meet or exceed GRI GM 17. [1]Transmissivity at a temp. of 21°C, gradient of 0.1 and a load of 10,000 psf: seating time 15 min. between steel plates.

SUPPLY INFORMATION (STANDARD ROLL DIMENSIONS)

THICKNESS		WIDTH		LENGTH		AREA (APPROX.)	
mil	mm	ft	m	ft	m	ft^2	m^2
50	1.25	23	7	500	152	11,500	1,068
60	1.5	23	7	500	152	11,500	1,068
80	2.0	23	7	300	91.4	6,900	640
100	2.5	23	7	300	91.4	6,900	640

Note:

Average roll weight is 5,000 lbs (2,268 kg) for 50 and 60 mil and 4,000 lbs (1,814 kg) for other thicknesses. All rolls are supplied with two slings. Rolls are wound on a 6" core. Special length available upon request. Roll length and width have a tolerance of ±1%. The weight values may change due to project specifications (i.e. absolute minimum thickness or special length) or shipping requirements (i.e. international contanerized shipments).

All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable; however, it is the users responsibility to determine the suitability for their own use of the products described herein. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by AGRU America as to the effects of such use or the results to be obtained, nor does AGRU America assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.

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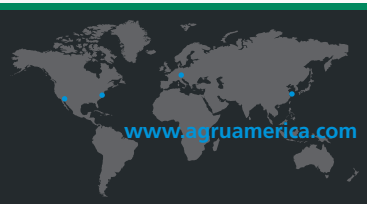
Revision Date: July 3, 2019

This information is provided for reference purposes only and is not intended as a waranty or guarantee. AGRU America, Inc. assumes no liability in connection with the use of this information.



ClosureTurf® w 50 mil Super Gripnet® Liner

Product Data	Test Method	LLDPE Values	HDPE Values
Thickness (nominal), mil (mm)	ASTM D5994	50 (1.25)	50 (1.25)
Thickness (min. avg.), mil (mm)	ASTM D5994	47.5 (1.19)	47.5 (1.19)
Thickness (lowest indiv.), mil (mm)	ASTM D5994	42.5 (1.06)	42.5 (1.06)
Drainage Stud Height (min. avg.), mil (mm)	ASTM D7466	130 (3.3)	130 (3.3)
Friction Spike Height (min. avg.), mil (mm)	ASTM D7466	175 (4.45)	175 (4.45)
Density, g/cc	ASTM D792, Method B	0.939 (max.)	0.94 (min.)
Tensile Properties (avg. both directions)	ASTM D6693, Type IV		
Strength @Yield (min. avg.), lb/in. width (N/mm)		N/A	110 (19.3)
Elongation @ Yield (min. avg.), % (GL=1.3 in.)		N/A	12
Strength@Break (min. avg.), lb./in. width (N/mm)		105 (18.4)	110 (19.3)
Elongation@Break (min. avg.), %(GL=2.0 in.)		300	200
Tear Resistance (min. avg.), lbs. (N)	ASTM D1004	30 (133)	38 (169)
Puncture Resistance (min. avg.) lbs. (N)	ASTM D4833	55 (245)	80 (356)
Carbon Black Content (range %)	ASTM D4218	2-3	2-3
Carbon Black Dispersion (Category)	ASTM D5596	Only near spherical agglomerates for 10 views in Cat. 1 or 2	
Stress Crack Resistance (Single Point NCTL), hours	ASTM D5397, Appendix	N/A	500
Oxidative Induction Time, minutes	ASTM D3895, 200°C, 1 atm O_2	≥140	≥140

Agru America's geomembranes are certified to pass Low Temp. Brittleness via. ASTM D746 (-80°C), and Dimensional Stability via. ASTM D1204 (± 2% @ 300°C)

ENGINEERED TURF COMPONENT (CT)

Product Data	Test Method	Values
Yarn Type	N/A	Polyethylene, Fibrillated
Yarn Color	N/A	Olive Green, Play Green, Tan
Yarn Weight (Total Product Weight)	ASTM D5261 (sample size, 1 yd²)	≥20 oz. / sq. yd. (≥ 32 oz. / sq. yd.)
Tensile Strength of Yarn	ASTM D2256	15 lbs. min.
CBR Puncture	ASTM D6241	1,500 lb. (MARV)
Tensile Product (MD/XD)	ASTM D4595	2,100 MD / 1,600 XD lb/ft (MARV)
Interface Friction between ClosureTurf CT and Super Gripnet®	ASTM D5321	35°, min. Peak
Engineered Turf Fiber UV Stability	ASTM G147	>60% retained tensile strength at 100 yrs. (projected)
Backing System UV Stability (Exposed)	ASTM G154 Modified Cycle 1., UVA340	110 lbs./ft. retained tensile strength at 6,500 hrs (projected)
Aerodynamic Evaluation	GTRI Wind Tunnel	120 mph with max. uplift of 0.12 lb/sf
Rainfall Induced Erosion	ASTM D6459	Infill Loss 0.1% at 6 in./hr. Rainfall
Steady State Hydraulic Overtopping (ClosureTurf® w/ HydroBinder®)	ASTM D7277/D7276	5 ft. overtopping resulting in 29 ft/s velocity and 8.8 psf shear stress for Manning's n value of 0.02
Full Scale Wave Overtopping Test Cumulative Volume (ClosureTurf® with HydroBinder®)	Colorado State University Wave Simulator	165,000 ft³/ft
Full Scale Wave Overtopping Test Discharge (ClosureTurf® with HydroBinder®)	Colorado State University Wave Simulator	4.0 ft³/s/ft
HydroBinder® Infill Mix	ASTM C387 / ASTM C109	3/4 in. infill 5,000 psi (min. at 28 days)

SUPPLY INFORMATION (Standard Roll Dimensions)

	Thickness		Width		Length		Area (approx.)		Weight (avg.)	
	mil	mm	ft.	m	ft.	m	ft²	m²	lbs	kg
Super Gripnet®	50	1.25	23	7	500	152	11,500	1,068	~5,000	~2,268
Turf Component	N/A	N/A	15	4.6	300	91.44	4,500	418	~1,000	~454

ClosureTurf®/and HydroTurf®/ products (US Patent No. 7,682,105, 8,585,322, 9,163,375, and 9,199,287; Canadian Patent No. 2,663,170; and other Patents Pending) and trademarks are the property of Watershed Geosynthetics LLC. All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.

Attachment E:

Hydrology Evaluation

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Table 1: Stormwater Ponds Hydraulic Design Summary
Table 2: Culverts Hydraulic Design Summary
Table 3: Perimeter Ditches Hydraulic Design Summary
Table 4: Stormwater Flumes Hydraulic Design Summary
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Attachments

Attachment E1: NOAA Precipitation Frequency Data
Attachment E2: SWMM Output / Hydrologic and Hydraulic Report / Stage Storage Curves
Attachment E3: Historic Ponds Drawings
Attachment E4: Sand Infill Hydraulic Stability Calculations

AECOM

Job	Big Rivers Wilson Landfill	Project No.	60631499	Sheet	1 of 5
Description	Attachment E: Hydrology Evaluation	Computed by	NN	Date	11/19/20
		Checked by	FS	Date	11/19/20

I. PURPOSE

The purpose of this attachment is to design and analyze the surface water controls for Big Rivers Electric Corporation's Wilson Fossil Plant in consistent with 401 KAR 45:110 Rule[1]..

II. SITE AND PROJECT DESCRIPTION

The surface water control design was performed as part of the closure plan for the landfill facility at Big Rivers Wilson plant in Island, Kentucky. Refer to Figure 1 for a depiction of the stormwater features (i.e., ponds, flumes, terraces, and perimeter ditches) in relation to the landfill.

The following sections summarize the design criteria, procedure, assumptions, and results of the stormwater features design.

III. PROCEDURE

Design of the landfill site stormwater features was an iterative process beginning with basic assumptions and a proposed grading plan for the site. The hydraulic features of the stormwater ponds, stormwater flumes, and perimeter ditches were initially assumed and then confirmed through multiple iterations.

The AutoCAD Civil 3D software package was used to generate the proposed site grading plan and subsequently to determine drainage areas, volumes, and other site geometries (Attachment **H**). SWMM (version 5.1) modeling software was used to conduct the hydrologic and hydraulic calculations for this analysis with inputs based on the site geometry, rainfall data, and other design assumptions. (Attachment E2)

The model was used to generate surface water volumes and peak water surface elevations in the basins and to generate velocities, and water surface elevations at the outlets of the benches, stormwater flumes, and perimeter ditches for one design storm condition (i.e., 24-hour, 25-year storm) and based on upstream watershed features of the site and the drainage facilities design parameters. The proposed drainage system will pass all flows equal to and lesser than those generated by the 24-hour, 25-year storm.

The rainfall depths for Island, Kentucky of 5.90 inches for the 24-hour, 25-year storm was obtained from NOAA Atlas 14 located at http://hdsc.nws.noaa.gov/hdsc/pfds/ and are included as Attachment E1.

[1] Kentucky Administrative Regulations: Technical and Operating Requirements for Special Waste Landfills: Section 401 KAR 45:110

The shear stress was also calculated for each channel reach (bench/flume/ditch) to confirm the type of channel lining selected. Actual shear stress was calculated by the following equation:

$\tau ac = 62.4 * D * S$

where,

D = water surface depth, ft

S = channel slope, ft/ft

τac = Actual shear stress, lbs/ft^2

IV. SUMMARY OF RESULTS

a. Stormwater Ponds

The results of the stormwater ponds design are summarized in Table 1. The results of the SWMM modeling for three ponds are provided in Attachment E2. The three ponds detain the water volume generated by the 24-hour, 25-year storm and the discharge outlets are sized appropriately such that the peak water surface elevation in the ponds during the 24-hour, 25-year storm remains safely below the peak storage elevation of the ponds.

b. Culverts

A summary of culverts is presented in Table 2. The results of the culverts design show that the objectives have been met (see also Attachment E2 for associated SWMM output reports). The structures properly control and convey the water volume generated by the 24-hour, 25-year storm such that the peak water surface elevation immediately upstream remains safely below the impounding side slopes.

c. Perimeter Ditches

The results of the channels design are summarized in Table 3 (see also Attachment E2 for the SWMM output report). The channels properly control and convey the water volume generated by the 24-hour, 25-year storm such that the peak water surface elevation stays safely below the impounding side slopes. These are the perimeter channels collecting landfill run-off which is conveyed to the sediment basins. A channel lining of ClosureTurf with HydroBinder was chosen for all perimeter and conveyance channels as the peak velocity ranged from 2 to 11 fps and the actual shear stress ranged from 0.1to 2.7 lbs/ft^2.

d. Stormwater Flumes

The results of the stormwater flumes design are summarized in Table 4 (see also Attachment E2 for the SWMM output report). The flumes properly control and convey the water volume generated by the 24-hour, 25-year storm such that the average flow depth stays safely below the impounding side slopes. A channel lining of ClosureTurf with HydroBinder (manning n = 0.02, and shear stress = 8.8 lb/ft^2)[2] was chosen for all flumes as the peak velocity ranged from 8 to 20 fps and the actual shear stress ranged from 1.6 to 8.7 lbs/ft^2.

e. Benches/ Terraces

A select number of presumed worst-case terraces were modeled based on drainage area/length and channel slope. The results of the terrace design are summarized in Table 5 (see also Attachment E2 for the SWMM output report). The terraces properly control and convey the water volume generated by the 24-hour, 25-year storm such that the average flow depth stays safely below the impounding side slopes. A channel lining of KYTC No. 57 (manning n = 0.039, and shear stress = 5.0 lb/ft^2)[3] was chosen for all terraces as the peak velocity ranged from 1 to 3 fps and the actual shear stress ranged from 0.1 to 1.2 lbs/ft^2.

[2] ClosureTurf with MicroSpike 40mil Product Data Sheet: Watershedgeo.com
[3] Drainage System Controls, transportation.ky.gov (source: https://transportation.ky.gov/EnvironmentalAnalysis/Environmental%20Resources/4-Drainage%20System%20Controls.pdf)

V. CONCLUSIONS

The proposed grading of the landfill and stormwater ponds in combination with the design of the channels and culverts as presented above is sufficient to safely control and convey the 24-hour, 25-year storm. Appropriate outlet protection riprap has been selected for each culvert based on regulatory guidance. The check dams would be appropriate and recommended for this site. Refer to accompanying calculations used to design upstream conveyance features (storm water terraces, perimeter channels, and culverts) entering the basins.

VI. ATTACHMENTS

Figures:

Figure 1: Sitemap

Tables:

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Attachment E4: Sand Infill Hydraulic Stability Calculations

VII. REFERENCES

1- Technical and Operating Requirements for Special Waste Landfills: Section 401 KAR 45:110 (Kentucky Administrative Regulations)

2- ClosureTurf with MicroSpike 40mil Product Data Sheet (Watershedgeo.com)

3- Drainage System Controls (transportation.ky.gov)

4- ClosureTurf Design Guideline Manual (Watershedgeo)

Figure 1

Site Map

Figure 1 Wilson Plant Site Map

Table 1

Stormwater Ponds Hydraulic Design Summary

Table 1 Stormwater Ponds Hydraulic Design Summary

Design Summary						
Pond	Initial Pond Depth (feet)	Maximum Pond Depth (feet)	Pond Inlet Invert Elevation (feet)	Spillway Inlet Invert Elevation (feet)	Maximum Volume Generated (ft3)	Peak Spillway Discharge (cfs)
002	4	7.52	398	402	507,837	88
009	6	8	396	402	240,642	31
014	4.3	8	384	391	1,519,455	0

Table 2

Culverts Hydraulic Design Summary

Table 2 Culverts Hydraulic Design Summary

Design Summary								Model Result		
Link	From Node	To Node	Length (ft)	Depth (ft)	Area (ft2)	Roughness	Barrel	Maximum Flow CFS	Max Velocity ft/sec	Max % Full (Depth)
C76	J76	J77	130.00	2.5	4.91	0.015	1	37	12	60%
C77	J77	Pond009	80.00	2	3.14	0.015	1	37	17	64%
C79	J79	Pond014	80.00	2	3.14	0.015	1	37	18	61%
C80	J80	J81	397.00	3.5	9.62	0.015	1	53	7	75%
C83	J83	Pond002	50.00	2	3.14	0.015	2	53	16	53%
C84	J84	Pond002	64.00	3	7.07	0.015	1	75	16	64%

Table 3

Perimeter Ditches Hydraulic Design Summary

Table 3 Perimeter Ditches Hydraulic Design Summary

Design Summary							Model Result			
Link	From Node	To Node	Length (ft)	Depth (ft)	Area (ft2)	Roughness	Maximum Flow CFS	Max Velocity ft/sec	Max % Full (Depth)	Shear Stress (lb/ft2)
C06	J11	J12	1650.00	2	10	0.02	7	2	40%	0.1
C25	J23	J80	950.00	3	13.5	0.02	53	4	93%	0.4
C26	J47	J84	490.00	3	13.5	0.02	75	6	90%	0.9
C37	J38	J23	818.00	3	13.5	0.02	30	3	80%	0.2
C43	J12	J47	1110.00	2	10	0.02	37	7	56%	0.9
C56-N	J56-N	J47	575.00	2	10	0.02	16	3	55%	0.2
C56-S	J56-S	J66	810.00	2	10	0.02	5	2	28%	0.1
C59-N	J59-N	J38	777.00	2	6	0.02	8	7	24%	1.1
C59-S	J59-S	J69	803.00	2	6	0.02	14	7	44%	1.0
C72	J69	J75	526.00	2	6	0.02	31	8	70%	1.7
C73	J75	J78-W	427.00	2	6	0.02	31	11	57%	2.7
C74	J66	J74	620.00	2	10	0.02	37	4	86%	0.3
C75	J74	J76	310.00	2	10	0.02	37	4	86%	0.3
C78-E	J78-E	J79	330.00	2	10	0.02	3	2	18%	0.1
C78-W	J78-W	J79	300.00	2	10	0.02	34	6	65%	0.5
C81	J81	J82	1150.00	3	13.5	0.02	53	5	86%	0.5
C82	J82	J83	800.00	3	13.5	0.02	53	8	58%	1.3

Table 4

Stormwater Flumes Hydraulic Design Summary

Table 4 Stormwater Flumes Hydraulic Design Summary

Design Summary							Model Result			
Link	From Node	To Node	Length (ft)	Depth (ft)	Area (ft2)	Roughness	Maximum Flow CFS	Max Velocity ft/sec	Max % Full (Depth)	Shear Stress (lb/ft2)
C07	J02	J04	92.00	3	15	0.02	2	8	3%	1.6
C08	J04	J06	97.00	3	15	0.02	5	12	7%	3.5
C09	J06	J08	98.00	3	15	0.02	10	15	10%	4.7
C10	J08	J10	94.00	3	15	0.02	17	18	13%	7.0
C11	J10	J12	140.00	3	15	0.02	24	17	18%	6.1
C20	J14	J16	116.00	3	15	0.02	3	9	5%	1.9
C21	J16	J18	100.00	3	15	0.02	6	12	7%	3.7
C22	J18	J20	123.00	3	15	0.02	9	13	10%	3.9
C23	J20	J22	100.00	3	15	0.02	13	16	11%	5.5
C24	J22	J23	120.00	3	15	0.02	20	18	15%	6.7
C33	J31	J33	108.00	3	15	0.02	5	11	7%	3.1
C34	J33	J35	108.00	3	15	0.02	9	13	10%	3.7
C35	J35	J37	103.00	3	15	0.02	13	17	11%	6.0
C36	J37	J38	121.00	3	15	0.02	18	17	15%	6.2
C44	J29	J43	138.00	3	15	0.02	3	9	5%	1.9
C45	J43	J44	118.00	3	15	0.02	8	11	10%	2.7
C46	J44	J45	106.00	3	15	0.02	12	17	10%	6.8
C47	J45	J46	129.00	3	15	0.02	16	16	14%	5.2
C48	J46	J47	160.00	3	15	0.02	22	18	16%	7.4
C53	J51	J53	142.00	3	15	0.02	3	9	5%	2.0
C54	J53	J55	120.00	3	15	0.02	7	13	9%	3.9
C55	J55	J56-N	123.00	3	15	0.02	11	16	10%	5.6
C58	J58	J59-S	153.00	3	15	0.02	8	12	10%	3.1
C60	J68	J69	140.00	3	15	0.02	10	15	10%	5.3
C64	J61	J63	117.00	3	15	0.02	6	12	8%	3.4
C65	J63	J65	119.00	3	15	0.02	14	15	13%	5.0
C66	J65	J66	141.00	3	15	0.02	25	20	17%	8.7

Table 5

Benches/Terraces Hydraulic Design Summary

Table 5 Benches/Terraces Hydraulic Design Summary

Design Summary							Model Result			
Link	From Node	To Node	Length (ft)	Depth (ft)	Area (ft2)	Roughness	Maximum Flow CFS	Max Velocity ft/sec	Max % Full (Depth)	Shear Stress (lb/ft2)
C01	J01	J02	425.00	2	4	0.039	2	2	42%	1.0
C02	J03	J04	625.00	2	4	0.039	4	3	60%	1.2
C03	J05	J06	957.00	2	4	0.039	5	2	73%	0.8
C04	J07	J08	1100.00	2	4	0.039	7	3	81%	0.9
C05	J09	J10	1300.00	2	4	0.039	7	3	85%	0.9
C15	J13	J14	315.00	2	4	0.039	1	1	52%	0.2
C16	J15	J16	447.00	2	4	0.039	2	1	72%	0.2
C17	J17	J18	571.00	2	4	0.039	3	1	83%	0.2
C18	J19	J20	660.00	2	4	0.039	4	2	72%	0.5
C19	J21	J22	800.00	2	4	0.039	7	2	89%	0.7
C27	J28	J14	600.00	2	4	0.039	2	1	71%	0.1
C28	J30	J31	755.00	2	4	0.039	5	2	79%	0.5
C29	J32	J33	750.00	2	4	0.039	4	2	71%	0.7
C30	J34	J35	809.00	2	4	0.039	4	1	89%	0.3
C31	J36	J37	795.00	2	4	0.039	5	2	84%	0.4
C38	J42	J29	590.00	2	4	0.039	3	1	82%	0.2
C39	J39	J43	670.00	2	4	0.039	4	2	72%	0.5
C40	J40	J44	800.00	2	4	0.039	4	2	80%	0.4
C41	J41	J45	840.00	2	4	0.039	4	2	76%	0.5
C42	J48	J46	947.00	2	4	0.039	6	2	84%	0.6
C49	J49	J43	336.00	2	4	0.039	1	1	53%	0.2
C50	J50	J51	883.00	2	4	0.039	3	2	65%	0.6
C51	J52	J53	815.00	2	4	0.039	4	1	88%	0.3
C52	J54	J55	701.00	2	4	0.039	4	2	83%	0.3
C57	J57	J58	777.00	2	4	0.039	8	2	92%	0.7
C61	J60	J61	781.00	2	4	0.039	4	2	76%	0.4
C62	J62	J63	781.00	2	4	0.039	4	2	73%	0.6
C63	J64	J65	771.00	2	4	0.039	5	2	87%	0.4

Design Summary							Model Result			
Link	From Node	To Node	Length (ft)	Depth (ft)	Area (ft2)	Roughness	Maximum Flow CFS	Max Velocity ft/sec	Max % Full (Depth)	Shear Stress (lb/ft2)
C67	J67	J68	772.00	2	4	0.039	5	2	75%	0.6
C68	J70	J68	635.00	2	4	0.039	5	2	84%	0.5
C69	J71	J61	568.00	2	4	0.039	2	2	59%	0.5
C70	J72	J63	607.00	2	4	0.039	3	2	76%	0.3
C71	J73	J65	1230.00	2	4	0.039	6	2	83%	0.8

Attachment E1

NOAA Precipitation Frequency Data

NOAA Atlas 14, Volume 2, Version 3
Location name: Hartford, Kentucky, USA*
Latitude: 37.4782°, Longitude: -86.8488°
Elevation: 513.99 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.352** (0.323-0.382)	**0.413** (0.380-0.450)	**0.476** (0.438-0.518)	**0.527** (0.483-0.572)	**0.591** (0.539-0.642)	**0.637** (0.578-0.694)	**0.685** (0.618-0.745)	**0.730** (0.654-0.796)	**0.786** (0.698-0.859)	**0.829** (0.730-0.910)
10-min	**0.562** (0.516-0.611)	**0.660** (0.608-0.719)	**0.762** (0.701-0.829)	**0.842** (0.772-0.915)	**0.941** (0.858-1.02)	**1.01** (0.921-1.10)	**1.09** (0.982-1.18)	**1.16** (1.04-1.26)	**1.24** (1.10-1.36)	**1.31** (1.15-1.43)
15-min	**0.702** (0.645-0.763)	**0.830** (0.764-0.904)	**0.964** (0.887-1.05)	**1.07** (0.977-1.16)	**1.19** (1.09-1.30)	**1.29** (1.17-1.40)	**1.38** (1.24-1.50)	**1.46** (1.31-1.59)	**1.57** (1.39-1.71)	**1.64** (1.44-1.80)
30-min	**0.962** (0.885-1.05)	**1.15** (1.06-1.25)	**1.37** (1.26-1.49)	**1.54** (1.42-1.68)	**1.77** (1.61-1.92)	**1.94** (1.76-2.11)	**2.11** (1.90-2.29)	**2.27** (2.04-2.48)	**2.49** (2.21-2.72)	**2.65** (2.34-2.91)
60-min	**1.20** (1.10-1.31)	**1.44** (1.32-1.57)	**1.76** (1.62-1.91)	**2.01** (1.84-2.18)	**2.35** (2.15-2.56)	**2.62** (2.38-2.85)	**2.90** (2.62-3.16)	**3.19** (2.86-3.48)	**3.57** (3.17-3.91)	**3.87** (3.41-4.25)
2-hr	**1.45** (1.34-1.57)	**1.74** (1.61-1.89)	**2.14** (1.98-2.32)	**2.46** (2.27-2.66)	**2.89** (2.65-3.13)	**3.23** (2.95-3.50)	**3.58** (3.25-3.88)	**3.95** (3.55-4.29)	**4.45** (3.95-4.84)	**4.84** (4.26-5.29)
3-hr	**1.58** (1.47-1.71)	**1.89** (1.76-2.05)	**2.33** (2.16-2.53)	**2.68** (2.48-2.90)	**3.17** (2.91-3.42)	**3.56** (3.26-3.85)	**3.96** (3.60-4.29)	**4.39** (3.96-4.75)	**4.97** (4.43-5.41)	**5.44** (4.79-5.95)
6-hr	**1.95** (1.81-2.12)	**2.34** (2.17-2.54)	**2.88** (2.66-3.12)	**3.33** (3.07-3.60)	**3.97** (3.63-4.28)	**4.49** (4.09-4.85)	**5.05** (4.55-5.46)	**5.64** (5.04-6.11)	**6.47** (5.69-7.04)	**7.16** (6.22-7.81)
12-hr	**2.35** (2.16-2.58)	**2.82** (2.59-3.10)	**3.47** (3.19-3.81)	**4.02** (3.67-4.41)	**4.79** (4.35-5.24)	**5.43** (4.90-5.94)	**6.11** (5.46-6.69)	**6.83** (6.04-7.49)	**7.86** (6.85-8.63)	**8.70** (7.48-9.59)
24-hr	**2.84** (2.63-3.07)	**3.41** (3.17-3.69)	**4.24** (3.93-4.58)	**4.92** (4.55-5.31)	**5.90** (5.42-6.36)	**6.71** (6.13-7.23)	**7.57** (6.87-8.17)	**8.49** (7.63-9.18)	**9.80** (8.68-10.6)	**10.9** (9.52-11.8)
2-day	**3.42** (3.16-3.71)	**4.10** (3.79-4.45)	**5.09** (4.71-5.53)	**5.92** (5.45-6.42)	**7.11** (6.51-7.71)	**8.10** (7.37-8.80)	**9.17** (8.27-9.97)	**10.3** (9.21-11.3)	**12.0** (10.5-13.2)	**13.4** (11.6-14.7)
3-day	**3.64** (3.37-3.94)	**4.36** (4.04-4.73)	**5.42** (5.01-5.87)	**6.30** (5.81-6.83)	**7.57** (6.94-8.20)	**8.64** (7.86-9.37)	**9.78** (8.82-10.6)	**11.0** (9.84-12.0)	**12.8** (11.3-14.0)	**14.3** (12.4-15.8)
4-day	**3.86** (3.58-4.18)	**4.62** (4.29-5.01)	**5.75** (5.32-6.22)	**6.68** (6.17-7.23)	**8.03** (7.37-8.70)	**9.17** (8.35-9.93)	**10.4** (9.38-11.3)	**11.7** (10.5-12.8)	**13.6** (12.0-14.9)	**15.2** (13.2-16.8)
7-day	**4.52** (4.17-4.95)	**5.42** (5.00-5.94)	**6.78** (6.23-7.43)	**7.96** (7.29-8.71)	**9.73** (8.84-10.6)	**11.3** (10.2-12.3)	**13.0** (11.6-14.2)	**14.8** (13.1-16.4)	**17.7** (15.3-19.6)	**20.1** (17.1-22.5)
10-day	**5.09** (4.71-5.55)	**6.10** (5.63-6.64)	**7.57** (6.97-8.24)	**8.82** (8.11-9.61)	**10.7** (9.75-11.6)	**12.3** (11.1-13.4)	**14.0** (12.6-15.3)	**15.9** (14.2-17.5)	**18.8** (16.4-20.7)	**21.2** (18.2-23.5)
20-day	**6.99** (6.55-7.47)	**8.30** (7.78-8.88)	**9.98** (9.34-10.7)	**11.3** (10.6-12.1)	**13.2** (12.3-14.1)	**14.7** (13.6-15.7)	**16.3** (15.0-17.4)	**17.9** (16.3-19.2)	**20.1** (18.2-21.7)	**21.9** (19.7-23.9)
30-day	**8.59** (8.09-9.15)	**10.2** (9.56-10.8)	**12.0** (11.3-12.8)	**13.5** (12.7-14.4)	**15.5** (14.6-16.5)	**17.1** (16.0-18.2)	**18.7** (17.4-20.0)	**20.4** (18.8-21.8)	**22.5** (20.6-24.2)	**24.2** (22.0-26.2)
45-day	**10.8** (10.2-11.4)	**12.7** (12.0-13.4)	**14.8** (14.0-15.6)	**16.4** (15.5-17.3)	**18.4** (17.4-19.5)	**20.0** (18.8-21.2)	**21.5** (20.1-22.8)	**23.0** (21.4-24.4)	**24.8** (23.0-26.5)	**26.3** (24.2-28.1)
60-day	**12.9** (12.3-13.6)	**15.2** (14.4-16.0)	**17.5** (16.6-18.4)	**19.2** (18.2-20.2)	**21.3** (20.2-22.4)	**22.9** (21.6-24.1)	**24.4** (22.9-25.7)	**25.7** (24.1-27.2)	**27.4** (25.6-29.0)	**28.6** (26.6-30.4)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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Attachment E2

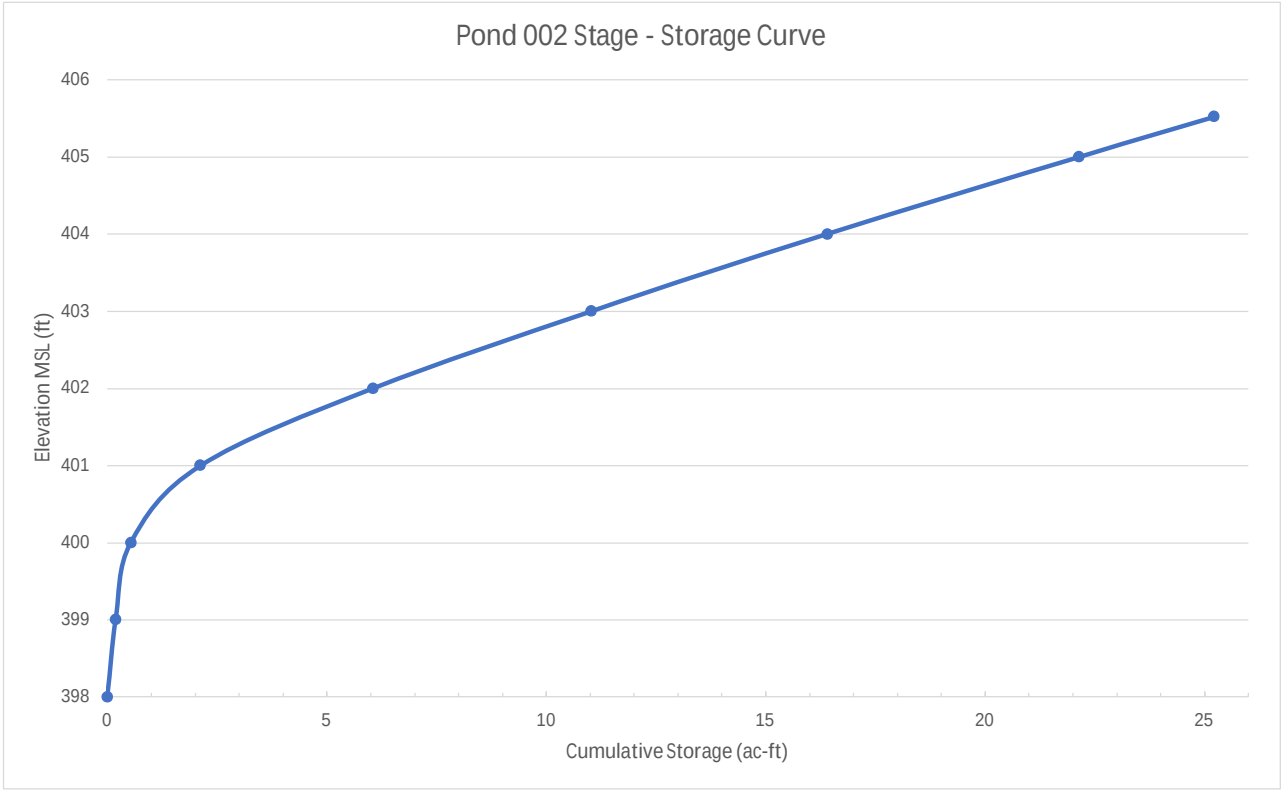
SWMM Output Report

Hydrologic and Hydraulic Report

Ponds Stage-Storage Curves

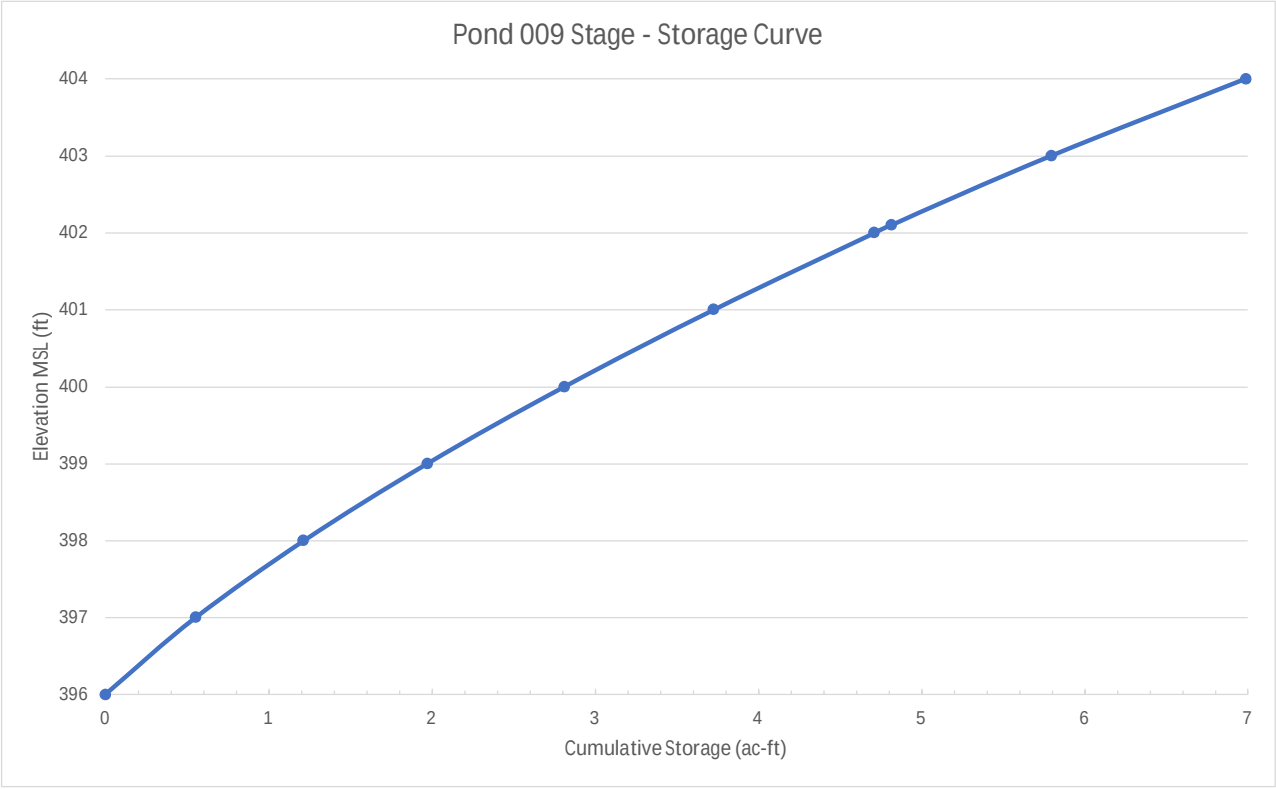
Pond 002	
Bottom Elv. (ft)	398
Initial pool Elv. (ft)	402
Spillway Elv. (ft)	402
Pond top Elv. (ft)	405.52
Spillway Height (ft)	3.52
Inlet offset (ft)	4
Weir crest Length (ft)	10
Initial Depth (ft)	4
Max Depth (ft)	7.52

Elev (ft)	Area (ac)	Avg Area (ac)	Interval (ft)	Storage (ac-ft)	Cum. Storage (ac-ft)	Stage Interval (ft)
398	0.0123				0.00	
399	0.3735	0.1929	1.00	0.1929	0.1929	1.00
400	0.3269	0.3502	1.00	0.3502	0.5431	2.00
401	2.8288	1.5779	1.00	1.5779	2.1210	3.00
402	5.056	3.9424	1.00	3.9424	6.0634	4.00
403	4.8653	4.9607	1.00	4.9607	11.0240	5.00
404	5.9032	5.3843	1.00	5.3843	16.4083	6.00
405	5.5565	5.7299	1.00	5.7299	22.1381	7.00
405.52	6.3161	5.9363	0.52	3.0869	25.2250	7.52



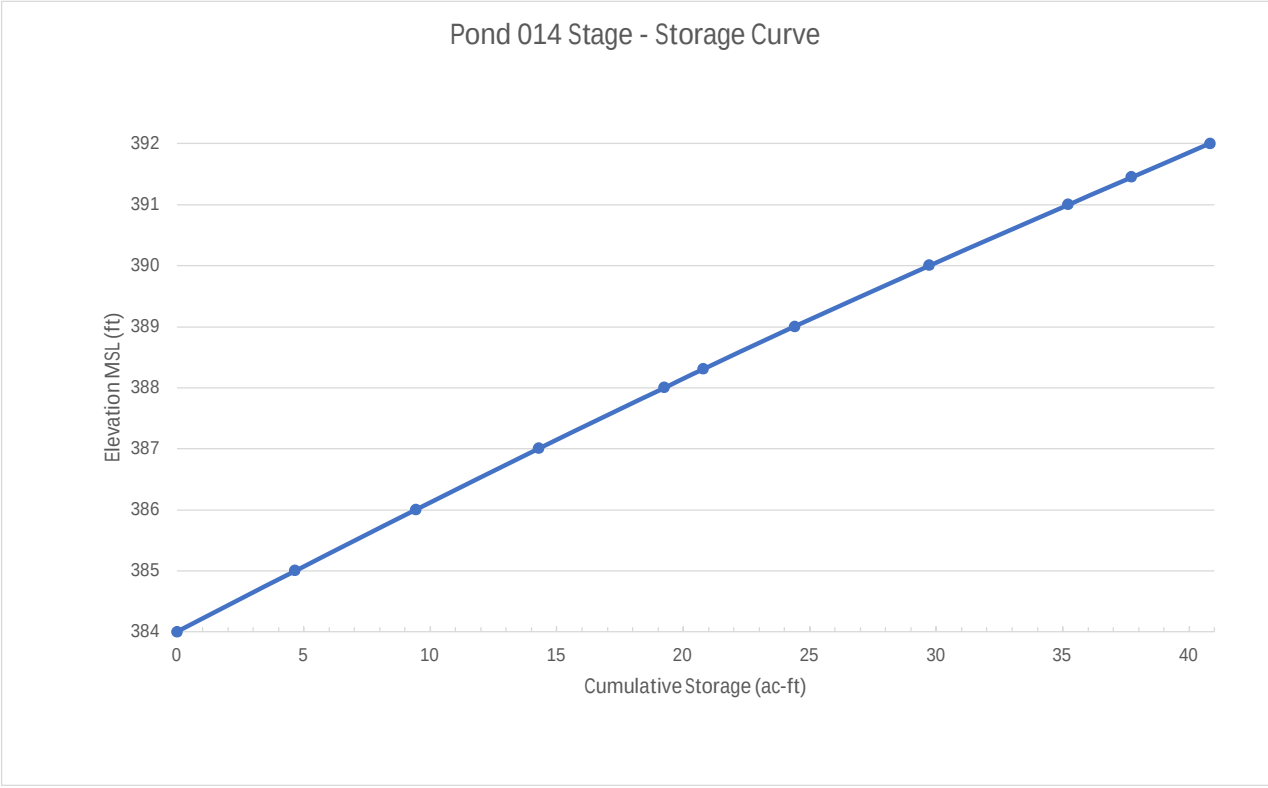
Pond 009	
Bottom Elv. (ft)	396
Initial pool Elv. (ft)	402
Spillway Elv. (ft)	402
Pond top Elv. (ft)	404
Spillway Height (ft)	2
Inlet offset (ft)	6
Weir crest Length (ft)	14
Initial Depth (ft)	6
Max Depth (ft)	8

Elev (ft)	Area (ac)	Avg Area (ac)	Interval (ft)	Storage (ac-ft)	Cum. Storage (ac-ft)	Stage Interval (ft)
396	0.5				0.00	0.00
397	0.605	0.5525	1.00	0.5525	0.5525	1.00
398	0.72	0.6625	1.00	0.6625	1.2150	2.00
399	0.798	0.7590	1.00	0.7590	1.9740	3.00
400	0.88	0.8390	1.00	0.8390	2.8130	4.00
401	0.949	0.9145	1.00	0.9145	3.7275	5.00
402	1.02	0.9845	1.00	0.9845	4.7120	6.00
402.1	1.05	1.0350	0.10	0.1035	4.8155	6.10
403	1.132	1.0910	0.90	0.9819	5.7974	7.00
404	1.25	1.1910	1.00	1.1910	6.9884	8.00



Pond 014	
Bottom Elv. (ft)	384
Initial pool Elv. (ft)	388.3
Spillway Elv. (ft)	391
Pond top Elv. (ft)	392
Spillway Height (ft)	1
Inlet offset (ft)	7
Weir crest Length (ft)	10
Initial Depth (ft)	4.3
Max Depth (ft)	8

Elev (ft)	Area (ac)	Avg Area (ac)	Interval (ft)	Storage (ac-ft)	Cum. Storage (ac-ft)	Stage Interval (ft)
384	4.62				0.00	
385	4.73	4.6750	1.00	4.6750	4.6750	1.00
386	4.82	4.7750	1.00	4.7750	9.4500	2.00
387	4.88	4.8500	1.00	4.8500	14.3000	3.00
388	5.057	4.9685	1.00	4.9685	19.2685	4.00
388.3	5.111	5.0840	0.30	1.5252	20.7937	4.30
389	5.237	5.1740	0.70	3.6218	24.4155	5.00
390	5.42	5.3285	1.00	5.3285	29.7440	6.00
391	5.544	5.4820	1.00	5.4820	35.2260	7.00
391.45	5.601	5.5725	0.45	2.5076	37.7336	7.45
392	5.67	5.6355	0.55	3.0995	40.8332	8.00



Model Input File

LANDFILL SWMM MODEL MAP

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

****
Element Count
****
Number of rain gages 1
Number of subcatchments ... 45
Number of nodes 88
Number of links 86
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
G1	25yr-24hr	VOLUME	30 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
S1	0.58	59.00	100.00	20.8000	G1	J01
S2	1.43	100.00	100.00	23.8000	G1	J03
S3	1.92	87.00	100.00	23.7000	G1	J05
S4	2.65	105.00	100.00	22.7000	G1	J07
S5	3.00	101.00	100.00	22.6000	G1	J09
S6	3.00	79.00	100.00	20.1000	G1	J11
S7	0.44	61.00	100.00	15.3000	G1	J13
S8	0.86	84.00	100.00	23.7000	G1	J15
S9	1.17	89.00	100.00	23.5000	G1	J17

S10	1.50	99.00	100.00	20.2000 G1	J19
S11	2.66	145.00	100.00	23.0000 G1	J21
S12	1.74	80.00	100.00	26.4000 G1	J23
S17	0.76	55.00	100.00	15.3000 G1	J28
S18	1.80	104.00	100.00	23.7000 G1	J30
S19	1.64	95.00	100.00	20.2000 G1	J32
S21	1.71	92.00	100.00	24.4000 G1	J34
S22	1.78	98.00	100.00	23.1000 G1	J36
S23	1.71	91.00	100.00	24.3000 G1	J38
S24	1.10	81.00	100.00	20.8000 G1	J42
S25	1.48	96.00	100.00	24.0000 G1	J39
S26	1.57	85.00	100.00	25.9000 G1	J40
S27	1.56	81.00	100.00	21.6000 G1	J41
S28	2.19	101.00	100.00	26.0000 G1	J48
S29	2.97	117.00	100.00	19.1000 G1	J12
S30	3.00	168.00	100.00	22.3000 G1	J57
S31	2.93	164.00	100.00	19.4000 G1	J59-N
S32	0.44	57.00	100.00	24.0000 G1	J49
S33	1.23	61.00	100.00	25.9000 G1	J50
S34	1.65	88.00	100.00	26.4000 G1	J52
S35	1.50	93.00	100.00	21.4000 G1	J54
S36	1.85	140.00	100.00	23.9000 G1	J56-N
S37	1.75	99.00	100.00	19.0000 G1	J67
S38	2.56	139.00	100.00	22.6000 G1	J59-S
S39	1.57	88.00	100.00	5.6000 G1	J60
S40	1.60	89.00	100.00	26.4000 G1	J62
S41	2.00	113.00	100.00	23.1000 G1	J64
S42	2.00	108.00	100.00	23.5000 G1	J56-S
S43	1.00	77.00	100.00	5.6000 G1	J71
S44	1.26	90.00	100.00	26.4000 G1	J72
S45	2.59	92.00	100.00	23.1000 G1	J73
S46	2.50	117.00	100.00	23.5000 G1	J66
S47	2.00	137.00	100.00	19.0000 G1	J70
S48	2.82	129.00	100.00	22.6000 G1	J69
S49	1.00	132.00	100.00	27.5000 G1	J78-E
S50	1.00	145.00	100.00	28.9000 G1	J78-W

****

Node Summary

****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J01	JUNCTION	556.00	2.00	0.0	
J02	JUNCTION	548.00	3.00	0.0	
J03	JUNCTION	533.00	2.00	0.0	
J04	JUNCTION	523.00	3.00	0.0	
J05	JUNCTION	506.00	2.00	0.0	
J06	JUNCTION	498.00	3.00	0.0	
J07	JUNCTION	484.00	2.00	0.0	
J08	JUNCTION	474.00	3.00	0.0	
J09	JUNCTION	459.00	2.00	0.0	
J10	JUNCTION	448.00	3.00	0.0	
J11	JUNCTION	425.00	2.00	0.0	
J12	JUNCTION	423.00	3.00	0.0	
J13	JUNCTION	556.00	2.00	0.0	
J14	JUNCTION	555.00	3.00	0.0	
J15	JUNCTION	533.00	2.00	0.0	
J16	JUNCTION	532.00	3.00	0.0	
J17	JUNCTION	506.00	2.00	0.0	
J18	JUNCTION	505.00	3.00	0.0	
J19	JUNCTION	484.00	2.00	0.0	
J20	JUNCTION	480.00	3.00	0.0	
J21	JUNCTION	459.00	2.00	0.0	
J22	JUNCTION	454.00	3.00	0.0	
J23	JUNCTION	426.00	3.00	0.0	
J28	JUNCTION	556.00	2.00	0.0	
J29	JUNCTION	552.00	3.00	0.0	
J30	JUNCTION	532.00	2.00	0.0	
J31	JUNCTION	528.00	3.00	0.0	
J32	JUNCTION	509.00	2.00	0.0	
J33	JUNCTION	503.00	3.00	0.0	
J34	JUNCTION	484.00	2.00	0.0	
J35	JUNCTION	482.00	3.00	0.0	
J36	JUNCTION	456.00	2.00	0.0	
J37	JUNCTION	453.00	3.00	0.0	
J38	JUNCTION	427.00	3.00	0.0	
J39	JUNCTION	529.00	2.00	0.0	
J40	JUNCTION	511.00	2.00	0.0	

J41	JUNCTION	476.00	2.00	0.0
J42	JUNCTION	553.00	2.00	0.0
J43	JUNCTION	525.00	3.00	0.0
J44	JUNCTION	508.00	3.00	0.0
J45	JUNCTION	472.00	3.00	0.0
J46	JUNCTION	447.00	3.00	0.0
J47	JUNCTION	408.50	3.00	0.0
J48	JUNCTION	452.00	2.00	0.0
J49	JUNCTION	526.00	2.00	0.0
J50	JUNCTION	508.00	2.00	0.0
J51	JUNCTION	502.00	3.00	0.0
J52	JUNCTION	474.00	2.00	0.0
J53	JUNCTION	472.00	3.00	0.0
J54	JUNCTION	447.00	2.00	0.0
J55	JUNCTION	445.00	3.00	0.0
J56-N	JUNCTION	410.00	3.00	0.0
J56-S	JUNCTION	410.00	2.00	0.0
J57	JUNCTION	485.00	2.00	0.0
J58	JUNCTION	480.00	3.00	0.0
J59-N	JUNCTION	455.00	2.00	0.0
J59-S	JUNCTION	455.00	3.00	0.0
J60	JUNCTION	501.00	2.00	0.0
J61	JUNCTION	498.00	3.00	0.0
J62	JUNCTION	477.00	2.00	0.0
J63	JUNCTION	472.00	3.00	0.0
J64	JUNCTION	451.00	2.00	0.0
J65	JUNCTION	445.00	3.00	0.0
J66	JUNCTION	408.00	3.00	0.0
J67	JUNCTION	483.00	2.00	0.0
J68	JUNCTION	478.00	3.00	0.0
J69	JUNCTION	440.00	3.00	0.0
J70	JUNCTION	481.00	2.00	0.0
J71	JUNCTION	502.00	2.00	0.0
J72	JUNCTION	474.00	2.00	0.0
J73	JUNCTION	457.00	2.00	0.0
J74	JUNCTION	406.00	2.00	0.0
J75	JUNCTION	430.00	2.00	0.0
J76	JUNCTION	405.00	2.50	0.0
J77	JUNCTION	402.00	2.50	0.0
J78-E	JUNCTION	413.00	2.00	0.0

J78-W	JUNCTION	414.00	2.00	0.0
J79	JUNCTION	412.00	2.00	0.0
J80	JUNCTION	423.80	3.50	0.0
J81	JUNCTION	422.00	3.50	0.0
J82	JUNCTION	418.50	3.00	0.0
J83	JUNCTION	409.00	3.00	0.0
J84	JUNCTION	406.00	3.00	0.0
Out4	OUTFALL	380.00	0.00	0.0
Out5	OUTFALL	380.00	0.00	0.0
Pond014	STORAGE	384.00	8.00	0.0
Pond002	STORAGE	398.00	7.52	0.0
Pond009	STORAGE	396.00	8.00	0.0

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Link Summary
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Name	From Node	To Node	Type	Length	%Slope	Roughness
C01	J01	J02	CONDUIT	425.0	1.8827	0.0390
C02	J03	J04	CONDUIT	625.0	1.6002	0.0390
C03	J05	J06	CONDUIT	957.0	0.8360	0.0390
C04	J07	J08	CONDUIT	1100.0	0.9091	0.0390
C05	J09	J10	CONDUIT	1300.0	0.8462	0.0390
C06	J11	J12	CONDUIT	1650.0	0.1212	0.0200
C07	J02	J04	CONDUIT	92.0	28.2364	0.0200
C08	J04	J06	CONDUIT	97.0	26.6743	0.0200
C09	J06	J08	CONDUIT	98.0	25.2590	0.0200
C10	J08	J10	CONDUIT	94.0	28.7825	0.0200
C11	J10	J12	CONDUIT	140.0	18.1489	0.0200
C15	J13	J14	CONDUIT	315.0	0.3175	0.0390
C16	J15	J16	CONDUIT	447.0	0.2237	0.0390
C17	J17	J18	CONDUIT	571.0	0.1751	0.0390
C18	J19	J20	CONDUIT	660.0	0.6061	0.0390
C19	J21	J22	CONDUIT	800.0	0.6250	0.0390
C20	J14	J16	CONDUIT	116.0	20.2292	0.0200
C21	J16	J18	CONDUIT	100.0	28.0415	0.0200
C22	J18	J20	CONDUIT	123.0	20.7585	0.0200
C23	J20	J22	CONDUIT	100.0	26.9260	0.0200
C24	J22	J23	CONDUIT	120.0	23.9957	0.0200

C25	J23	J80	CONDUIT	950.0	0.2316	0.0200
C26	J47	J84	CONDUIT	490.0	0.5102	0.0200
C27	J28	J14	CONDUIT	600.0	0.1667	0.0390
C28	J30	J31	CONDUIT	755.0	0.5298	0.0390
C29	J32	J33	CONDUIT	750.0	0.8000	0.0390
C30	J34	J35	CONDUIT	809.0	0.2472	0.0390
C31	J36	J37	CONDUIT	795.0	0.3774	0.0390
C33	J31	J33	CONDUIT	108.0	23.7944	0.0200
C34	J33	J35	CONDUIT	108.0	19.8228	0.0200
C35	J35	J37	CONDUIT	103.0	29.3424	0.0200
C36	J37	J38	CONDUIT	121.0	22.0015	0.0200
C37	J38	J23	CONDUIT	818.0	0.1222	0.0200
C38	J42	J29	CONDUIT	590.0	0.1695	0.0390
C39	J39	J43	CONDUIT	670.0	0.5970	0.0390
C40	J40	J44	CONDUIT	800.0	0.3750	0.0390
C41	J41	J45	CONDUIT	840.0	0.4762	0.0390
C42	J48	J46	CONDUIT	947.0	0.5280	0.0390
C43	J12	J47	CONDUIT	1110.0	1.3064	0.0200
C44	J29	J43	CONDUIT	138.0	19.9508	0.0200
C45	J43	J44	CONDUIT	118.0	14.5587	0.0200
C46	J44	J45	CONDUIT	106.0	36.1085	0.0200
C47	J45	J46	CONDUIT	129.0	19.7544	0.0200
C48	J46	J47	CONDUIT	160.0	24.7909	0.0200
C49	J49	J43	CONDUIT	336.0	0.2976	0.0390
C50	J50	J51	CONDUIT	883.0	0.6795	0.0390
C51	J52	J53	CONDUIT	815.0	0.2454	0.0390
C52	J54	J55	CONDUIT	701.0	0.2853	0.0390
C53	J51	J53	CONDUIT	142.0	21.6146	0.0200
C54	J53	J55	CONDUIT	120.0	23.0921	0.0200
C55	J55	J56-N	CONDUIT	123.0	29.6823	0.0200
C56-N	J56-N	J47	CONDUIT	575.0	0.2609	0.0200
C56-S	J56-S	J66	CONDUIT	810.0	0.2469	0.0200
C57	J57	J58	CONDUIT	777.0	0.6435	0.0390
C58	J58	J59-S	CONDUIT	153.0	16.5625	0.0200
C59-N	J59-N	J38	CONDUIT	777.0	3.6059	0.0200
C59-S	J59-S	J69	CONDUIT	803.0	1.8683	0.0200
C60	J68	J69	CONDUIT	140.0	28.2016	0.0200
C61	J60	J61	CONDUIT	781.0	0.3841	0.0390
C62	J62	J63	CONDUIT	781.0	0.6402	0.0390
C63	J64	J65	CONDUIT	771.0	0.7782	0.0390

C64	J61	J63	CONDUIT	117.0	22.7921	0.0200
C65	J63	J65	CONDUIT	119.0	23.2966	0.0200
C66	J65	J66	CONDUIT	141.0	27.1941	0.0200
C67	J67	J68	CONDUIT	772.0	0.6477	0.0390
C68	J70	J68	CONDUIT	635.0	0.4724	0.0390
C69	J71	J61	CONDUIT	568.0	0.7042	0.0390
C70	J72	J63	CONDUIT	607.0	0.3295	0.0390
C71	J73	J65	CONDUIT	1230.0	0.9757	0.0390
C72	J69	J75	CONDUIT	526.0	1.9015	0.0200
C73	J75	J78-W	CONDUIT	427.0	3.7497	0.0200
C74	J66	J74	CONDUIT	620.0	0.3226	0.0200
C75	J74	J76	CONDUIT	310.0	0.3226	0.0200
C76	J76	J77	CONDUIT	130.0	2.3083	0.0150
C77	J77	Pond009	CONDUIT	80.0	6.2622	0.0150
C78-E	J78-E	J79	CONDUIT	330.0	0.3030	0.0200
C78-W	J78-W	J79	CONDUIT	300.0	0.6667	0.0200
C79	J79	Pond014	CONDUIT	80.0	7.5212	0.0150
C80	J80	J81	CONDUIT	397.0	0.4534	0.0150
C81	J81	J82	CONDUIT	1150.0	0.3043	0.0200
C82	J82	J83	CONDUIT	800.0	1.1876	0.0200
C83	J83	Pond002	CONDUIT	50.0	6.0108	0.0150
C84	J84	Pond002	CONDUIT	64.0	3.1265	0.0150
Weir002	Pond002	Out5	WEIR			
Weir009	Pond009	Pond014	WEIR			
Weir014	Pond014	Out4	WEIR			

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Cross Section Summary
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Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C01	TRIANGULAR	2.00	4.00	0.71	4.00	1	16.60
C02	TRIANGULAR	2.00	4.00	0.71	4.00	1	15.30
C03	TRIANGULAR	2.00	4.00	0.71	4.00	1	11.06
C04	TRIANGULAR	2.00	4.00	0.71	4.00	1	11.53
C05	TRIANGULAR	2.00	4.00	0.71	4.00	1	11.13
C06	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	28.89
C07	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	751.90

C08	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	730.80
C09	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	711.15
C10	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	759.13
C11	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	602.81
C15	TRIANGULAR	2.00	4.00	0.71	4.00	1	6.82
C16	TRIANGULAR	2.00	4.00	0.71	4.00	1	5.72
C17	TRIANGULAR	2.00	4.00	0.71	4.00	1	5.06
C18	TRIANGULAR	2.00	4.00	0.71	4.00	1	9.42
C19	TRIANGULAR	2.00	4.00	0.71	4.00	1	9.56
C20	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	636.42
C21	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	749.30
C22	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	644.69
C23	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	734.24
C24	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	693.14
C25	TRAPEZOIDAL	3.00	13.50	1.39	6.00	1	60.14
C26	TRAPEZOIDAL	3.00	13.50	1.39	6.00	1	89.26
C27	TRIANGULAR	2.00	4.00	0.71	4.00	1	4.94
C28	TRIANGULAR	2.00	4.00	0.71	4.00	1	8.81
C29	TRIANGULAR	2.00	4.00	0.71	4.00	1	10.82
C30	TRIANGULAR	2.00	4.00	0.71	4.00	1	6.01
C31	TRIANGULAR	2.00	4.00	0.71	4.00	1	7.43
C33	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	690.23
C34	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	629.99
C35	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	766.48
C36	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	663.71
C37	TRAPEZOIDAL	3.00	13.50	1.39	6.00	1	43.69
C38	TRIANGULAR	2.00	4.00	0.71	4.00	1	4.98
C39	TRIANGULAR	2.00	4.00	0.71	4.00	1	9.35
C40	TRIANGULAR	2.00	4.00	0.71	4.00	1	7.41
C41	TRIANGULAR	2.00	4.00	0.71	4.00	1	8.35
C42	TRIANGULAR	2.00	4.00	0.71	4.00	1	8.79
C43	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	94.85
C44	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	632.03
C45	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	539.90
C46	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	850.27
C47	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	628.91
C48	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	704.53
C49	TRIANGULAR	2.00	4.00	0.71	4.00	1	6.60
C50	TRIANGULAR	2.00	4.00	0.71	4.00	1	9.97
C51	TRIANGULAR	2.00	4.00	0.71	4.00	1	5.99

C52	TRIANGULAR	2.00	4.00	0.71	4.00	1	6.46
C53	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	657.85
C54	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	679.96
C55	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	770.91
C56-N	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	42.38
C56-S	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	41.24
C57	TRIANGULAR	2.00	4.00	0.71	4.00	1	9.70
C58	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	575.86
C59-N	TRAPEZOIDAL	2.00	6.00	0.93	4.00	1	80.49
C59-S	TRAPEZOIDAL	2.00	6.00	0.93	4.00	1	57.93
C60	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	751.43
C61	TRIANGULAR	2.00	4.00	0.71	4.00	1	7.50
C62	TRIANGULAR	2.00	4.00	0.71	4.00	1	9.68
C63	TRIANGULAR	2.00	4.00	0.71	4.00	1	10.67
C64	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	675.53
C65	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	682.97
C66	TRAPEZOIDAL	3.00	15.00	1.43	8.00	1	737.89
C67	TRIANGULAR	2.00	4.00	0.71	4.00	1	9.74
C68	TRIANGULAR	2.00	4.00	0.71	4.00	1	8.31
C69	TRIANGULAR	2.00	4.00	0.71	4.00	1	10.15
C70	TRIANGULAR	2.00	4.00	0.71	4.00	1	6.94
C71	TRIANGULAR	2.00	4.00	0.71	4.00	1	11.95
C72	TRAPEZOIDAL	2.00	6.00	0.93	4.00	1	58.45
C73	TRAPEZOIDAL	2.00	6.00	0.93	4.00	1	82.07
C74	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	47.13
C75	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	47.13
C76	CIRCULAR	2.50	4.91	0.63	2.50	1	54.01
C77	CIRCULAR	2.00	3.14	0.50	2.00	1	49.06
C78-E	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	45.68
C78-W	TRAPEZOIDAL	2.00	10.00	1.18	6.00	1	67.76
C79	CIRCULAR	2.00	3.14	0.50	2.00	1	53.77
C80	CIRCULAR	3.50	9.62	0.88	3.50	1	58.71
C81	TRAPEZOIDAL	3.00	13.50	1.39	6.00	1	68.94
C82	TRAPEZOIDAL	3.00	13.50	1.39	6.00	1	136.18
C83	CIRCULAR	2.00	3.14	0.50	2.00	2	48.07
C84	CIRCULAR	3.00	7.07	0.75	3.00	1	102.21

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Model Output File

NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
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****
Analysis Options
****
Flow Units ..... CFS
Process Models:
  Rainfall/Runoff ..... YES
  RDII ..... NO
  Snowmelt ..... NO
  Groundwater ..... NO
  Flow Routing ..... YES
  Ponding Allowed ..... NO
  Water Quality ..... NO
Infiltration Method ..... CURVE_NUMBER
Flow Routing Method ..... KINWAVE
Starting Date 09/07/2020 00:00:00
Ending Date 09/09/2020 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:15:00
Wet Time Step 00:05:00
Dry Time Step 00:05:00
Routing Time Step ..... 5.00 sec

****
Control Actions Taken
****

**********   Volume   Depth
Runoff Quantity Continuity   acre-feet   inches
**********   ---------   -------
Total Precipitation 39.073   5.900
Evaporation Loss 0.000   0.000
Infiltration Loss 0.000   0.000
Surface Runoff 39.087   5.902

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Final Storage ............          0.010         0.001
Continuity Error (%) .....         -0.061

**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......          0.000         0.000
Wet Weather Inflow .......         39.087        12.737
Groundwater Inflow .......          0.000         0.000
RDII Inflow ..............          0.000         0.000
External Inflow ..........          0.000         0.000
External Outflow .........         24.960         8.134
Flooding Loss ............          0.000         0.000
Evaporation Loss .........          0.000         0.000
Exfiltration Loss ........          0.000         0.000
Initial Stored Volume ....         31.854        10.380
Final Stored Volume ......         45.973        14.981
Continuity Error (%) .....          0.010

*******************************
Highest Flow Instability Indexes
*******************************
All links are stable.


************************
Routing Time Step Summary
************************
Minimum Time Step           :     5.00 sec
Average Time Step           :     5.00 sec
Maximum Time Step           :     5.00 sec
Percent in Steady State     :     0.00
Average Iterations per Step :     1.01
Percent Not Converging      :     0.00


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Subcatchment Runoff Summary
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Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
S1	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.09	1.60	1.001
S2	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.23	3.88	1.001
S3	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.31	4.99	1.000
S4	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.42	6.74	1.000
S5	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.48	7.42	1.000
S6	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.48	6.94	1.000
S7	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.07	1.22	1.001
S8	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.14	2.37	1.001
S9	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.19	3.19	1.001
S10	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.24	4.02	1.000
S11	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.43	7.05	1.000
S12	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.28	4.56	1.000
S17	5.90	0.00	0.00	0.00	5.90	0.00	5.90	0.12	2.03	1.000

S18			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.29	4.81	1.000							
S19			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.26	4.35	1.000							
S21			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.27	4.54	1.000							
S22			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.29	4.73	1.000							
S23			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.27	4.54	1.000							
S24			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.18	2.98	1.001							
S25			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.24	3.99	1.001							
S26			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.25	4.18	1.000							
S27			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.25	4.10	1.000							
S28			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.35	5.74	1.000							
S29			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.48	7.44	1.000							
S30			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.48	7.96	1.000							
S31			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.47	7.72	1.000							
S32			5.90	0.00	0.00	0.00	5.91	0.00	5.91
0.07	1.22	1.001							
S33			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.20	3.25	1.000							
S34			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.26	4.40	1.000							
S35			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.24	4.01	1.000							
S36			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.30	5.04	1.001							
S37			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.28	4.61	1.000							
S38			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.41	6.78	1.000							

S39			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.25	3.74	1.000							
S40			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.26	4.28	1.000							
S41			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.32	5.32	1.000							
S42			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.32	5.30	1.000							
S43			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.16	2.53	1.000							
S44			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.20	3.43	1.001							
S45			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.41	6.48	1.000							
S46			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.40	6.52	1.000							
S47			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.32	5.37	1.000							
S48			5.90	0.00	0.00	0.00	5.90	0.00	5.90
0.45	7.32	1.000							
S49			5.90	0.00	0.00	0.00	5.91	0.00	5.91
0.16	2.78	1.001							
S50			5.90	0.00	0.00	0.00	5.91	0.00	5.91
0.16	2.78	1.001							

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Node Depth Summary
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Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J01	JUNCTION	0.16	0.83	556.83	0 12:30	0.83
J02	JUNCTION	0.16	0.83	548.83	0 12:30	0.83
J03	JUNCTION	0.24	1.20	534.20	0 12:30	1.19
J04	JUNCTION	0.24	1.19	524.19	0 12:31	1.19
J05	JUNCTION	0.31	1.48	507.48	0 12:30	1.48

J06	JUNCTION	0.31	1.47	499.47	0	12:33	1.45
J07	JUNCTION	0.34	1.64	485.64	0	12:30	1.63
J08	JUNCTION	0.34	1.62	475.62	0	12:33	1.59
J09	JUNCTION	0.37	1.72	460.72	0	12:30	1.72
J10	JUNCTION	0.37	1.70	449.70	0	12:35	1.65
J11	JUNCTION	0.10	0.83	425.83	0	12:30	0.83
J12	JUNCTION	0.13	1.13	424.13	0	12:33	1.10
J13	JUNCTION	0.20	1.05	557.05	0	12:30	1.05
J14	JUNCTION	0.29	1.42	556.42	0	12:34	1.39
J15	JUNCTION	0.28	1.44	534.44	0	12:30	1.44
J16	JUNCTION	0.28	1.44	533.44	0	12:31	1.43
J17	JUNCTION	0.33	1.68	507.68	0	12:30	1.68
J18	JUNCTION	0.33	1.68	506.68	0	12:32	1.65
J19	JUNCTION	0.29	1.45	485.45	0	12:30	1.45
J20	JUNCTION	0.29	1.45	481.45	0	12:32	1.44
J21	JUNCTION	0.36	1.78	460.78	0	12:30	1.78
J22	JUNCTION	0.36	1.78	455.78	0	12:32	1.76
J23	JUNCTION	0.30	2.81	428.81	0	12:33	2.76
J28	JUNCTION	0.29	1.43	557.43	0	12:30	1.43
J29	JUNCTION	0.33	1.64	553.64	0	12:33	1.61
J30	JUNCTION	0.32	1.59	533.59	0	12:30	1.59
J31	JUNCTION	0.32	1.59	529.59	0	12:32	1.57
J32	JUNCTION	0.29	1.42	510.42	0	12:30	1.42
J33	JUNCTION	0.29	1.42	504.42	0	12:32	1.40
J34	JUNCTION	0.37	1.80	485.80	0	12:30	1.80
J35	JUNCTION	0.37	1.78	483.78	0	12:34	1.75
J36	JUNCTION	0.34	1.69	457.69	0	12:30	1.69
J37	JUNCTION	0.34	1.68	454.68	0	12:33	1.65
J38	JUNCTION	0.26	2.42	429.42	0	12:31	2.40
J39	JUNCTION	0.29	1.45	530.45	0	12:30	1.45
J40	JUNCTION	0.33	1.61	512.61	0	12:30	1.61
J41	JUNCTION	0.31	1.53	477.53	0	12:30	1.53
J42	JUNCTION	0.33	1.65	554.65	0	12:30	1.65
J43	JUNCTION	0.29	1.45	526.45	0	12:32	1.44
J44	JUNCTION	0.33	1.60	509.60	0	12:33	1.58
J45	JUNCTION	0.31	1.52	473.52	0	12:33	1.49
J46	JUNCTION	0.35	1.69	448.69	0	12:33	1.66
J47	JUNCTION	0.30	2.71	411.21	0	12:34	2.64
J48	JUNCTION	0.35	1.70	453.70	0	12:30	1.70
J49	JUNCTION	0.21	1.06	527.06	0	12:30	1.06

J50	JUNCTION	0.27	1.31	509.31	0	12:30	1.31
J51	JUNCTION	0.27	1.31	503.31	0	12:33	1.28
J52	JUNCTION	0.36	1.78	475.78	0	12:30	1.78
J53	JUNCTION	0.36	1.77	473.77	0	12:34	1.73
J54	JUNCTION	0.34	1.67	448.67	0	12:30	1.67
J55	JUNCTION	0.34	1.66	446.66	0	12:33	1.64
J56-N	JUNCTION	0.12	1.10	411.10	0	12:32	1.10
J56-S	JUNCTION	0.06	0.56	410.56	0	12:30	0.56
J57	JUNCTION	0.38	1.86	486.86	0	12:30	1.86
J58	JUNCTION	0.38	1.85	481.85	0	12:32	1.83
J59-N	JUNCTION	0.05	0.49	455.49	0	12:30	0.49
J59-S	JUNCTION	0.09	0.88	455.88	0	12:30	0.88
J60	JUNCTION	0.34	1.54	502.54	0	12:30	1.54
J61	JUNCTION	0.34	1.52	499.52	0	12:35	1.49
J62	JUNCTION	0.30	1.47	478.47	0	12:30	1.47
J63	JUNCTION	0.31	1.53	473.53	0	12:32	1.52
J64	JUNCTION	0.31	1.54	452.54	0	12:30	1.54
J65	JUNCTION	0.34	1.57	446.57	0	12:34	1.54
J66	JUNCTION	0.18	1.72	409.72	0	12:32	1.69
J67	JUNCTION	0.31	1.51	484.51	0	12:30	1.51
J68	JUNCTION	0.34	1.69	479.69	0	12:32	1.68
J69	JUNCTION	0.15	1.40	441.40	0	12:31	1.39
J70	JUNCTION	0.34	1.70	482.70	0	12:30	1.70
J71	JUNCTION	0.25	1.19	503.19	0	12:30	1.19
J72	JUNCTION	0.30	1.54	475.54	0	12:30	1.54
J73	JUNCTION	0.34	1.59	458.59	0	12:30	1.59
J74	JUNCTION	0.18	1.71	407.71	0	12:34	1.67
J75	JUNCTION	0.15	1.39	431.39	0	12:32	1.38
J76	JUNCTION	0.21	1.71	406.71	0	12:35	1.66
J77	JUNCTION	0.21	1.51	403.51	0	12:35	1.45
J78-E	JUNCTION	0.04	0.36	413.36	0	12:30	0.36
J78-W	JUNCTION	0.14	1.31	415.31	0	12:32	1.30
J79	JUNCTION	0.16	1.31	413.31	0	12:32	1.30
J80	JUNCTION	0.34	2.80	426.60	0	12:36	2.69
J81	JUNCTION	0.33	2.62	424.62	0	12:37	2.47
J82	JUNCTION	0.28	2.58	421.08	0	12:39	2.52
J83	JUNCTION	0.19	1.73	410.73	0	12:41	1.70
J84	JUNCTION	0.31	2.71	408.71	0	12:35	2.61
Out4	OUTFALL	0.00	0.00	380.00	0	00:00	0.00
Out5	OUTFALL	0.00	0.00	380.00	0	00:00	0.00

Pond014	STORAGE	6.20	6.94	390.94	2	00:00	6.94
Pond002	STORAGE	4.14	5.13	403.13	0	13:12	5.13
Pond009	STORAGE	6.08	6.76	402.76	0	12:52	6.75

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Node Inflow Summary
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Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J01	JUNCTION	1.60	1.60	0 12:30	0.093	0.093	0.000
J02	JUNCTION	0.00	1.60	0 12:30	0	0.093	0.000
J03	JUNCTION	3.88	3.88	0 12:30	0.229	0.229	0.000
J04	JUNCTION	0.00	5.47	0 12:31	0	0.322	0.000
J05	JUNCTION	4.99	4.99	0 12:30	0.308	0.308	0.000
J06	JUNCTION	0.00	10.33	0 12:31	0	0.63	0.000
J07	JUNCTION	6.74	6.74	0 12:30	0.425	0.425	0.000
J08	JUNCTION	0.00	16.88	0 12:32	0	1.05	0.000
J09	JUNCTION	7.42	7.42	0 12:30	0.481	0.481	0.000
J10	JUNCTION	0.00	23.99	0 12:33	0	1.53	0.000
J11	JUNCTION	6.94	6.94	0 12:30	0.48	0.48	0.000
J12	JUNCTION	7.44	37.19	0 12:33	0.476	2.49	0.000
J13	JUNCTION	1.22	1.22	0 12:30	0.0705	0.0705	0.000
J14	JUNCTION	0.00	3.18	0 12:32	0	0.192	-0.000
J15	JUNCTION	2.37	2.37	0 12:30	0.138	0.138	0.000
J16	JUNCTION	0.00	5.55	0 12:32	0	0.33	0.000
J17	JUNCTION	3.19	3.19	0 12:30	0.188	0.188	0.000
J18	JUNCTION	0.00	8.72	0 12:32	0	0.518	0.000
J19	JUNCTION	4.02	4.02	0 12:30	0.24	0.24	0.000
J20	JUNCTION	0.00	12.71	0 12:32	0	0.758	0.000
J21	JUNCTION	7.05	7.05	0 12:30	0.426	0.426	0.000
J22	JUNCTION	0.00	19.69	0 12:32	0	1.18	0.000
J23	JUNCTION	4.56	53.51	0 12:33	0.279	3.32	0.000
J28	JUNCTION	2.03	2.03	0 12:30	0.122	0.122	-0.000
J29	JUNCTION	0.00	2.94	0 12:33	0	0.176	-0.000

J30	JUNCTION	4.81	4.81	0	12:30	0.288	0.288	0.000
J31	JUNCTION	0.00	4.76	0	12:32	0	0.289	0.000
J32	JUNCTION	4.35	4.35	0	12:30	0.263	0.263	0.000
J33	JUNCTION	0.00	9.06	0	12:32	0	0.551	0.000
J34	JUNCTION	4.54	4.54	0	12:30	0.274	0.274	0.000
J35	JUNCTION	0.00	13.48	0	12:33	0	0.825	0.000
J36	JUNCTION	4.73	4.73	0	12:30	0.285	0.285	0.000
J37	JUNCTION	0.00	18.12	0	12:33	0	1.11	-0.000
J38	JUNCTION	4.54	29.98	0	12:31	0.274	1.85	0.000
J39	JUNCTION	3.99	3.99	0	12:30	0.237	0.237	-0.000
J40	JUNCTION	4.18	4.18	0	12:30	0.252	0.252	0.000
J41	JUNCTION	4.10	4.10	0	12:30	0.25	0.25	0.000
J42	JUNCTION	2.98	2.98	0	12:30	0.176	0.176	0.000
J43	JUNCTION	0.00	8.12	0	12:32	0	0.484	0.000
J44	JUNCTION	0.00	12.23	0	12:32	0	0.736	0.000
J45	JUNCTION	0.00	16.25	0	12:32	0	0.986	0.000
J46	JUNCTION	0.00	21.87	0	12:33	0	1.34	-0.000
J47	JUNCTION	0.00	74.90	0	12:34	0	4.83	0.000
J48	JUNCTION	5.74	5.74	0	12:30	0.351	0.351	0.000
J49	JUNCTION	1.22	1.22	0	12:30	0.0706	0.0706	0.000
J50	JUNCTION	3.25	3.25	0	12:30	0.197	0.197	0.000
J51	JUNCTION	0.00	3.19	0	12:33	0	0.197	0.000
J52	JUNCTION	4.40	4.40	0	12:30	0.264	0.264	0.000
J53	JUNCTION	0.00	7.49	0	12:33	0	0.462	-0.000
J54	JUNCTION	4.01	4.01	0	12:30	0.24	0.24	-0.000
J55	JUNCTION	0.00	11.44	0	12:33	0	0.702	0.000
J56-N	JUNCTION	5.04	16.10	0	12:32	0.297	0.998	-0.000
J56-S	JUNCTION	5.30	5.30	0	12:30	0.321	0.321	-0.000
J57	JUNCTION	7.96	7.96	0	12:30	0.481	0.481	0.000
J58	JUNCTION	0.00	7.89	0	12:32	0	0.481	0.000
J59-N	JUNCTION	7.72	7.72	0	12:30	0.47	0.47	0.000
J59-S	JUNCTION	6.78	14.47	0	12:30	0.41	0.891	-0.000
J60	JUNCTION	3.74	3.74	0	12:30	0.251	0.251	0.000
J61	JUNCTION	0.00	6.08	0	12:34	0	0.412	0.000
J62	JUNCTION	4.28	4.28	0	12:30	0.256	0.256	0.000
J63	JUNCTION	0.00	13.70	0	12:33	0	0.87	0.000
J64	JUNCTION	5.32	5.32	0	12:30	0.321	0.321	0.000
J65	JUNCTION	0.00	25.24	0	12:33	0	1.61	0.000
J66	JUNCTION	6.52	36.67	0	12:32	0.401	2.33	0.000
J67	JUNCTION	4.61	4.61	0	12:30	0.28	0.28	-0.000

J68	JUNCTION	0.00	9.88	0	12:32	0	0.601	0.000	
J69	JUNCTION	7.32	31.41	0	12:31	0.452	1.94	0.000	
J70	JUNCTION	5.37	5.37	0	12:30	0.321	0.321	0.000	
J71	JUNCTION	2.53	2.53	0	12:30	0.16	0.16	0.000	
J72	JUNCTION	3.43	3.43	0	12:30	0.202	0.202	0.000	
J73	JUNCTION	6.48	6.48	0	12:30	0.415	0.415	0.000	
J74	JUNCTION	0.00	36.59	0	12:34	0	2.33	0.000	
J75	JUNCTION	0.00	31.39	0	12:32	0	1.94	0.000	
J76	JUNCTION	0.00	36.57	0	12:35	0	2.33	-0.000	
J77	JUNCTION	0.00	36.57	0	12:35	0	2.33	0.000	
J78-E	JUNCTION	2.78	2.78	0	12:30	0.16	0.16	0.000	
J78-W	JUNCTION	2.78	33.91	0	12:32	0.16	2.1	0.000	
J79	JUNCTION	0.00	36.59	0	12:32	0	2.26	0.000	
J80	JUNCTION	0.00	53.33	0	12:36	0	3.32	0.000	
J81	JUNCTION	0.00	53.30	0	12:37	0	3.32	0.000	
J82	JUNCTION	0.00	53.07	0	12:39	0	3.32	0.000	
J83	JUNCTION	0.00	53.03	0	12:41	0	3.32	-0.000	
J84	JUNCTION	0.00	74.86	0	12:35	0	4.83	0.000	
Out4	OUTFALL	0.00	0.00	0	00:00	0	0	0.000	gal
Out5	OUTFALL	0.00	87.84	0	13:12	0	8.13	0.000	
Pond014	STORAGE	0.00	61.48	0	12:39	0	11.4	0.000	
Pond002	STORAGE	0.00	125.59	0	12:37	0	10.1	-0.000	
Pond009	STORAGE	0.00	36.57	0	12:35	0	3.95	-0.000	

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Node Flooding Summary
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No nodes were flooded.

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Storage Volume Summary
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Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS

Pond014	1345.561	76	0	0	1519.452	85	2	00:00	0.00
Pond002	295.733	27	0	0	507.837	46	0	13:12	87.84
Pond009	221.510	70	0	0	253.300	80	0	12:52	30.65

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Outfall Loading Summary
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Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
Out4	0.00	0.00	0.00	0.000
Out5	97.03	6.48	87.84	8.133
System	48.52	6.48	87.84	8.133

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Link Flow Summary
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Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C01	CONDUIT	1.60	0 12:30	2.35	0.10	0.42
C02	CONDUIT	3.87	0 12:31	2.76	0.25	0.60
C03	CONDUIT	4.90	0 12:33	2.32	0.44	0.73
C04	CONDUIT	6.59	0 12:33	2.59	0.57	0.81
C05	CONDUIT	7.18	0 12:35	2.61	0.65	0.85
C06	CONDUIT	6.54	0 12:40	1.98	0.23	0.40
C07	CONDUIT	1.60	0 12:31	7.89	0.00	0.03
C08	CONDUIT	5.47	0 12:31	12.05	0.01	0.07
C09	CONDUIT	10.33	0 12:32	14.66	0.01	0.10
C10	CONDUIT	16.88	0 12:32	17.95	0.02	0.13

C11	CONDUIT	23.99	0	12:33	17.05	0.04	0.18
C15	CONDUIT	1.22	0	12:31	1.14	0.18	0.52
C16	CONDUIT	2.38	0	12:31	1.20	0.42	0.72
C17	CONDUIT	3.16	0	12:32	1.19	0.63	0.83
C18	CONDUIT	4.00	0	12:32	1.95	0.42	0.72
C19	CONDUIT	6.98	0	12:32	2.27	0.73	0.89
C20	CONDUIT	3.18	0	12:32	9.10	0.00	0.05
C21	CONDUIT	5.55	0	12:32	12.31	0.01	0.07
C22	CONDUIT	8.72	0	12:32	12.98	0.01	0.10
C23	CONDUIT	12.71	0	12:32	16.03	0.02	0.11
C24	CONDUIT	19.69	0	12:32	17.69	0.03	0.15
C25	CONDUIT	53.33	0	12:36	4.37	0.89	0.93
C26	CONDUIT	74.86	0	12:35	6.35	0.84	0.90
C27	CONDUIT	1.98	0	12:34	1.05	0.40	0.71
C28	CONDUIT	4.76	0	12:32	1.94	0.54	0.79
C29	CONDUIT	4.30	0	12:32	2.20	0.40	0.71
C30	CONDUIT	4.44	0	12:34	1.48	0.74	0.89
C31	CONDUIT	4.65	0	12:33	1.72	0.63	0.84
C33	CONDUIT	4.76	0	12:32	11.06	0.01	0.07
C34	CONDUIT	9.06	0	12:32	12.95	0.01	0.10
C35	CONDUIT	13.48	0	12:33	16.82	0.02	0.11
C36	CONDUIT	18.12	0	12:33	16.74	0.03	0.15
C37	CONDUIT	29.78	0	12:34	2.98	0.68	0.80
C38	CONDUIT	2.94	0	12:33	1.16	0.59	0.82
C39	CONDUIT	3.97	0	12:32	1.94	0.42	0.72
C40	CONDUIT	4.12	0	12:33	1.68	0.56	0.80
C41	CONDUIT	4.02	0	12:33	1.81	0.48	0.76
C42	CONDUIT	5.63	0	12:33	2.05	0.64	0.84
C43	CONDUIT	37.12	0	12:35	7.26	0.39	0.56
C44	CONDUIT	2.94	0	12:33	8.82	0.00	0.05
C45	CONDUIT	8.12	0	12:32	11.26	0.02	0.10
C46	CONDUIT	12.23	0	12:32	17.47	0.01	0.10
C47	CONDUIT	16.25	0	12:33	15.59	0.03	0.14
C48	CONDUIT	21.87	0	12:33	18.48	0.03	0.16
C49	CONDUIT	1.23	0	12:31	1.12	0.19	0.53
C50	CONDUIT	3.19	0	12:33	1.95	0.32	0.65
C51	CONDUIT	4.30	0	12:34	1.47	0.72	0.88
C52	CONDUIT	3.95	0	12:33	1.50	0.61	0.83
C53	CONDUIT	3.19	0	12:33	9.31	0.00	0.05
C54	CONDUIT	7.49	0	12:33	12.78	0.01	0.09

C55	CONDUIT	11.44	0	12:33	16.00	0.01	0.10
C56-N	CONDUIT	16.06	0	12:34	3.22	0.38	0.55
C56-S	CONDUIT	5.26	0	12:32	2.23	0.13	0.28
C57	CONDUIT	7.89	0	12:32	2.36	0.81	0.92
C58	CONDUIT	7.89	0	12:32	11.65	0.01	0.10
C59-N	CONDUIT	7.70	0	12:30	7.09	0.10	0.24
C59-S	CONDUIT	14.45	0	12:32	6.77	0.25	0.44
C60	CONDUIT	9.88	0	12:32	14.99	0.01	0.10
C61	CONDUIT	3.62	0	12:35	1.63	0.48	0.76
C62	CONDUIT	4.24	0	12:32	2.03	0.44	0.73
C63	CONDUIT	5.28	0	12:32	2.29	0.49	0.77
C64	CONDUIT	6.08	0	12:34	11.86	0.01	0.08
C65	CONDUIT	13.70	0	12:33	15.63	0.02	0.12
C66	CONDUIT	25.24	0	12:33	19.94	0.03	0.17
C67	CONDUIT	4.55	0	12:32	2.06	0.47	0.75
C68	CONDUIT	5.33	0	12:32	1.91	0.64	0.84
C69	CONDUIT	2.49	0	12:32	1.81	0.25	0.59
C70	CONDUIT	3.42	0	12:32	1.51	0.49	0.76
C71	CONDUIT	6.30	0	12:34	2.65	0.53	0.78
C72	CONDUIT	31.39	0	12:32	8.36	0.54	0.70
C73	CONDUIT	31.39	0	12:32	10.73	0.38	0.57
C74	CONDUIT	36.59	0	12:34	4.42	0.78	0.86
C75	CONDUIT	36.57	0	12:35	4.40	0.78	0.86
C76	CONDUIT	36.57	0	12:35	11.81	0.68	0.60
C77	CONDUIT	36.57	0	12:35	17.12	0.75	0.64
C78-E	CONDUIT	2.79	0	12:30	1.90	0.06	0.18
C78-W	CONDUIT	33.90	0	12:32	5.57	0.50	0.65
C79	CONDUIT	36.59	0	12:32	18.40	0.68	0.61
C80	CONDUIT	53.30	0	12:37	6.92	0.91	0.75
C81	CONDUIT	53.07	0	12:39	4.83	0.77	0.86
C82	CONDUIT	53.03	0	12:41	7.96	0.39	0.58
C83	CONDUIT	53.03	0	12:41	15.67	0.55	0.53
C84	CONDUIT	74.86	0	12:35	15.79	0.73	0.64
Weir002	WEIR	87.84	0	13:12			0.00
Weir009	WEIR	30.65	0	12:52			0.00
Weir014	WEIR	0.00	0	00:00			0.00

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Conduit Surcharge Summary

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No conduits were surcharged.


Analysis begun on:  Thu Nov 19 15:42:49 2020
Analysis ended on:  Thu Nov 19 15:42:53 2020
Total elapsed time: 00:00:04
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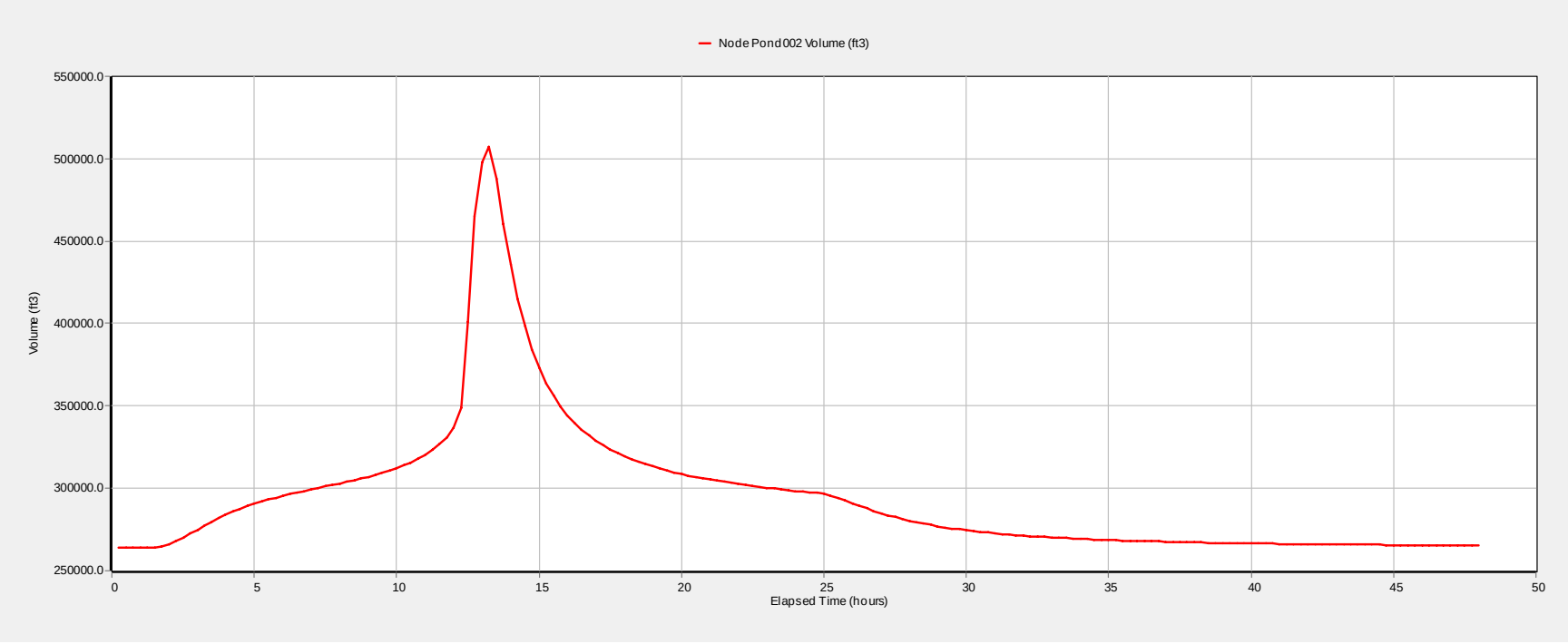
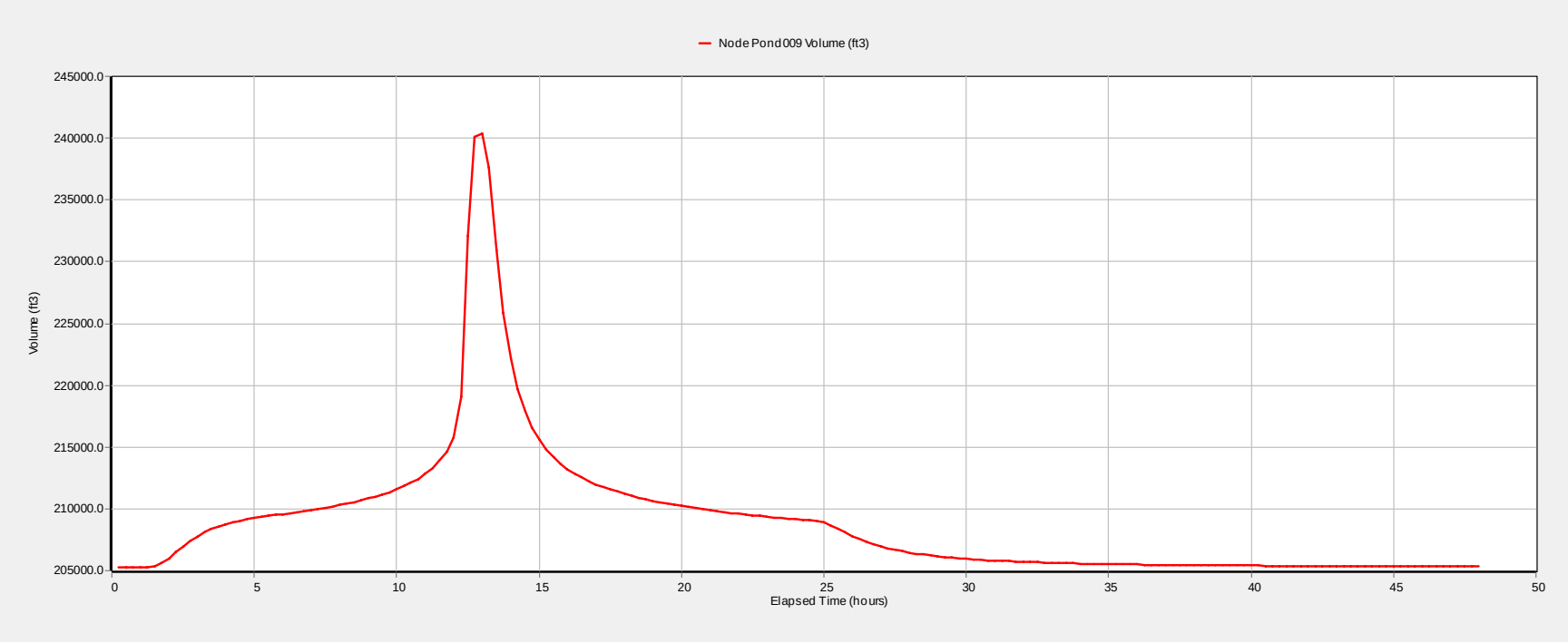
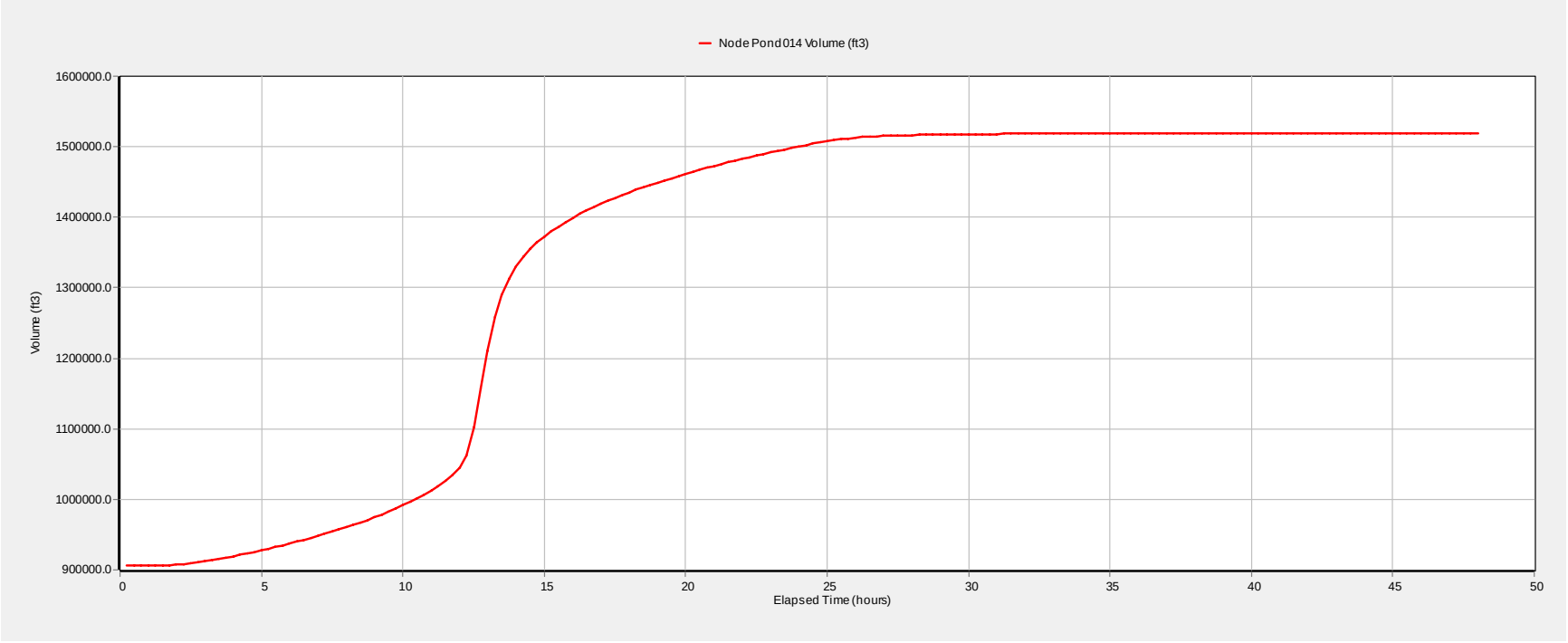
Ponds Volume vs Time

(During Storm Event)


Node Pond002 Volume (ft3)
550000.0
500000.0
450000.0
400000.0
350000.0
300000.0
250000.0
Volume (ft3)
0
5
10
15
20
25
30
35
40
45
50
Elapsed Time (hours)


Node Pond009 Volume (ft3)
245000.0
240000.0
235000.0
230000.0
225000.0
220000.0
215000.0
210000.0
205000.0
Volume (ft3)
0
5
10
15
20
25
30
35
40
45
50
Elapsed Time (hours)


Node Pond014 Volume (ft3)
1600000.0
1500000.0
1400000.0
1300000.0
1200000.0
1100000.0
1000000.0
900000.0
Volume (ft3)
0
5
10
15
20
25
30
35
40
45
50
Elapsed Time (hours)

H&H Calculation Demonstration

and Erosion Check

Manning Equation:

Description			Note
Link name	C01		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	1.88	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	16.643		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	0.84	ft	
Max Flow Area, A	0.706		
Hydraulic Radius, R:	0.30		
Capacity Check			
Max Flow, Q	1.600	cfs	Pass (less than full flow)
Max Velocity, V	2.35	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.987	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C02		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	1.60	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	15.344		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.2		
Max Flow Area, A	1.440		
Hydraulic Radius, R:	0.42		
Capacity Check			
Max Flow, Q	3.870	cfs	Pass (less than full flow)
Max Velocity, V	2.76	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.198	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C03		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.84	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	11.090		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.46		
Max Flow Area, A	2.132		
Hydraulic Radius, R:	0.52		
Capacity Check			
Max Flow, Q	4.900	cfs	Pass (less than full flow)
Max Velocity, V	2.32	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.762	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C04		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.91	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	11.565		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.62		
Max Flow Area, A	2.624		
Hydraulic Radius, R:	0.57		
Capacity Check			
Max Flow, Q	6.590	cfs	Pass (less than full flow)
Max Velocity, V	2.59	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.919	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C05		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.85	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	11.158		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.7		
Max Flow Area, A	2.890		
Hydraulic Radius, R:	0.60		
Capacity Check			
Max Flow, Q	7.180	cfs	Pass (less than full flow)
Max Velocity, V	2.61	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.898	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C06		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.12	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	28.968		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.8		
Max Flow Area, A	3.520		
Hydraulic Radius, R:	0.42		
Capacity Check			
Max Flow, Q	6.540	cfs	Pass (less than full flow)
Max Velocity, V	1.98	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.061	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C07		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	28.24	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	753.922		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.09		
Max Flow Area, A	0.188		
Hydraulic Radius, R:	0.02		
Capacity Check			
Max Flow, Q	1.600	cfs	Pass (less than full flow)
Max Velocity, V	7.89	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.586	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C08		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	26.67	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	732.771		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.21		
Max Flow Area, A	0.464		
Hydraulic Radius, R:	0.04		
Capacity Check			
Max Flow, Q	5.470	cfs	Pass (less than full flow)
Max Velocity, V	12.05	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.495	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C09		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	25.26	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	713.066		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	10.330	cfs	Pass (less than full flow)
Max Velocity, V	14.66	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	4.728	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C10		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	28.78	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	761.177		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.39		
Max Flow Area, A	0.932		
Hydraulic Radius, R:	0.09		
Capacity Check			
Max Flow, Q	16.880	cfs	Pass (less than full flow)
Max Velocity, V	17.95	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	7.005	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C11		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	18.15	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	604.431		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.54		
Max Flow Area, A	1.372		
Hydraulic Radius, R:	0.13		
Capacity Check			
Max Flow, Q	23.990	cfs	Pass (less than full flow)
Max Velocity, V	17.05	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	6.115	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	4.09		
Conjugate Depth y_2=	2.87	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C15		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.32	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	6.835		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.04		
Max Flow Area, A	1.082		
Hydraulic Radius, R:	0.37		
Capacity Check			
Max Flow, Q	1.220	cfs	Pass (less than full flow)
Max Velocity, V	1.14	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.206	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C16		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.22	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	5.737		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.44		
Max Flow Area, A	2.074		
Hydraulic Radius, R:	0.51		
Capacity Check			
Max Flow, Q	2.380	cfs	Pass (less than full flow)
Max Velocity, V	1.2	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.201	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C17		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.18	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	5.076		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.66		
Max Flow Area, A	2.756		
Hydraulic Radius, R:	0.59		
Capacity Check			
Max Flow, Q	3.160	cfs	Pass (less than full flow)
Max Velocity, V	1.19	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.181	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C18		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.61	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	9.443		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.44		
Max Flow Area, A	2.074		
Hydraulic Radius, R:	0.51		
Capacity Check			
Max Flow, Q	4.000	cfs	Pass (less than full flow)
Max Velocity, V	1.95	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.545	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C19		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.63	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	9.589		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.78		
Max Flow Area, A	3.168		
Hydraulic Radius, R:	0.63		
Capacity Check			
Max Flow, Q	6.980	cfs	Pass (less than full flow)
Max Velocity, V	2.27	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.694	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C20		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	20.23	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	638.133		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.15		
Max Flow Area, A	0.323		
Hydraulic Radius, R:	0.03		
Capacity Check			
Max Flow, Q	3.180	cfs	Pass (less than full flow)
Max Velocity, V	9.1	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.893	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C21		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	28.04	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	751.315		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.21		
Max Flow Area, A	0.464		
Hydraulic Radius, R:	0.04		
Capacity Check			
Max Flow, Q	5.550	cfs	Pass (less than full flow)
Max Velocity, V	12.31	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.675	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C22		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	20.76	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	646.427		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	8.720	cfs	Pass (less than full flow)
Max Velocity, V	12.98	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.886	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C23		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	26.93	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	736.220		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.33		
Max Flow Area, A	0.769		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	12.710	cfs	Pass (less than full flow)
Max Velocity, V	16.03	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	5.545	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C24		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	24.00	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	695.006		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.45		
Max Flow Area, A	1.103		
Hydraulic Radius, R:	0.11		
Capacity Check			
Max Flow, Q	19.690	cfs	Pass (less than full flow)
Max Velocity, V	17.69	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	6.738	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	4.65		
Conjugate Depth y_2=	2.74	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C25		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	3	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	13.5	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.39		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.23	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	60.301		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	2.79		
Max Flow Area, A	12.262		
Hydraulic Radius, R:	1.26		
Capacity Check			
Max Flow, Q	53.330	cfs	Pass (less than full flow)
Max Velocity, V	4.37	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.403	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C26		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	3	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	13.5	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.39		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.51	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	89.500		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	2.7		
Max Flow Area, A	11.745		
Hydraulic Radius, R:	1.21		
Capacity Check			
Max Flow, Q	74.860	cfs	Pass (less than full flow)
Max Velocity, V	6.35	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.860	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C27		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.17	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	4.952		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.42		
Max Flow Area, A	2.016		
Hydraulic Radius, R:	0.50		
Capacity Check			
Max Flow, Q	1.980	cfs	Pass (less than full flow)
Max Velocity, V	1.05	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.148	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C28		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.53	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	8.829		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.58		
Max Flow Area, A	2.496		
Hydraulic Radius, R:	0.56		
Capacity Check			
Max Flow, Q	4.760	cfs	Pass (less than full flow)
Max Velocity, V	1.94	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.522	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C29		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.80	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	10.849		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.42		
Max Flow Area, A	2.016		
Hydraulic Radius, R:	0.50		
Capacity Check			
Max Flow, Q	4.300	cfs	Pass (less than full flow)
Max Velocity, V	2.2	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.709	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C30		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.25	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	6.031		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.78		
Max Flow Area, A	3.168		
Hydraulic Radius, R:	0.63		
Capacity Check			
Max Flow, Q	4.440	cfs	Pass (less than full flow)
Max Velocity, V	1.48	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.275	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C31		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.38	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	7.451		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.68		
Max Flow Area, A	2.822		
Hydraulic Radius, R:	0.59		
Capacity Check			
Max Flow, Q	4.650	cfs	Pass (less than full flow)
Max Velocity, V	1.72	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.396	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C33		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	23.79	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	692.084		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.21		
Max Flow Area, A	0.464		
Hydraulic Radius, R:	0.04		
Capacity Check			
Max Flow, Q	4.760	cfs	Pass (less than full flow)
Max Velocity, V	11.06	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.118	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C34		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	19.82	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	631.690		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	9.060	cfs	Pass (less than full flow)
Max Velocity, V	12.95	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.711	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C35		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	29.34	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	768.545		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.33		
Max Flow Area, A	0.769		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	13.480	cfs	Pass (less than full flow)
Max Velocity, V	16.82	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	6.042	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C36		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	22.00	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	665.500		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.45		
Max Flow Area, A	1.103		
Hydraulic Radius, R:	0.11		
Capacity Check			
Max Flow, Q	18.120	cfs	Pass (less than full flow)
Max Velocity, V	16.74	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	6.178	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	4.40		
Conjugate Depth y_2=	2.58	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C37		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	3	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	13.5	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.39		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.12	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	43.801		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	2.4		
Max Flow Area, A	10.080		
Hydraulic Radius, R:	1.04		
Capacity Check			
Max Flow, Q	29.780	cfs	Pass (less than full flow)
Max Velocity, V	2.98	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.183	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C38		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.17	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	4.994		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.64		
Max Flow Area, A	2.690		
Hydraulic Radius, R:	0.58		
Capacity Check			
Max Flow, Q	2.940	cfs	Pass (less than full flow)
Max Velocity, V	1.16	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.173	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C39		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.60	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	9.372		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.44		
Max Flow Area, A	2.074		
Hydraulic Radius, R:	0.51		
Capacity Check			
Max Flow, Q	3.970	cfs	Pass (less than full flow)
Max Velocity, V	1.94	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.536	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C40		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.38	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	7.428		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.6		
Max Flow Area, A	2.560		
Hydraulic Radius, R:	0.57		
Capacity Check			
Max Flow, Q	4.120	cfs	Pass (less than full flow)
Max Velocity, V	1.68	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.374	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C41		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.48	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	8.370		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.52		
Max Flow Area, A	2.310		
Hydraulic Radius, R:	0.54		
Capacity Check			
Max Flow, Q	4.020	cfs	Pass (less than full flow)
Max Velocity, V	1.81	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.452	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C42		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.53	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	8.814		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.68		
Max Flow Area, A	2.822		
Hydraulic Radius, R:	0.59		
Capacity Check			
Max Flow, Q	5.630	cfs	Pass (less than full flow)
Max Velocity, V	2.05	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.554	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C43		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	1.31	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	95.104		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.12		
Max Flow Area, A	5.107		
Hydraulic Radius, R:	0.60		
Capacity Check			
Max Flow, Q	37.120	cfs	Pass (less than full flow)
Max Velocity, V	7.26	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.913	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C44		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	19.95	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	633.726		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.15		
Max Flow Area, A	0.323		
Hydraulic Radius, R:	0.03		
Capacity Check			
Max Flow, Q	2.940	cfs	Pass (less than full flow)
Max Velocity, V	8.82	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.867	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C45		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	14.56	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	541.356		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	8.120	cfs	Pass (less than full flow)
Max Velocity, V	11.26	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	2.725	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C46		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	36.11	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	852.563		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	12.230	cfs	Pass (less than full flow)
Max Velocity, V	17.47	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	6.760	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C47		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	19.75	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	630.599		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.42		
Max Flow Area, A	1.016		
Hydraulic Radius, R:	0.10		
Capacity Check			
Max Flow, Q	16.250	cfs	Pass (less than full flow)
Max Velocity, V	15.59	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	5.177	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C48		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	24.79	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	706.428		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.48		
Max Flow Area, A	1.190		
Hydraulic Radius, R:	0.11		
Capacity Check			
Max Flow, Q	21.870	cfs	Pass (less than full flow)
Max Velocity, V	18.48	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	7.425	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	4.70		
Conjugate Depth y_2=	2.96	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C49		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.30	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	6.617		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.06		
Max Flow Area, A	1.124		
Hydraulic Radius, R:	0.37		
Capacity Check			
Max Flow, Q	1.230	cfs	Pass (less than full flow)
Max Velocity, V	1.12	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.197	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C50		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.68	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	9.998		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.3		
Max Flow Area, A	1.690		
Hydraulic Radius, R:	0.46		
Capacity Check			
Max Flow, Q	3.190	cfs	Pass (less than full flow)
Max Velocity, V	1.95	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.551	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C51		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.25	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	6.009		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.76		
Max Flow Area, A	3.098		
Hydraulic Radius, R:	0.62		
Capacity Check			
Max Flow, Q	4.300	cfs	Pass (less than full flow)
Max Velocity, V	1.47	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.270	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C52		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.29	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	6.479		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.66		
Max Flow Area, A	2.756		
Hydraulic Radius, R:	0.59		
Capacity Check			
Max Flow, Q	3.950	cfs	Pass (less than full flow)
Max Velocity, V	1.5	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.296	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C53		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	21.61	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	659.622		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.15		
Max Flow Area, A	0.323		
Hydraulic Radius, R:	0.03		
Capacity Check			
Max Flow, Q	3.190	cfs	Pass (less than full flow)
Max Velocity, V	9.31	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	2.023	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C54		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	23.09	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	681.794		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.27		
Max Flow Area, A	0.613		
Hydraulic Radius, R:	0.06		
Capacity Check			
Max Flow, Q	7.490	cfs	Pass (less than full flow)
Max Velocity, V	12.78	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.891	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C55		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	29.68	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	772.984		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	11.440	cfs	Pass (less than full flow)
Max Velocity, V	16	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	5.557	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	5.15		
Conjugate Depth y_2=	2.04	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C56-N		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.26	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	42.501		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.1		
Max Flow Area, A	5.005		
Hydraulic Radius, R:	0.59		
Capacity Check			
Max Flow, Q	16.060	cfs	Pass (less than full flow)
Max Velocity, V	3.22	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.179	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C56-S		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.25	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	41.345		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.56		
Max Flow Area, A	2.397		
Hydraulic Radius, R:	0.28		
Capacity Check			
Max Flow, Q	5.260	cfs	Pass (less than full flow)
Max Velocity, V	2.23	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.086	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C57		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.64	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	9.730		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.84		
Max Flow Area, A	3.386		
Hydraulic Radius, R:	0.65		
Capacity Check			
Max Flow, Q	7.890	cfs	Pass (less than full flow)
Max Velocity, V	2.36	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.739	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C58		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	16.56	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	577.410		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	7.890	cfs	Pass (less than full flow)
Max Velocity, V	11.65	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.101	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	3.75		
Conjugate Depth y_2=	1.45	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C59-N		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	2	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	6	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	0.93		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	3.61	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	80.702		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.48		
Max Flow Area, A	1.075		
Hydraulic Radius, R:	0.17		
Capacity Check			
Max Flow, Q	7.700	cfs	Pass (less than full flow)
Max Velocity, V	7.09	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.080	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C59-S		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	2	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	6	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	0.93		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	1.87	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	58.090		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.88		
Max Flow Area, A	2.147		
Hydraulic Radius, R:	0.33		
Capacity Check			
Max Flow, Q	14.450	cfs	Pass (less than full flow)
Max Velocity, V	6.77	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.026	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C60		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	28.20	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	753.457		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.3		
Max Flow Area, A	0.690		
Hydraulic Radius, R:	0.07		
Capacity Check			
Max Flow, Q	9.880	cfs	Pass (less than full flow)
Max Velocity, V	14.99	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	5.279	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	4.82		
Conjugate Depth y_2=	1.90	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C61		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.38	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	7.517		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.52		
Max Flow Area, A	2.310		
Hydraulic Radius, R:	0.54		
Capacity Check			
Max Flow, Q	3.620	cfs	Pass (less than full flow)
Max Velocity, V	1.63	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.364	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	0.233		
Conjugate Depth y_2=	0.150	ft	

Manning Equation:

Description			Note
Link name	C62		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.64	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	9.705		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.46		
Max Flow Area, A	2.132		
Hydraulic Radius, R:	0.52		
Capacity Check			
Max Flow, Q	4.240	cfs	Pass (less than full flow)
Max Velocity, V	2.03	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.583	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C63		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.78	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	10.700		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.54		
Max Flow Area, A	2.372		
Hydraulic Radius, R:	0.54		
Capacity Check			
Max Flow, Q	5.280	cfs	Pass (less than full flow)
Max Velocity, V	2.29	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.748	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C64		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	22.79	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	677.351		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.24		
Max Flow Area, A	0.538		
Hydraulic Radius, R:	0.05		
Capacity Check			
Max Flow, Q	6.080	cfs	Pass (less than full flow)
Max Velocity, V	11.86	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	3.413	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C65		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	23.30	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	684.807		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.36		
Max Flow Area, A	0.850		
Hydraulic Radius, R:	0.08		
Capacity Check			
Max Flow, Q	13.700	cfs	Pass (less than full flow)
Max Velocity, V	15.63	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	5.233	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C66		
Shape	TRAPEZOIDAL		Flume
Side slop; z =	1		
Width, b	2	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	15	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.43		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	27.19	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	739.876		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.51		
Max Flow Area, A	1.280		
Hydraulic Radius, R:	0.12		
Capacity Check			
Max Flow, Q	25.240	cfs	Pass (less than full flow)
Max Velocity, V	19.94	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	8.654	lb/ft2	Pass (less than material shear stress)
Hydraulic Jump Check at SW Flume Toe			
Frude Number	4.92		
Conjugate Depth y_2=	3.30	ft	Pass (less than 4' riprap dissipaters depth)

Manning Equation:

Description			Note
Link name	C67		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.65	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	9.762		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.5		
Max Flow Area, A	2.250		
Hydraulic Radius, R:	0.53		
Capacity Check			
Max Flow, Q	4.550	cfs	Pass (less than full flow)
Max Velocity, V	2.06	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.606	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C68		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.47	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	8.337		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.68		
Max Flow Area, A	2.822		
Hydraulic Radius, R:	0.59		
Capacity Check			
Max Flow, Q	5.330	cfs	Pass (less than full flow)
Max Velocity, V	1.91	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.495	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C69		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.70	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	10.179		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.18		
Max Flow Area, A	1.392		
Hydraulic Radius, R:	0.42		
Capacity Check			
Max Flow, Q	2.490	cfs	Pass (less than full flow)
Max Velocity, V	1.81	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.519	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C70		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.33	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	6.963		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.52		
Max Flow Area, A	2.310		
Hydraulic Radius, R:	0.54		
Capacity Check			
Max Flow, Q	3.420	cfs	Pass (less than full flow)
Max Velocity, V	1.51	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.313	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C71		
Shape	TRIANGULAR		Bench
Side slop; z =	1		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	4	ft2	z*y^2
Full Flow Hydraulic Radius, R:	0.71		z*y/(2*(1+z^2)^0.5)
Link Slope, S:	0.98	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.039		KYTC NO.57
Full Flow, Q:	11.981		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	5.000	lb/ft2	KYTC NO.57
Model Results			
Max Depth, Y	1.56		
Max Flow Area, A	2.434		
Hydraulic Radius, R:	0.55		
Capacity Check			
Max Flow, Q	6.300	cfs	Pass (less than full flow)
Max Velocity, V	2.65	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.950	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C72		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	2	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	6	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	0.93		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	1.90	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	58.604		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.4		
Max Flow Area, A	3.780		
Hydraulic Radius, R:	0.58		
Capacity Check			
Max Flow, Q	31.390	cfs	Pass (less than full flow)
Max Velocity, V	8.36	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.661	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C73		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	2	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	6	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	0.93		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	3.75	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	82.295		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.14		
Max Flow Area, A	2.930		
Hydraulic Radius, R:	0.45		
Capacity Check			
Max Flow, Q	31.390	cfs	Pass (less than full flow)
Max Velocity, V	10.73	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	2.667	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C74		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.32	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	47.260		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.72		
Max Flow Area, A	8.359		
Hydraulic Radius, R:	0.99		
Capacity Check			
Max Flow, Q	36.590	cfs	Pass (less than full flow)
Max Velocity, V	4.42	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.346	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C75		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.32	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	47.260		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.72		
Max Flow Area, A	8.359		
Hydraulic Radius, R:	0.99		
Capacity Check			
Max Flow, Q	36.570	cfs	Pass (less than full flow)
Max Velocity, V	4.4	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.346	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C78-E		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.30	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	45.802		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	0.36		
Max Flow Area, A	1.505		
Hydraulic Radius, R:	0.18		
Capacity Check			
Max Flow, Q	2.790	cfs	Pass (less than full flow)
Max Velocity, V	1.9	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.068	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C78-W		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	4	ft	
Full Depth, y	2	ft	
Full Flow Area, A:	10	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.18		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.67	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	67.940		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.3		
Max Flow Area, A	6.045		
Hydraulic Radius, R:	0.71		
Capacity Check			
Max Flow, Q	33.900	cfs	Pass (less than full flow)
Max Velocity, V	5.57	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.541	lb/ft2	Pass (less than material shear stress)

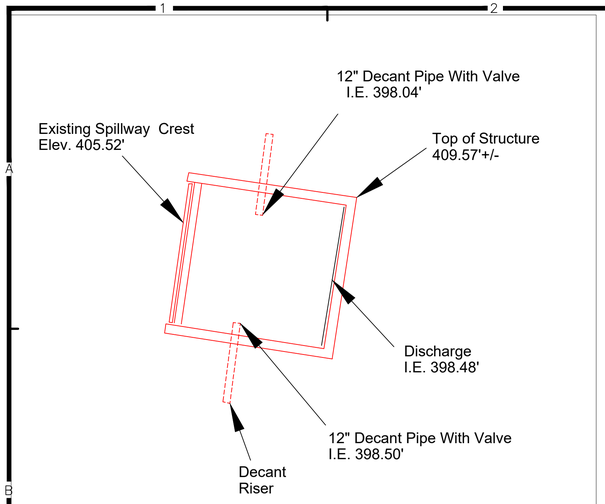
Manning Equation:

Description			Note
Link name	C81		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	3	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	13.5	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.39		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	0.30	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	69.120		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	2.58		
Max Flow Area, A	11.068		
Hydraulic Radius, R:	1.14		
Capacity Check			
Max Flow, Q	53.070	cfs	Pass (less than full flow)
Max Velocity, V	4.83	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	0.490	lb/ft2	Pass (less than material shear stress)

Manning Equation:

Description			Note
Link name	C82		
Shape	TRAPEZOIDAL		Ditch
Side slop; z =	0.5		
Width, b	3	ft	
Full Depth, y	3	ft	
Full Flow Area, A:	13.5	ft2	(b+z*y)*y
Full Flow Hydraulic Radius, R:	1.39		(b+z*y)*y/(b+2*y*(1+z^2)^0.5)
Link Slope, S:	1.19	%	
Manning Equation Constant:	1.49		
Manning Roughness Coefficient, n:	0.02		HydroBinder
Full Flow, Q:	136.549		(1.49/n)*A*R^(2/3)*S^0.5
Material Shear Stress	8.800	lb/ft2	HydroBinder
Model Results			
Max Depth, Y	1.74		
Max Flow Area, A	6.734		
Hydraulic Radius, R:	0.69		
Capacity Check			
Max Flow, Q	53.030	cfs	Pass (less than full flow)
Max Velocity, V	7.96	f/s	
Erosion Check			
Max Shear Stress = water density x depth x slope	1.289	lb/ft2	Pass (less than material shear stress)

Attachment E3
Historic Ponds Drawings



LEGEND

- 410 — As-Built Index Contour
- As-Built Contour
- Bathometric Contour
- 400 — Bathometric Index Contour

GRAPHIC SCALE
0 20 40 80
1" = 40'

Existing Spillway
See Detail

18" CPP
I.E. 409.31'

I.E. 406.61'

18" CPP
I.E. 405.44'

I.E. 406.58'

A

A'

B

B'

ASSOCIATED ENGINEERS, INC.
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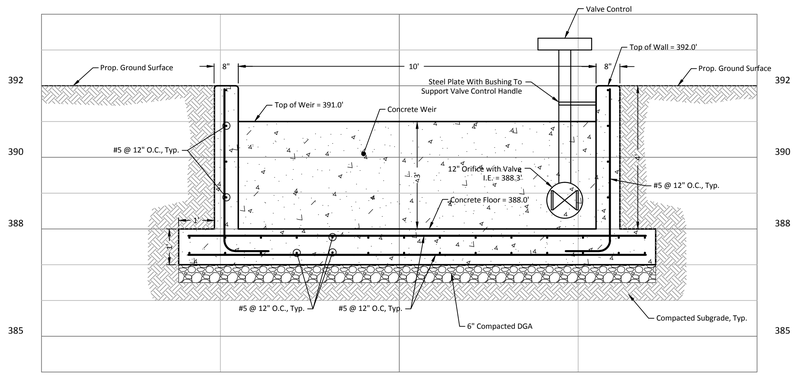
JOB NUMBER	DRAWN BY	CHECKED BY	DATE
20003	J. SHORT	D. LAMB	08-18-2020

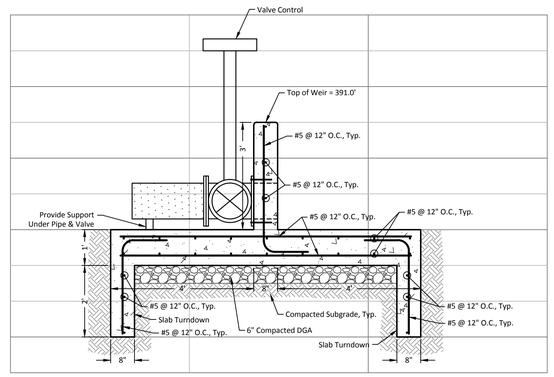
BIG RIVERS ELECTRIC CORPORATION
D.B. WILSON POWER PLANT
002 POND EXPANSION - AS BUILT

AS-BUILT

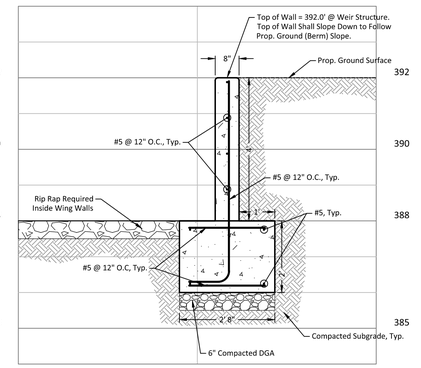
SHEET NUMBER
1
OF 2



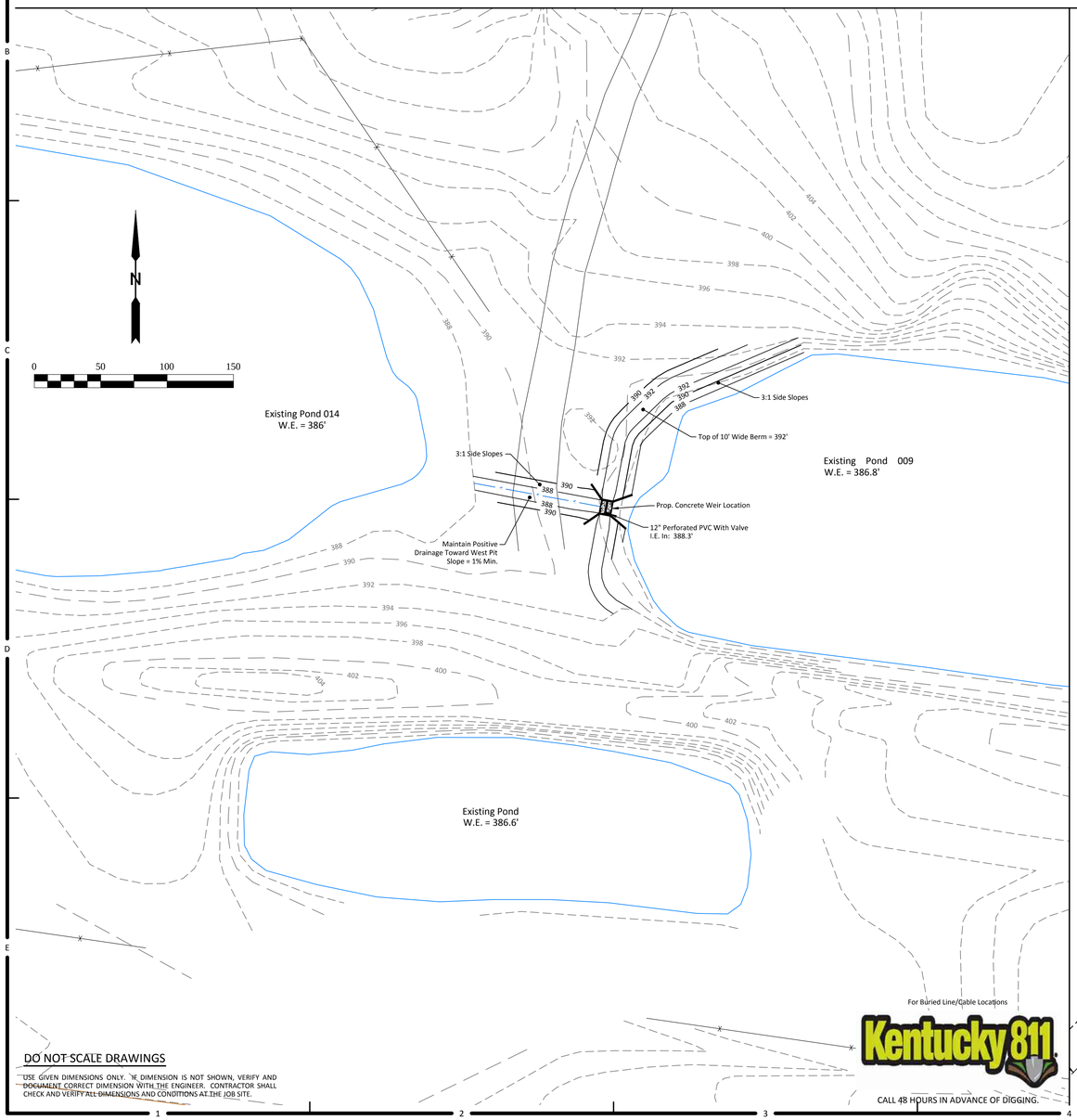
Spillway Section A-A'
H: 2 V: 2

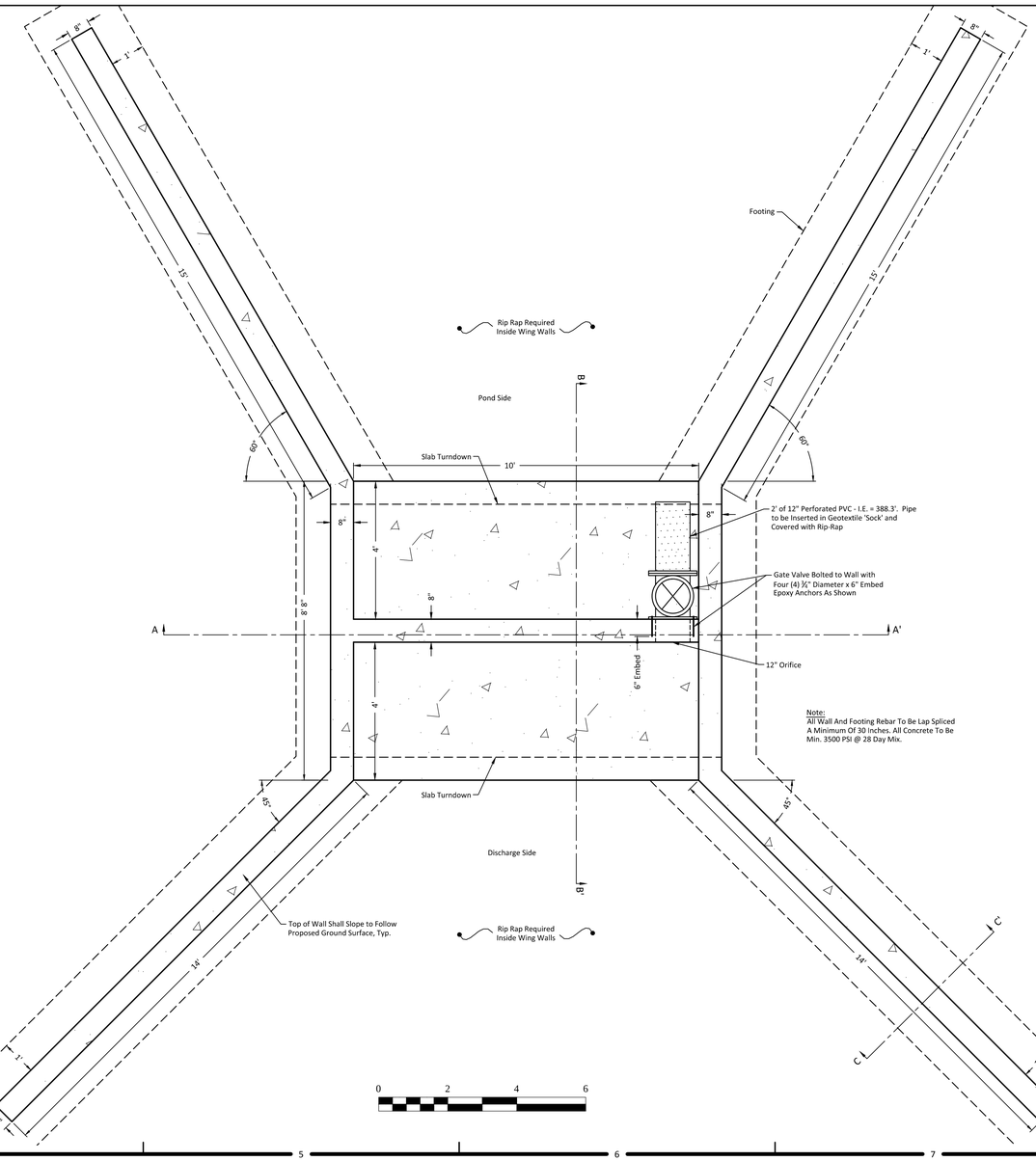


Spillway Section B-B'
H: 2 V: 2



Spillway Section C-C'
H: 2 V: 2





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JOB NO.	12-0149
DRAWN BY	PTH
CHECKED BY	TDB
DATE	01/30/2013

BREC - D.B. WILSON GENERATING STATION
EX. PIT - CONCRETE SPILLWAY STRUCTURE
PLAN & SECTIONS

SHEET NUMBER

1

S:\2012 Project File Folders\12-0149 BREC DB Wilson Landfill Stormwater Management Design\FINAL\Drainage Design SOUTH PIT.dwg

N

LEGEND

400 — As-Built Index Contour

As-Built Contour

Graphic Scale

10' 0' 5' 10' 20' 40'

1"=20'

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21-0016
DRAWN BY J.SHORT
CHECKED BY D.LAMB
DATE 01-27-2021

BIG RIVERS ELECTRIC CORPORATION
D.B. WILSON POWER PLANT
AS-BUILT BASIN 009 01-22-2021
PLAN VIEW

SHEET NUMBER
1
OF 2

Attachment E4
Sand Infill Hydraulic Stability Calculations

Sand Infill Hydraulic Stability Calculations
Big Rivers Generating Station

Sand infill hydraulic stability in ClosureTurf® has been independently tested by the third-party laboratory, TRI Environmental. A summary of testing and results is provided as Attachment 1. The current ClosureTurf sand infill specification is provided as Attachment 2. Test results demonstrate minimal sand infill mobilization at hydraulic shear values exceeding 1.5 lb/ft^2. The suggested design value for evaluating the potential for infill mobilization is 0.8 lb/ft^2.

Calculations utilizing site specific parameters to estimate hydraulic shear from rainfall runoff are provided. The purpose of the calculations is to evaluate whether the calculated maximum hydraulic shear stress in the sand infill of ClosureTurf exceeds the critical hydraulic shear stress. Three drainage scenarios are evaluated in the following calculations based on the information provided to Watershed Geo by the design engineer. The calculation results are summarized in Table 1 below.

Table 1. Summary of calculation results

Analysis Scenario	Calculated Max. Hydraulic Shear Stress using Super Gripnet® on Top Deck (psf)	Calculated Max. Hydraulic Shear Stress using Super Gripnet® on Side Slope (psf)	Suggested Critical Hydraulic Shear Stress (psf)	Hydraulic Shear Stress (Pass or Fail)
Scenario 1: 55 ft of top deck at 5% slope and 68 ft of side slope at 3.25H:1V	0.0 (Total flow on the top deck is less than the internal drainage capacity of Super Gripnet)	0.0 (Total flow on the slope is less than the internal drainage capacity of Super Gripnet)	0.8	Pass
Scenario 2: 156 ft of side slope at 3.4H:1V	-	0.0 (Total flow on the slope is less than the internal drainage capacity of Super Gripnet)		Pass
Scenario 3: 365 ft of side slope at 6H:1V	-	0.26		Pass

Scenario 1 – 55 ft of Top Deck into 68 ft of Side Slope

The maximum drainage path under Scenario 1 consists of a top deck with an assumed 5% slope with a drainage length of approximately 55 ft that then continues onto a 3.25H:1V side slope with a drainage length of approximately 68 ft.

Design Parameters:

Top Deck:

- Drainage length: L_1 = 55 ft (see Figure 1)
- Slope: S_1 = 5%
- Slope angle: $\alpha_1 = \tan^{-1}(5/100) = 2.86°$
- Hydraulic gradient: i_1 = 5% or 0.05
- Manning's roughness coefficient: n_1 = 0.22 (for slope $\leq$ 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 5% or i = 0.05):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.05^{0.624} = 1.89\ gpm/ft$
  - Transmissivity: $\theta_{i=0.05} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{1.89}{0.05} = 7.82 \times 10^{-3}\ m^2/sec$

Side Slope:

- Drainage length: L_2 = 68 ft (see Figure 1)
- Slope: S_2 = 30.8% (3.25H:1V)
- Slope angle: $\alpha_2 = \tan^{-1}(1/3.25) = 17.1°$
- Hydraulic gradient: i_2 = 30.8% or 0.308
- Manning's roughness coefficient: n_2 = 0.12 (for slope > 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 3.25H:1V or i = 0.308):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.308^{0.624} = 5.89\ gpm/ft$
  - Transmissivity: $\theta_{i=0.308} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{5.89}{0.308} = 3.96 \times 10^{-3}\ m^2/sec$

Other Design Parameters:

- Design rain fall intensity (see Figure 2, the 25-yr, 1-hr in NOAA precipitation data):

$$R = 2.35\frac{in}{hr} = 0.196\frac{ft}{hr}$$

- Critical hydraulic shear stress of ClosureTurf with manufactured sand infill:

τ_C = 0.8 psf (see Attachment 1)

Step 1: Calculate the maximum hydraulic shear stress of flow on the top deck

Flow rate on the top deck under the design rainfall intensity (assuming unit width of 1 ft of final cover):

$$q_1 = L_1 \cdot R \cdot \cos\alpha_1 = 55ft \times 0.196\frac{ft}{hr} \times \cos 2.86° = 10.76\frac{ft^2}{hr} = 0.0029\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.05} \cdot i_1 = 7.82 \times 10^{-3}\frac{m^2}{sec} \times 0.05$$
$$= 7.82 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.05 = 15.14\frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q_1' = q_1 - q_{int} = 10.76\frac{ft^2}{hr} - 15.14\frac{ft^2}{hr} = -4.38\frac{ft^2}{hr} < 0$$

Because the internal drainage capacity of Super Gripnet is greater than the flow rate, no water is expected to flow within the sand infill layer. Therefore, the hydraulic shear stress in the sand infill is zero and no erosion of sand infill is expected to occur.

Step 2: Calculate the maximum hydraulic shear stress of flow on the side slope

Water from the top deck will continue to flow onto the side slope. The total flow at the end of the side slope is:

$$q_{total} = q_1 + q_2 = q_1 + L_2 \cdot R \cdot \cos\alpha_2 = 10.76\frac{ft^2}{hr} + \left(68ft \times 0.196\frac{ft}{hr} \times \cos 17.1°\right)$$
$$= 23.49\frac{ft^2}{hr} = 0.0065\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.308} \cdot i_2 = 3.96 \times 10^{-3}\frac{m^2}{sec} \times 0.308$$

$$= 3.96 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.308 = 47.24 \frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q'_{total} = q_{total} - q_{int} = 23.49 \frac{ft^2}{hr} - 47.24 \frac{ft^2}{hr} = -23.75 \frac{ft^2}{hr} < 0$$

Because the internal drainage capacity of Super Gripnet is greater than the flow rate, no water is expected to flow within the sand infill layer. Therefore, the hydraulic shear stress in the sand infill is zero and minimal sand infill mobilization is expected to occur.

Scenario 2 – 156 ft of Side Slope at 3.4H:1V

The maximum drainage path under Scenario 2 consists of a side slope with a 3.4H:1V slope and a drainage length of approximately 156 ft that does not receive flow from a top deck.

Design Parameters:

Side Slope:

- Drainage length: L_1 = 156 ft (See Figure 1)
- Slope: S_1 = 29.4% (3.4H:1V)
- Slope angle: $\alpha_1 = \tan^{-1}(1/3.4) = 16.4°$
- Hydraulic gradient: i_1 = 29.4% or 0.294
- Manning's roughness coefficient: n_1 = 0.12 (for slope > 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 29.4% or i = 0.294):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.294^{0.624} = 5.72\ gpm/ft$
  - Transmissivity: $\theta_{i=0.294} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{5.72}{0.294} = 4.03 \times 10^{-3}\ m^2/sec$

Other Design Parameters:

- Design rain fall intensity (see Figure 2, the 25-yr, 1-hr in NOAA precipitation data):

$$R = 2.35\frac{in}{hr} = 0.196\frac{ft}{hr}$$

  Critical hydraulic shear stress of ClosureTurf with manufactured sand infill: $\tau_C = 0.8\ psf$ (see Attachment 1)

Step 1: Calculate the maximum hydraulic shear stress of flow on the slope

Flow rate on the slope under the design rainfall intensity (assuming unit width of 1 ft of final cover):

$$q_1 = L_1 \cdot R \cdot \cos\alpha_1 = 156ft \times 0.196\frac{ft}{hr} \times \cos 16.4° = 29.33\frac{ft^2}{hr} = 0.0081\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.294} \cdot i_1 = 4.03 \times 10^{-3}\frac{m^2}{sec} \times 0.294$$

$$= 4.03 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.294 = 45.89 \frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q_1' = q_1 - q_{int} = 29.33 \frac{ft^2}{hr} - 45.89 \frac{ft^2}{hr} = -16.56 \frac{ft^2}{hr} < 0$$

Because the internal drainage capacity of Super Gripnet is greater than the flow rate, no water is expected to flow within the sand infill layer. Therefore, the hydraulic shear stress in the sand infill is zero and minimal sand infill mobilization is expected to occur.

Scenario 3 – 365 ft of Side Slope at 6H:1V

The maximum drainage path under Scenario 3 consists of a side slope with a 6H:1V slope and a drainage length of approximately 365 ft that does not receive flow from a top deck.

Design Parameters:

Side Slope:

- Drainage length: L_1 = 365 ft (See Figure 1)
- Slope: S_1 = 16.7% (6H:1V)
- Slope angle: $\alpha_1 = \tan^{-1}(1/6) = 9.46°$
- Hydraulic gradient: i_1 = 16.7% or 0.167
- Manning's roughness coefficient: n_1 = 0.12 (for slope > 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 16.7% or i = 0.167):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.167^{0.624} = 4.02\ gpm/ft$
  - Transmissivity: $\theta_{i=0.167} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{4.02}{0.167} = 4.98 \times 10^{-3}\ m^2/sec$

Other Design Parameters:

- Design rain fall intensity (see Figure 2, the 25-yr, 1-hr in NOAA precipitation data):
$$R = 2.35\frac{in}{hr} = 0.196\frac{ft}{hr}$$
- Critical hydraulic shear stress of ClosureTurf with manufactured sand infill: $\tau_C = 0.8\ psf$ (see Attachment 1)

Step 1: Calculate the maximum hydraulic shear stress of flow on the slope

Flow rate on the slope under the design rainfall intensity (assuming unit width of 1 ft of final cover):

$$q_1 = L_1 \cdot R \cdot \cos\alpha_1 = 365ft \times 0.196\frac{ft}{hr} \times \cos 9.46° = 70.56\frac{ft^2}{hr} = 0.0196\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.167} \cdot i_1 = 4.98 \times 10^{-3}\frac{m^2}{sec} \times 0.167$$

$$= 4.98 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.167 = 32.21\frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q_1' = q_1 - q_{int} = 70.56\frac{ft^2}{hr} - 32.21\frac{ft^2}{hr} = 38.35\frac{ft^2}{hr} = 0.0106\frac{ft^2}{s}$$

The flow rate:

$$q_1' = v_1 \cdot A_1 = v_1 \cdot (H_1 \times 1\,ft) = v_1 \cdot H_1$$

Where, H_1 is flow depth on the slope (ft). Using the Manning's Equation and assuming the hydraulic radius equals to the flow depth (in ft):

$$v_1 = \frac{1.49}{n_1} H_1^{\frac{2}{3}} \sqrt{S_1}$$

Therefore,

$$q_1' = v_1 \cdot H_1 = \frac{1.49}{n_1} H_1^{\frac{2}{3}} \sqrt{S_1} \cdot H_1 = \frac{1.49}{n} H_1^{\frac{5}{3}} \sqrt{S_1}$$

Solve the above equation for H_1,

$$H_1 = \left(\frac{q_1' \cdot n_1}{1.49 \cdot \sqrt{S_1}}\right)^{\frac{3}{5}} = \left(\frac{0.0106 \times 0.12}{1.49 \cdot \sqrt{0.167}}\right)^{\frac{3}{5}} = 0.025ft$$

The maximum hydraulic shear stress by the water flow on slope:

$$\tau_1 = \gamma_w \cdot H_1 \cdot S_1 = 62.4\frac{lb}{ft^3} \times 0.025\,ft \times 0.167 = 0.26\,psf < \tau_c = 0.8\,psf, \textbf{PASS}!$$

The calculated maximum hydraulic shear stress in the sand infill is less than the critical hydraulic shear stress, indicating minimal sand infill mobilization is expected to occur.

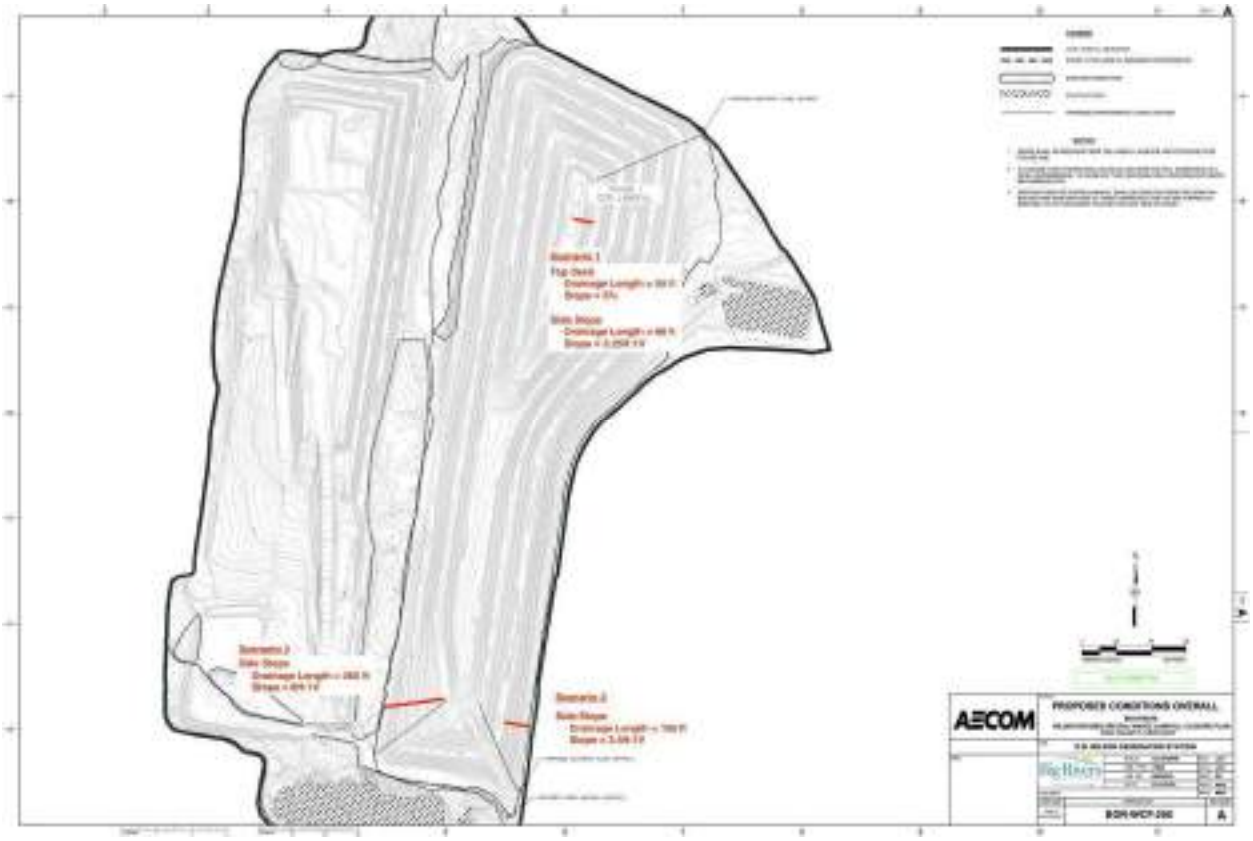

Figure 1. Grading plan with drainage paths identified

WG WatershedGeo™ Unearthing Solutions

9/16/2020

Precipitation Frequency Data Server

NOAA Atlas 14, Volume 2, Version 3
Location name: Hartford, Kentucky, USA*
Latitude: 37.4782°, Longitude: -86.8488°
Elevation: 513.99 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.352 (0.323-0.382)	0.413 (0.380-0.450)	0.476 (0.438-0.518)	0.527 (0.483-0.572)	0.591 (0.539-0.642)	0.637 (0.578-0.694)	0.685 (0.618-0.745)	0.730 (0.654-0.796)	0.786 (0.698-0.859)	0.829 (0.730-0.910)
10-min	0.562 (0.516-0.611)	0.660 (0.608-0.719)	0.762 (0.701-0.829)	0.842 (0.772-0.915)	0.941 (0.858-1.02)	1.01 (0.921-1.10)	1.09 (0.982-1.18)	1.16 (1.04-1.26)	1.24 (1.10-1.36)	1.31 (1.15-1.43)
15-min	0.702 (0.645-0.763)	0.830 (0.764-0.904)	0.964 (0.887-1.05)	1.07 (0.977-1.16)	1.19 (1.09-1.30)	1.29 (1.17-1.40)	1.38 (1.24-1.50)	1.46 (1.31-1.59)	1.57 (1.39-1.71)	1.64 (1.44-1.80)
30-min	0.962 (0.885-1.05)	1.15 (1.06-1.25)	1.37 (1.26-1.49)	1.54 (1.42-1.68)	1.77 (1.61-1.92)	1.94 (1.76-2.11)	2.11 (1.90-2.29)	2.27 (2.04-2.48)	2.49 (2.21-2.72)	2.65 (2.34-2.91)
60-min	1.20 (1.10-1.31)	1.44 (1.32-1.57)	1.76 (1.62-1.91)	2.01 (1.84-2.18)	2.35 (2.15-2.56)	2.62 (2.38-2.85)	2.90 (2.62-3.16)	3.19 (2.86-3.48)	3.57 (3.17-3.91)	3.87 (3.41-4.25)
2-hr	1.45 (1.34-1.57)	1.74 (1.61-1.89)	2.14 (1.98-2.32)	2.46 (2.27-2.66)	2.89 (2.68-3.13)	3.23 (2.95-3.50)	3.58 (3.25-3.88)	3.95 (3.55-4.29)	4.45 (3.95-4.84)	4.84 (4.26-5.29)
3-hr	1.58 (1.47-1.71)	1.89 (1.76-2.05)	2.33 (2.16-2.53)	2.68 (2.49-2.90)	3.17 (2.91-3.42)	3.56 (3.26-3.85)	3.96 (3.60-4.29)	4.39 (3.96-4.75)	4.97 (4.43-5.41)	5.44 (4.79-5.95)
6-hr	1.95 (1.81-2.12)	2.34 (2.17-2.54)	2.88 (2.66-3.12)	3.33 (3.07-3.60)	3.97 (3.63-4.28)	4.49 (4.09-4.85)	5.05 (4.55-5.46)	5.64 (5.04-6.11)	6.47 (5.69-7.04)	7.16 (6.22-7.81)
12-hr	2.35 (2.16-2.58)	2.82 (2.59-3.10)	3.47 (3.19-3.81)	4.02 (3.67-4.41)	4.79 (4.36-5.24)	5.43 (4.90-5.94)	6.11 (5.46-6.69)	6.83 (6.04-7.49)	7.86 (6.85-8.63)	8.70 (7.48-9.59)
24-hr	2.84 (2.63-3.07)	3.41 (3.17-3.69)	4.24 (3.93-4.58)	4.92 (4.55-5.31)	5.90 (5.42-6.36)	6.71 (6.13-7.23)	7.57 (6.87-8.17)	8.49 (7.63-9.18)	9.80 (8.68-10.6)	10.9 (9.52-11.8)
2-day	3.42 (3.19-3.71)	4.10 (3.79-4.45)	5.09 (4.71-5.53)	5.92 (5.45-6.42)	7.11 (6.51-7.71)	8.10 (7.37-8.80)	9.17 (8.27-9.97)	10.3 (9.21-11.3)	12.0 (10.5-13.2)	13.4 (11.6-14.7)
3-day	3.64 (3.37-3.94)	4.36 (4.04-4.73)	5.42 (5.01-5.87)	6.30 (5.81-6.83)	7.57 (6.94-8.20)	8.64 (7.86-9.37)	9.78 (8.82-10.6)	11.0 (9.84-12.0)	12.8 (11.3-14.0)	14.3 (12.4-15.6)
4-day	3.86 (3.58-4.18)	4.62 (4.29-5.01)	5.75 (5.32-6.22)	6.68 (6.17-7.23)	8.03 (7.37-8.70)	9.17 (8.35-9.93)	10.4 (9.38-11.3)	11.7 (10.5-12.8)	13.6 (12.0-14.9)	15.2 (13.2-16.8)
7-day	4.52 (4.17-4.95)	5.42 (5.00-5.94)	6.78 (6.23-7.43)	7.96 (7.29-8.71)	9.73 (8.84-10.6)	11.3 (10.2-12.3)	13.0 (11.6-14.2)	14.8 (13.1-16.4)	17.7 (15.3-19.6)	20.1 (17.1-22.5)
10-day	5.09 (4.71-5.55)	6.10 (5.63-6.64)	7.57 (6.97-8.24)	8.82 (8.11-9.61)	10.7 (9.75-11.6)	12.3 (11.1-13.4)	14.0 (12.6-15.3)	15.9 (14.2-17.5)	18.8 (16.4-20.7)	21.2 (18.2-23.5)
20-day	6.99 (6.55-7.47)	8.30 (7.78-8.88)	9.98 (9.34-10.7)	11.3 (10.6-12.1)	13.2 (12.3-14.1)	14.7 (13.6-15.7)	16.3 (15.0-17.4)	17.9 (16.3-19.2)	20.1 (18.2-21.7)	21.9 (19.7-23.9)
30-day	8.59 (8.09-9.15)	10.2 (9.56-10.8)	12.0 (11.3-12.8)	13.5 (12.7-14.4)	15.5 (14.6-16.5)	17.1 (16.0-18.2)	18.7 (17.4-20.0)	20.4 (18.8-21.8)	22.5 (20.6-24.2)	24.2 (22.0-26.2)
45-day	10.8 (10.2-11.4)	12.7 (12.0-13.4)	14.8 (14.0-15.6)	16.4 (15.5-17.3)	18.4 (17.4-19.5)	20.0 (18.8-21.2)	21.5 (20.1 22.8)	23.0 (21.4-24.4)	24.8 (23.0-26.5)	26.3 (24.2-28.1)
60-day	12.9 (12.3-13.6)	15.2 (14.4-16.0)	17.5 (16.6-18.4)	19.2 (18.2-20.2)	21.3 (20.2-22.4)	22.9 (21.6-24.1)	24.4 (22.9-25.7)	25.7 (24.1-27.2)	27.4 (25.6-29.0)	28.6 (26.6-30.4)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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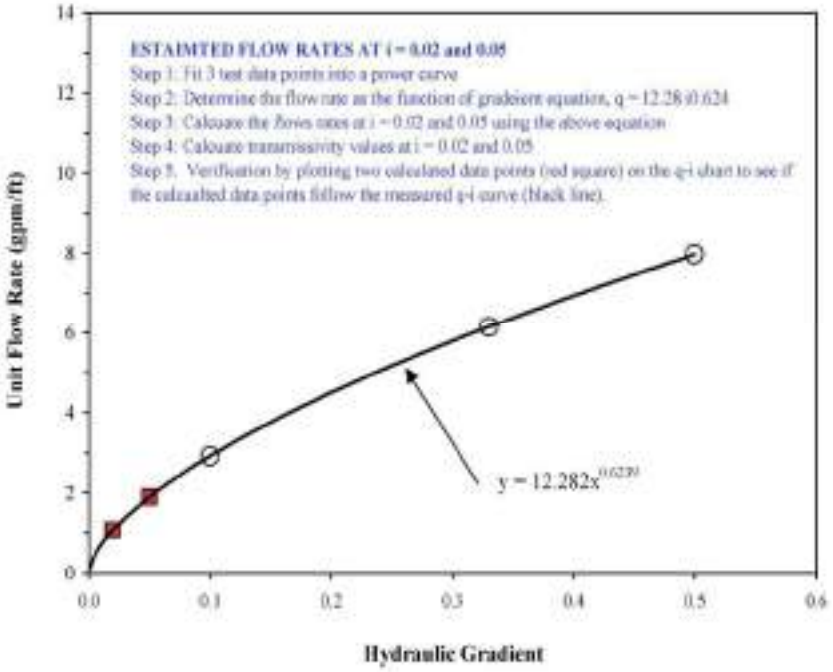
Figure 2. NOAA Precipitation Data

CLOSURETURF LLC -LANDFILL COVER SYSTEM
HYDRAULIC TRANSMISSIVITY TESTING (ASTM D 4716)
Test Configuration (from Top to Bottom): Sand Layer/Polytex Artificial Grass with Geotextile Side Down/ Agru 50-mil Super Gripnet LLDPE Geomembrane with Studs Side Up



Test No	Flow Direction	Specimen Size Width x Length (in. x in.)	Total Normal Stress[1] σ_n (psf)	Seating Time t (hour)	Hydraulic Gradient i (-)	Transmissivity $\theta = 0.00020697\left(\frac{q}{i}\right)$ (m^2/sec)	Flow Rate $q = 12.28i^{0.624}$ (gpm/ft)	Flow Rate q^t (l/min/m)
					0.02	1.11E-02	1.07	
					0.05	7.84E-03	1.84	
1	MD	12 x12	47	0.25	0.10	6.04E-03	2.92	36.3
2	MD	12 x12	47	0.25	0.33	3.86E-03	6.15	76.4
3	MD	12 x12	47	0.25	0.50	3.30E-03	7.97	99.0

NOTE:
Total normal stress = sand weight (sand + steel plate + surcharge) divided by the plan area of test specimen (1 square ft). A normal stress of 47 psf is approximately the minimum load stress required to keep the specimen from uplifting.

SGI TESTING SERVICES, LLC

DATE TESTED:	1/11/2013
FIGURE NO.	A-1
PROJECT NO.	SGI10007
DOCUMENT NO.	
FILE NO.	

Figure 3. Transmissivity test report of ClosureTurf with internal drainage layer

Attachment 1

Evaluation of Sand Infill Criteria for ClosureTurf®

Watershed Geo®
Unearthing Solutions

Technical Note

EVALUATION OF SAND INFILL CRITERIA FOR CLOSURETURF®

Fine aggregate infill (sand) is one component of the ClosureTurf® three component system. An extensive testing program was implemented to evaluate the criteria and performance properties for the sand infill in the ClosureTurf system. The program included large scale performance testing by an independent third party laboratory, TRI Environmental (TRI) at the Denver Downs Research facility in Greeneville, South Carolina. A description of the testing procedures and results are provided in this document.

SAND INFILL FUNCTION

The sand infill component of ClosureTurf is utilized as a protective layer for the geotextile backing of the engineered turf component. The polypropylene geotextile backing material contains ultraviolet (UV) radiation degradation inhibitors protecting it against UV damage. Sand infill functions as an additional protective layer against UV degradation of the geotextile backing. Optimal sand infill performance occurs with minimal sand movement.

TRI tested sand infill mobilization in ClosureTurf in general accordance with ASTM D 6460, *Standard Test Method for Determination of Rolled Erosion Control Product (RECP) Performance in Protecting Earthen Channels from Stormwater-Induced Erosion* and ASTM D 6459 *Standard Test Method for Determination of Rolled Erosion Control Product (RECP) Performance in Protecting Hillslopes from Rainfall-Induced Erosion*. The results of the testing were also analyzed in accordance with each Standard to quantify infill mobilization during tested conditions. Photographs of tested sands are provided as Attachment A.

SAND INFILL LARGE SCALE HYDRAULICS TESTING

The TRI large-scale hydraulic testing (ASTM D 6460) was conducted in a rectangular flume having a 0.10 ft/ft slope. The subgrade was a loamy soil over which ClosureTurf with a ½ inch sand infill was installed following installation guidelines. Water is supplied to the facility by gravity flow and controlled and measured through upstream sluice gates as presented in Figure 1.

A test consists of measuring infill thickness, opening the sluice gates a predetermined amount allowing overtopping flow on the ClosureTurf for a period of 30 minutes, closing the sluice gate to stop overtopping flow and measuring infill depth to evaluate sand loss. The test procedure is repeated a minimum of four times with increasing overtopping flow amounts or until enough sand infill has been removed to expose the majority of the geotextile backing.

Figure 1. ClosureTurf® TRI Flume Test Installation

Reported test results include sand infill loss during each 30-minute overtopping period and the corresponding hydraulic shear stress during the 30-minute test period. The testing was conducted on six different sand infills having a range of grain size distributions, fine aggregate angularities and specific gravities. Sand infill angularity and specific gravity are presented in Table 1. Tested sand infill grain size distributions are presented in Figure 2. Hydraulic shear stress results are presented in Figure 3.

Table 1. Tested Sand Infill Angularity and Specific Gravity

Test Sand No.	Fine Aggregate Angularity (FAA) (%) (ASTM C 1252 / AASHTO T 304) (Method A)	Bulk Specific Gravity, Dry (SG) (ASTM C 128 / AASHTO T 84)
1	47.2	2.64
2	40.5	2.60
3	43.1	2.59
4	45.7	2.64
5	47.1	2.85
6	43.7	1.96

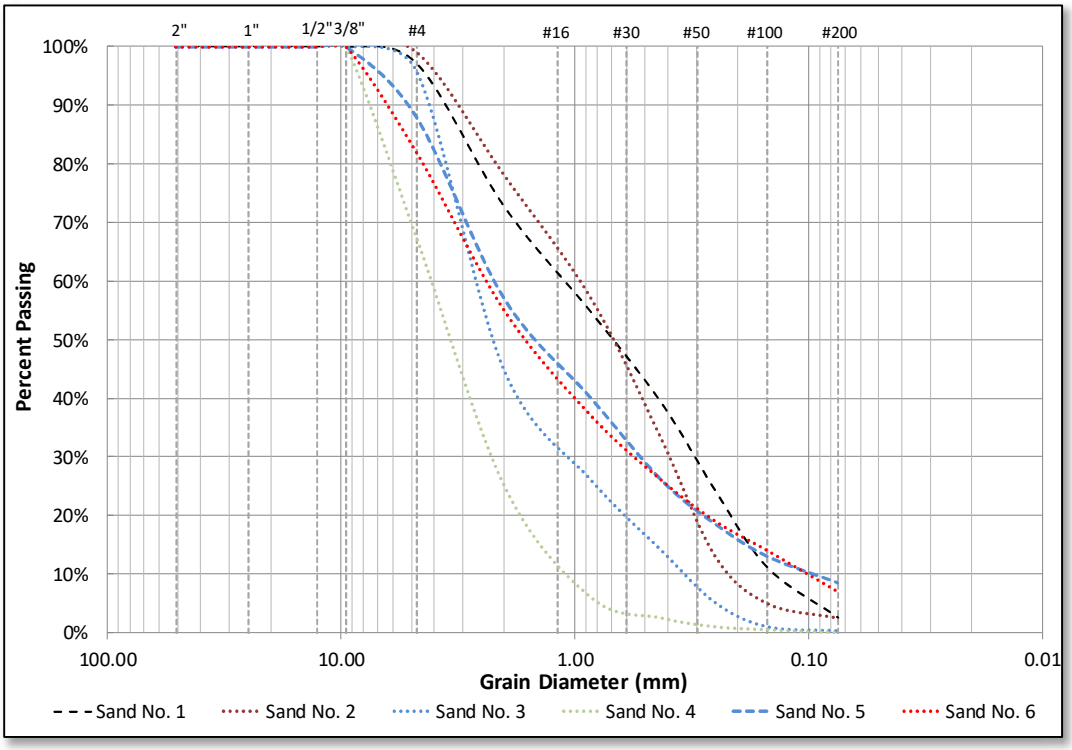


Figure 2. Tested Sand Infill Grain Size Distributions (ASTM C 136 / AASHTO T 27)

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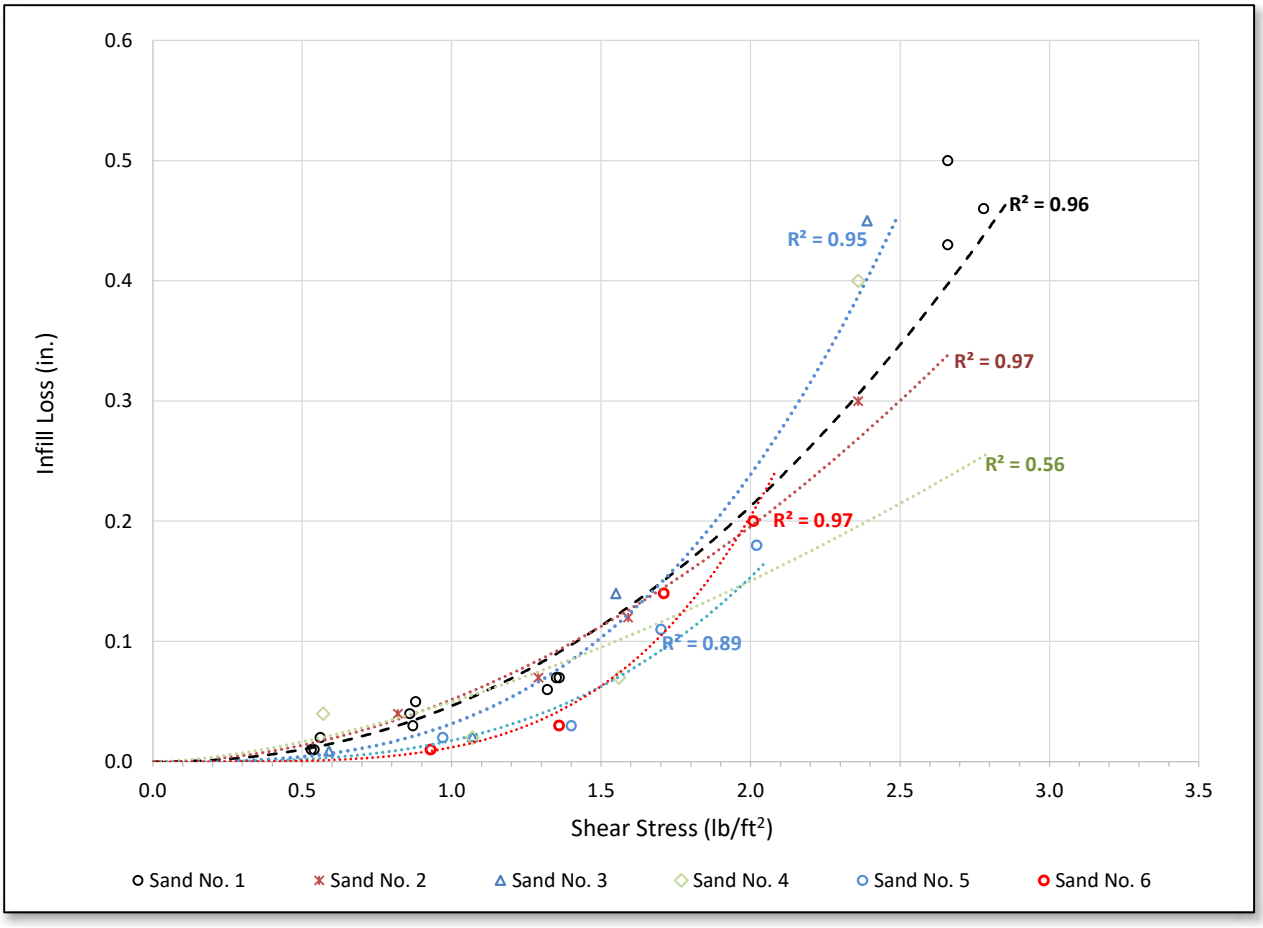

Figure 3. Infill Loss Due to Hydraulic Shear

SAND INFILL LARGE SCALE RAINFALL EROSION TESTING

The TRI large-scale rainfall erosion testing (ASTM D 6459) was conducted on a rectangular plot measuring 40 feet by 8 feet (length x width) and having a 0.33 ft/ft slope. The subgrade was a loamy soil over which ClosureTurf with a ½ inch sand infill was installed following installation guidelines as presented in Figure 4a. Artificial rainfall is produced by ten "rain trees" arranged around the perimeter of the test slope. Each rain tree has four sprinkler heads atop a 15 ft. riser pipe. The rainfall system produces target rainfall intensities of 2-, 4-and 6-inches per hour at pre-calibrated rain drop size distributions for a period of 20 minutes per intensity resulting in a one hour test. Testing in progress is presented in Figure 4b. All runoff was collected during testing to quantify sediment mobilization. Incremental infill losses are presented in Table 2.

(a) Infill Installation **(b) Testing in Progress**

Figure 4. ClosureTurf® TRI Rainfall Erosion Testing

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Table 2. Tested Sand Infill Rainfall Erosion Results

Test Sand No.	Rainfall Intensity (in./hr)	Incremental Infill Loss (%)
1	2.0	0.01
1	4.0	0.02
1	6.1	0.04
3	2.0	0.00
3	4.2	0.00
3	6.1	0.00
4	2.1	0.00
4	4.1	0.00
4	6.0	0.00

Based on the TRI large scale rainfall erosion and hydraulic shear test results and sand infill material properties, a sand infill specification was developed as summarized in Figure 5 and as appears in the WatershedGeo CSI specification, SECTION 31 05 16, *ClosureTurf® SAND INFILL COMPONENT*.

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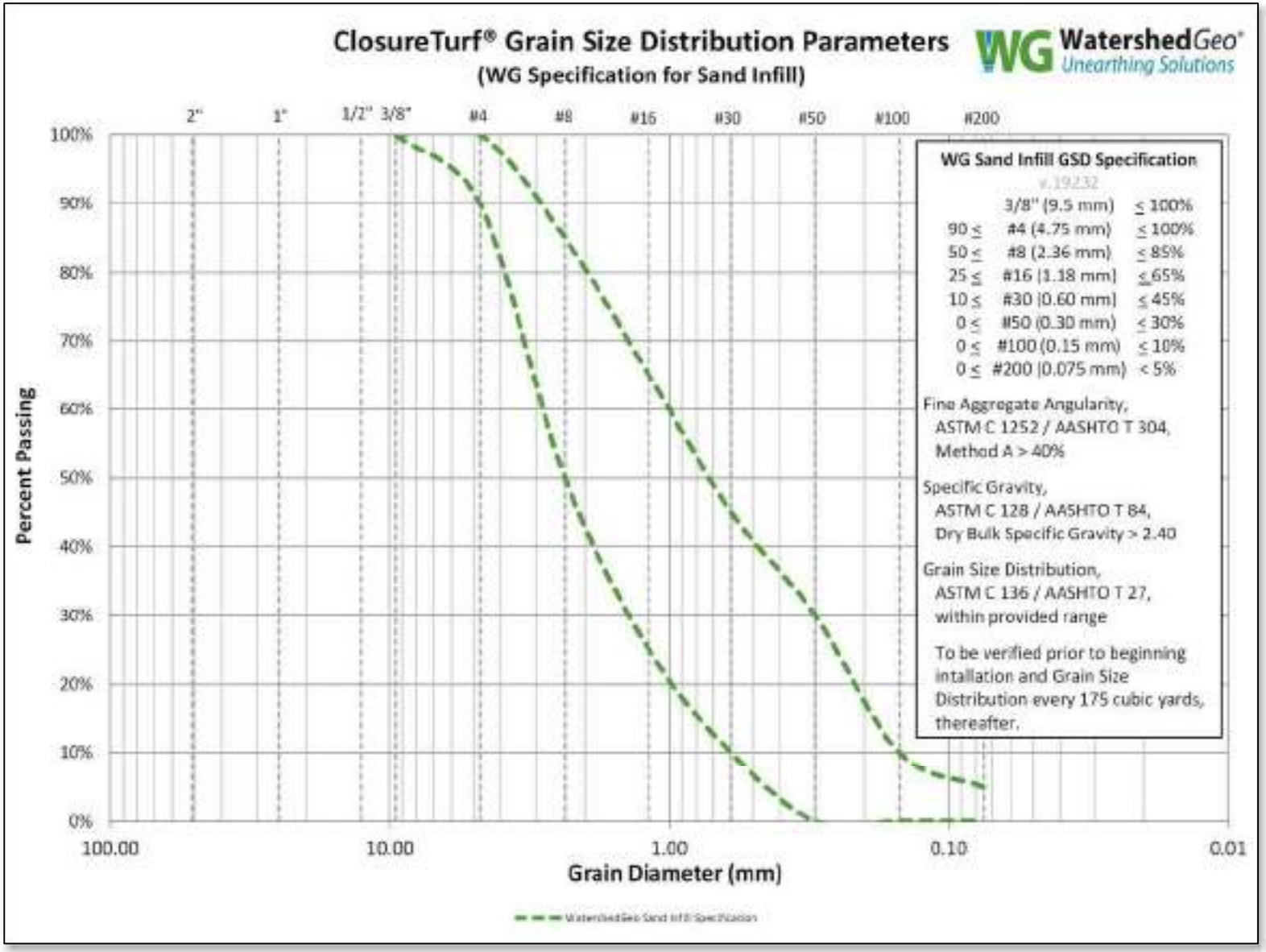

Figure 5. ClosureTurf® Sand Infill Specification

Attachment A

Figure A1. Tested Sand No. 1

Figure A2. Tested Sand No. 2

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Figure A3. Tested Sand No. 3

Figure A4. Tested Sand No. 4

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Figure A5. Tested Sand No. 5

Figure A6. Tested Sand No. 6

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LIMITATIONS

ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.

Attachment 2

ClosureTurf® Sand Infill Specification

This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site-specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 31 05 16

ClosureTurf® SAND INFILL COMPONENT

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:

Specifications for approved Sand Infill Component of the patented ClosureTurf® System.

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

PART 2: PRODUCTS

2.01 DESCRIPTION

Sand Infill Component of the ClosureTurf® System shall meet the fine aggregate angularity, specific gravity and grain size distribution as specified by WatershedGeo in this Specification.

A. Fine aggregate angularity shall be tested in accordance with ASTM C 1252 / AASHTO T 304, *Standard Test Methods for Uncompacted Void Content of Fine Aggregate (as Influenced by Particle Shape, Surface Texture, and Grading). Method A.* Method A uncompacted void content shall be greater than or equal to 40%.

B. Sand infill specific gravity shall be tested in accordance with ASTM C 128 / AASHTO T 84, *Standard Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate.* Bulk oven-dry specific gravity shall be greater than or equal to 2.40.

C. Sand infill grain size distribution shall be tested in accordance with ASTM C 136 / AASHTO T 27, *Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.* The grain size distribution shall be as prescribed in Table 1 and presented in Figure 1.

Table 1. Sand Infill Grain Size Distribution

		3/8" (9.5 mm)	≤	100%
90%	≤	#4 (4.75 mm)	≤	100%
50%	≤	#8 (2.36 mm)	≤	85%
25%	≤	#16 (1.18 mm)	≤	65%
10%	≤	#30 (0.60 mm)	≤	45%
0	≤	#50 (0.30 mm)	≤	30%
0	≤	#100 (0.15 mm)	≤	10%
0	≤	#200 (0.075 mm)	≤	5%

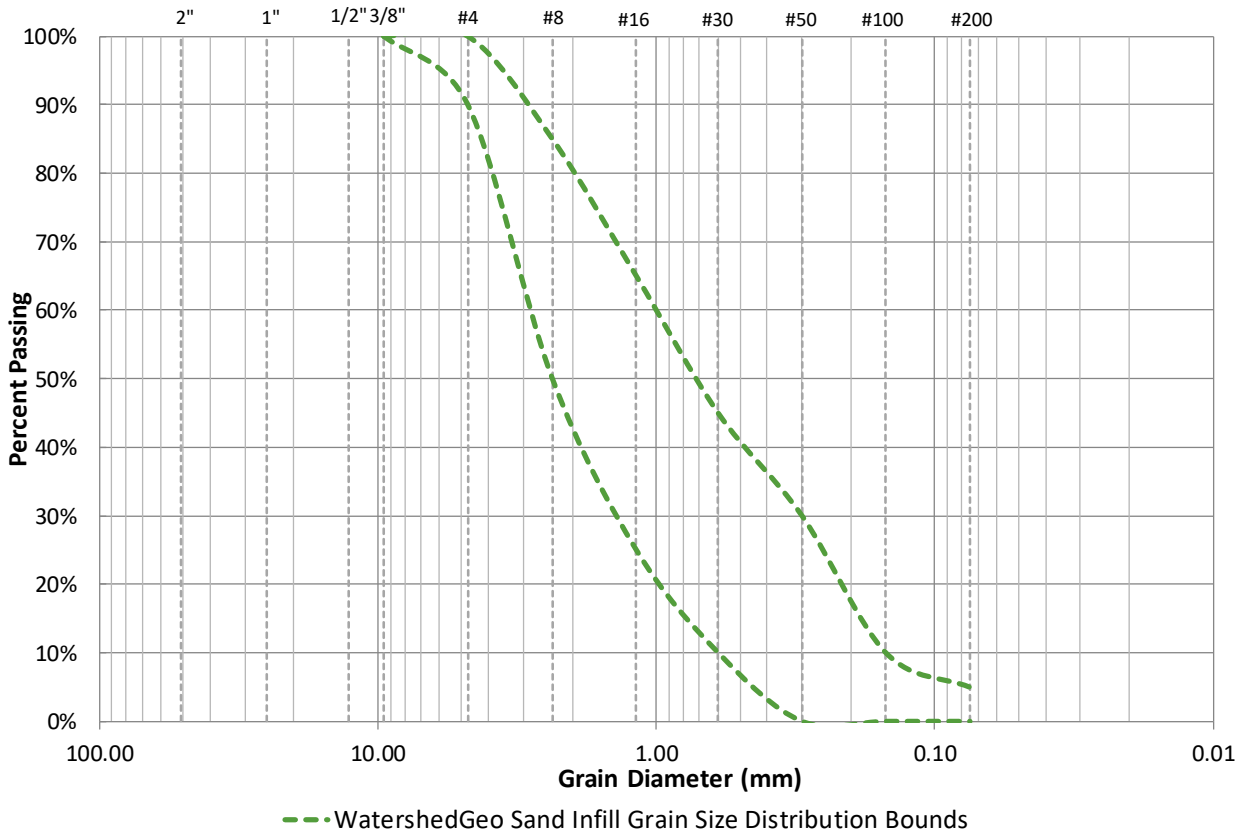

Figure 1: ClosureTurf® Specified Infill Grain Size Distribution

D. Documentation of sand infill conformance with ASTM C 136 / AASHTO T 27, ASTM C 128 / AASHTO T 84 and ASTM C 1252 / AASHTO T 304 shall be submitted to the specified CQA personnel.

E. Subsequent to initial verification of specification conformance, sand infill shall have grain size distribution conformance verified and documented for each 175 cubic yards to be installed.

PART 3: EXECUTION:

Not Used. See Section 01 73 19 ClosureTurf® Installation Specifications.

END OF SECTION

Attachment F:

ClosureTurf Product Data

TABLE OF CONTENTS

F1 - Infiltration Equivalence Analysis & Erosion Control
F2 - Longevity, Protection & Other Considerations
F3 - Cast Study
F4 - Technical Note on Design Life
F5 - Project Map
F6 - Fire Resistance
F7 - Aerodyamic Testing

ClosureTurf®

ADVANCED ENGINEERING CLOSURE SYSTEM

The only final cover solution that provides a predictable benchmark of performance.

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ClosureTurf® Overview

Superior Performance When Compared to EPA Subtitle D Final Closure Design

Watershed Geosynthetics, LLC has prepared this document to define the range of benefits of using ClosureTurf® as a final cover system for EPA Subtitle D applications. ClosureTurf offers several substantial performance benefits and environmental benefits over traditional and regulatory prescriptive designs for final closure of landfills and/or impoundments.

ClosureTurf provides significant technical advantages as a final closure system in comparison with the traditional EPA Subtitle D soil and vegetative cover treatment. Those benefits have been validated through extensive documented laboratory testing conducted at leading independent and existing operating facilities.

ClosureTurf is a more environmentally sound application when compared to traditional soil and vegetative covers. Some of these include improved water quality, land preservation and significant carbon footprint reduction. These environmental advantages are both quantifiable and effective.

As presented below, the regulatory criteria for evaluating an alternative cover system is to control infiltration and erosion. Based on several years of real world experience on over 40 million square feet installed, and extensive university and ASTM lab evaluations, the ClosureTurf system has shown to have a leakage rate over 40 times less than subtitle D prescriptive cover and an erosion loss of over 100 times less than subtitle D prescriptive cover.

ClosureTurf® Benefits

1) Regulatory Compliance

ClosureTurf is a three-component system comprised of a structured geomembrane, engineered synthetic turf, and a specified infill that meets and/or exceeds all of the requirements set forth by the EPA in "Subtitle D". EPA Subtitle D rules specifically state: "An alternative cover design may be used as long as it provides equivalent protection against infiltration and erosion." ClosureTurf significantly outperforms traditional Subtitle D closures based on these criteria, with the added benefit of performance well beyond the regulatory post-closure period.

2) Safety and Community Impact Reduction

The system eliminates approximately 550 truck trips per acre (1 load = 2 trips) from local roadways that would otherwise be used transporting soil to and from a borrow site. This reduction in size, number and duration of equipment means an overall increase in safety on both the project site and ingress and egress, while reducing dust, mud on roads and noise impacts to the surrounding community. Most traditional closures also require destruction of land in the community for project soil demands, resulting in secondary impacts and loss of future land use.

3) Sustainability

ClosureTurf® reduces the carbon footprint of a closure by approximately 80% when compared with traditional soil/vegetative covers. In addition, ClosureTurf provides an ideal foundation for future beneficial uses. Traditional post-closure plans identify the post-closure use simply as dead space. Note that ClosureTurf has been used for post-closure uses such photovoltaic solar panel arrays, allowing what is typically written off as "dead space" to be utilized as a renewable energy site. This feature is inherent with the ClosureTurf system and requires no special preparation or planning to accommodate possible future solar use.

4) Water Quality

The engineered synthetic turf and specified infill effectively filters surface water, providing clean runoff with very low turbidity. In addition, the system significantly reduces sediment loading to surrounding channels and sedimentation/detention basins both on and offsite. ClosureTurf will have a positive impact on overall storm water quality for sites, allowing them to improve their effluent levels to meet or be well below the regulatory limits.

5) Geotechnical Factors of Safety

ClosureTurf provides additional benefit through increased geotechnical factors of safety on the cover system. On side slopes, these factors of safety provide increased protection from sloughing and veneer failures under both static and seismic conditions. On flat surfaces (i.e. top decks), these increased factors of safety are realized through a significant reduction in the soil layer and subsequent loading of any underlying sludge-type waste materials that can reverse drainage and create ponding.

6) Water Conservation

ClosureTurf is a very low maintenance final cover system, eliminating the need of costly re-vegetating and fertilizing of traditional soil/vegetative covers and reducing the evaporative losses and water demands to sustain the closure and its performance. In addition, the system inhibits dust-creation, eliminating the need for wasteful watering practices intended to reduce dust transmission and air particulate pollution.

7) Maintenance Cost Savings

ClosureTurf effectively reduces the maintenance of a final closure system by over 90% through the elimination of maintenance activities and typical erosion repair issues associated with traditional vegetative covers. This savings continues to pay dividends year after year and protects the site from drought cycle or other severe weather damage that can have a detrimental effect on vegetative covers.

8) Land Conservation

Traditional closure methods require the destruction of land to achieve the closure. ClosureTurf optimizes land conservation through the elimination of excavation borrow pits on undisturbed, native land as well as providing acreage for renewable energy sites (i.e. photovoltaic solar panel arrays) that might otherwise need to be constructed in other undeveloped areas.

9) Project Schedule/Installation Rate

ClosureTurf® requires fewer resources to complete a final cover closure, from pre-design through final acceptance. ClosureTurf installs significantly faster than traditional soil covers using dramatically lighter and fewer pieces of equipment. This increase in project-completion efficiency means that owners, operators and their design and construction team can cover more acreage far more effectively with ClosureTurf than with traditional soil cover systems. In addition, the standardization of engineering and construction details associated with ClosureTurf reduces the burden on the regulatory review and approval process.

10) Longevity

The system is designed for and proven to have a design life over 100 years of the infilled geosynthetic protective layer (Engineered Synthetic Turf) of ClosureTurf (with the underlying geomembrane lasting many more years beyond the long life of the Engineered Turf component).

ClosureTurf® Detail Description

ClosureTurf is an environmentally friendly and aesthetically pleasing synthetic turf final cover system designed for long-term performance with a protective erosion layer for the structured membrane. This system eliminates the challenges of traditional vegetative cover systems such as erosion control, veneer slope stability, and post- closure maintenance. A section of ClosureTurf is shown in Figure 1. Its components include the following from bottom to top:

- Structured HDPE or LLDPE Geomembrane;
- Engineered Synthetic Turf (Comprised of Polyethylene Fibers Tufted through a Double Layer of Woven Polypropylene Geotextiles manufactured for high UV and heat resistance);and
- Specified Infill.

The ClosureTurf system is placed directly on top of the prepared subgrade.

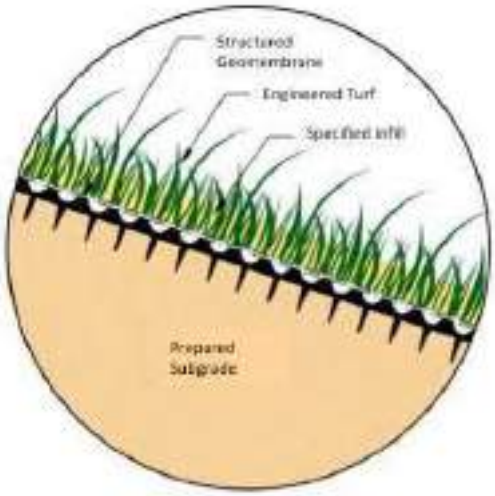


Figure 1 – Cross Section of ClosureTurf® System

ClosureTurf® has been approved as a Final Cover System in many states across the U.S. Approvals were based on a demonstration that ClosureTurf exceeds the minimum requirements defined in applicable state or Federal EPA regulations.

The minimum technical requirements for Subtitle D Final Cover Systems are contained in 40 CFR 258.60. This regulation allows for a prescriptive (minimum criteria) cover system or an alternative (performance based) cover system. The specific requirements of 40 CFR 258.60 for approval of an alternative final cover system are as follows:

"(B) The Director of an approved State may approve an alternative final cover design that includes:

(1) An infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (a) (1) and (a) (2) of this section, and

(2) An erosion layer that provides equivalent protection from wind and water erosion as the erosion layer specified in paragraph (a) (3) of this section."

The analyses demonstrate that the ClosureTurf Final Cover System has (1) a greater reduction in infiltration than the Prescriptive Subtitle D Cover and (2) provides greater protection from erosion, while providing several orders of magnitude of functional longevity with reduced maintenance burden. The regulatory approvals, testing and real-world experience has been demonstrated at multiple closures having varying climate conditions as shown in Figure 2 below.

Figure 2 - Completed Projects

Attachment F1:

Infiltration Equivalency Analysis & Erosion Control

Infiltration Equivalency Analyses

Infiltration equivalency through a cover system is typically evaluated using two methodologies. These methodologies are the Hydrologic Evaluation of Landfill Performance (HELP) Model and the Giroud Method[1]. Both of these methods have been used to compare the infiltration performance of the ClosureTurf® Final Cover System to the Prescriptive Subtitle D Cover. A summary of the results is shown in Table 1.

The results show that the ClosureTurf Final Cover System provides better infiltration protection than the Prescriptive Subtitle D Standard for construction of landfill final closure systems. These results are expected since ClosureTurf does not allow significant hydraulic head to build up over the geomembrane.

Infiltration Equivalency Analyses	ClosureTurf® Cover System	Prescriptive Subtitle D Cover System
Help Model for Site in Georgia – Average Annual Infiltration (Cubic Feet/Acre/Year)	8.3	347
Giroud Method with Silty-Sandy Soil below the ClosureTurf Peak Daily Infiltration (Gallons/Acre/Day)	1.33	4.51
Giroud Method with Silty-Sandy Soil with Some Clay below the ClosureTurf Peak Daily Infiltration (Gallons/Acre/Day)	0.24	4.51

Table 1 – Summary of Results for Infiltration Equivalency Analyses

Erosion Control

Rainfall Erosion Control Testing

ClosureTurf was tested at TRI Environmental in accordance with ASTM 6459 - Standard Test Method for Determination of Rolled Erosion Control Product (RECP) Performance in Protecting Hillslopes from Rainfall-Induced Erosion. ClosureTurf was tested in a rainfall simulator to an intensity of over 6.5 in/hr with less than 0.04% loss of sand infill.

[1] Rate Of Liquid Migration Through Defects In A Geomembrane Placed On A Semi-Permeable Medium, J.P. Giroud, T.D. King, T.R. Sanglerat, T. Hadj-Hamou and M.V. Khire, Geosynthetics International 1997, Vol. 4, Nos. 3-4.

Figure 3 – Rainfall Erosion Control Testing on ClosureTurf® (3H:1V Slope)

The typical design criterion for sediment runoff on a traditional landfill soil cover is 3 tons/acre/year. The measured loss of sand infill (0.04%) of the ClosureTurf® is approximately 0.03 tons/acre for a 6.5 in/hr rainfall intensity. Using ClosureTurf will significantly reduce sediment loads and runoff turbidity. Also, the ClosureTurf System filters the storm water and provides "clean" runoff as shown in the testing samples in Figure 4 below.

Enhanced Water Quality

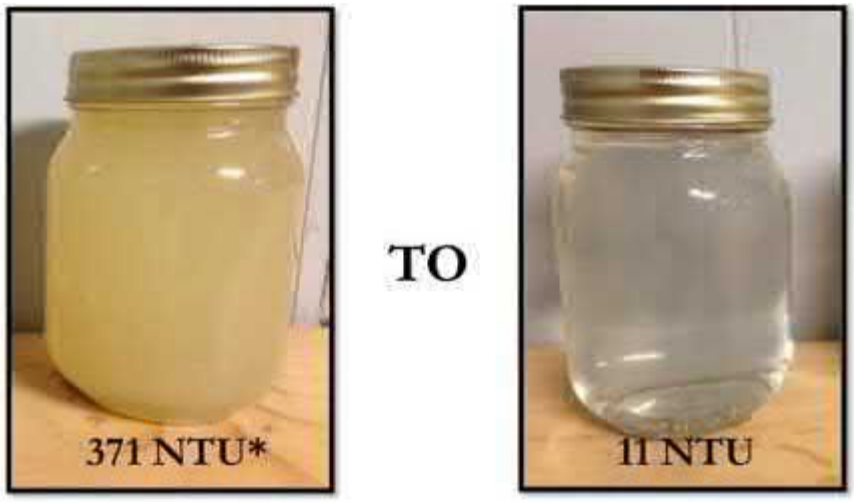


Figure 4* – Storm Water Quality Sampling at two ponds at the same facility
Pond 1 (left sample) drains vegetative CAP
Pond 2 (right sample) drains ClosureTurf® CAP

*2014 ICEG Award winning paper

Parameter	Area with Soil Cover	Area with ClosureTurf®
Turbidity (NTU)	371	11
Total Suspended Solids-TSS (mg/L)	349	<4
pH	6.5	7.3
Total Organic Carbon-TOC (mg/L)	174	1
Toxic Release Inventory-TRI (mg/L)	16	0.5

Table 3 – Analytical Results from Storm Water Samples at a Southeastern Landfill

Large Scale Flume Testing of ClosureTurf® with HydroBinder®

In areas of channelized flow (bench drains, down chutes, and perimeter channels), Watershed Geo suggests that the ClosureTurf® be infilled with HydroBinder® (sand cement infill) instead of just sand. ClosureTurf® with HydroBinder® has been tested at Colorado State University Engineering Research Center (CSU).

CSU tested ClosureTurf® with HydroBinder® in accordance with ASTM D 7277 – Standard Test Method for Performance Testing of Articulated Concrete Block (ACB) Revetment Systems for Hydraulic Stability in Open Channel Flow. The results of the testing were analyzed in accordance with ASTM D 7276 - Standard Guide for Analysis and Interpretation of Test Data for Articulating Concrete Block (ACB) Revetment Systems in Open Channel Flow. Testing was performed to the 5-ft overtop flume capacity which resulted in over 29 fps in velocity and over 8.8 psf in shear stress. The photos in Figure 5 show this steady state testing being performed.

Figure 5 – Steady State Hydraulic Testing of ClosureTurf® with HydroBinder® at CSU

Full-scale Wave Overtopping Testing for Side Slope Protection was also performed on the ClosureTurf® with HydroBinder® at CSU. CSU has the world's largest Wave Overtopping Simulator which they developed for the US Army Corp of Engineers. Testing was performed on HydroTurf for 13 hours with 9 hours at the maximum capacity of the simulator (4.0 cfs/ft which represents a generic hurricane with a 0.2 percent annual exceedance probability – 500-year event). The photos in Figure 6 show wave overtop testing on the HydroTurf.

Figure 6 – Wave Overtopping Hydraulic Testing of ClosureTurf® with HydroBinder® at CSU

January 20, 2021

SUBJECT: CLOSURETURF INFILTRATION EQUIVALENCY TO EPA CCR RULING

Agru America (Agru) understands you are considering use of ClosureTurf as a final cover system for a coal combustion residuals (CCR) enclosure. This letter demonstrates that ClosureTurf exceeds the requirement to "achieve equivalent reduction of infiltration of liquids" as specified in paragraphs (d)(3)(i)(A) and (B) below. The Federal Environmental Protection Agency (EPA) has issued closure regulations under Title 40 of the Code of Federal Regulations, Part 257 (CCR Rules) regarding CCR impoundments that are structured on existing closure requirements for solid waste landfills (40CFR 258.60). The closure cap criteria under Section 257.102(d) specify:

> *(3) Final cover system. If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (d)(3)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.*
>
> > *(i) The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.*
> >
> > > *(A) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1 × 10−5 cm/sec, whichever is less.*
> > >
> > > *(B) The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.*
> > >
> > > *(C) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.*
> > >
> > > *(D) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.*

Similar to landfill closure criteria, the CCR Rules allow for alternative closure cap designs, such as ClosureTurf under Section 257.102(d)(3)(ii):

> > *(ii) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (f)(3)(ii)(A) through (D) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.*
> >
> > > *(A) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(i)(A) and (B) of this section.*
> > >
> > > *(B) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(i)(C) of this section.*
> > >
> > > *(C) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.*

Infiltration through a ClosureTurf final cover system (alternative) is compared to that of the CCR prescriptive soil cover system in Table 1.

Table 1

Final Cover Infiltration Equivalency Calculation (Saturated Conditions)				
	CCR Prescriptive Standard		ClosureTurf	
	Subgrade Soil Type: Prescriptive[4]		Subgrade Soil Type: Prescriptive[4]	
Topsoil Thickness (h)	6 in	0.1524 m	0.5 in	0.0127 m
Diameter of GM Hole (d)			1 cm	0.01 m
Area of GM Hole			0.79 cm^2	7.85E-05 m^2
Coefficient for "Good" Contact C_{qo} [1]				0.21
Infiltration Layer Thickness (t_{UM})	18 in	0.4572 m	18 in	0.4572 m
Infiltration Layer Permeability, k_{UM} [2]	1.0E-05 cm/sec	1.0E-07 m/sec	1.00E-05 cm/sec	1.00E-07 m/sec
	Gradient, i ($h/h+t_{UM}$)	0.25	Upper Limit, k_G [3]	3.31E-04 m/sec
Liquid Flow Estimate	Darcy's Law	1.01E-04 m^3/sec/Ac.	Giroud '97	1.06E-08 m^3/sec/Ac.
Estimated Infiltration, Q		**2,308.4 Ga/Ac./day**		**0.2 Ga/Ac./day**

Notes: 1. "Good" contact conditions correspond to a geomembrane installed with a rigorous CQA program, producing as few wrinkles as possible, on top of a low-permeability soil layer that has been adequately compacted and has a smooth surface with final cover level overburden pressure. (Giroud 1997, Giroud & Bonaparte 1989)

2. The prescriptive standard permeability for soil liners, or infiltration layers, is 1 x 10-5 cm/sec in typical state final cover regulations in compliance with SubTitle D of the Federal regulations.

3. The Upper Permeability Limit represents the limit of calculation validity. Infiltration layer soil permeability above these levels begin to transition into Bernoulli flow conditions. (Giroud 1997)

4. Mixtures of clay, sand and silt.

This comparison uses Darcy's Law (Q = kiA) for liquid flow through soil to estimate fluid flow through one acre of prescriptive final cover. The infiltration estimate for ClosureTurf is based on the following equation[1]:

$$Q = 0.976 C_{qo} \left[1 + 0.1 \left(\frac{h}{t_{UM}} \right)^{0.95} \right] d^{0.2} h^{0.9} k_{UM}^{0.74}$$

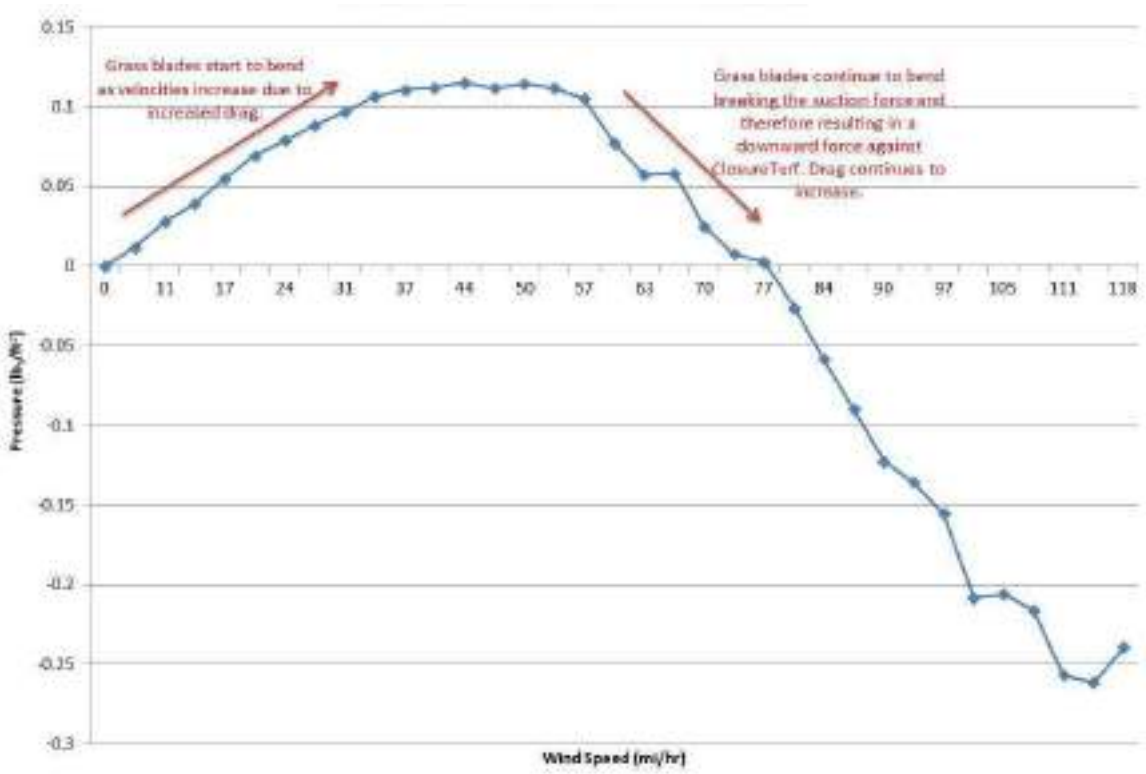
As shown in Table 1, the infiltration potential of ClosureTurf is much less than the prescriptive standard. This is due to the very small hydraulic head, h, associated with the ClosureTurf final cover system. Also, given modern Construction Quality Assurance (CQA) techniques, the likelihood of Giroud's assumed 1-cm diameter hole per acre in the Supergripnet geomembrane component of ClosureTurf is very conservative.

Wind and Water Erosion

ClosureTurf has been tested for wind and rainfall erosion resistance. It was subjected to hurricane category 3 windspeed at the Georgia Tech Research Institute wind tunnel to determine the turf's resistance to wind uplift forces commonly associated with "exposed" geomembrane. The wind tunnel testing reveals wind shear force is the predominant force requiring design consideration. Figure 1 are the results of the wind tunnel testing and demonstrate exception performance against wind forces.

[1] Giroud, J.P.,King, T.D., Sanglerat, T.R., Hadj-Hamou, T. and Khire,M.V., 1997, "Rate of Liquid Migration Through Defects in a Geomembrane Placed on a Semi-Permeable Medium", Geosynthetics International, Vol. 4, Nos. 3-4, pp. 349-372.

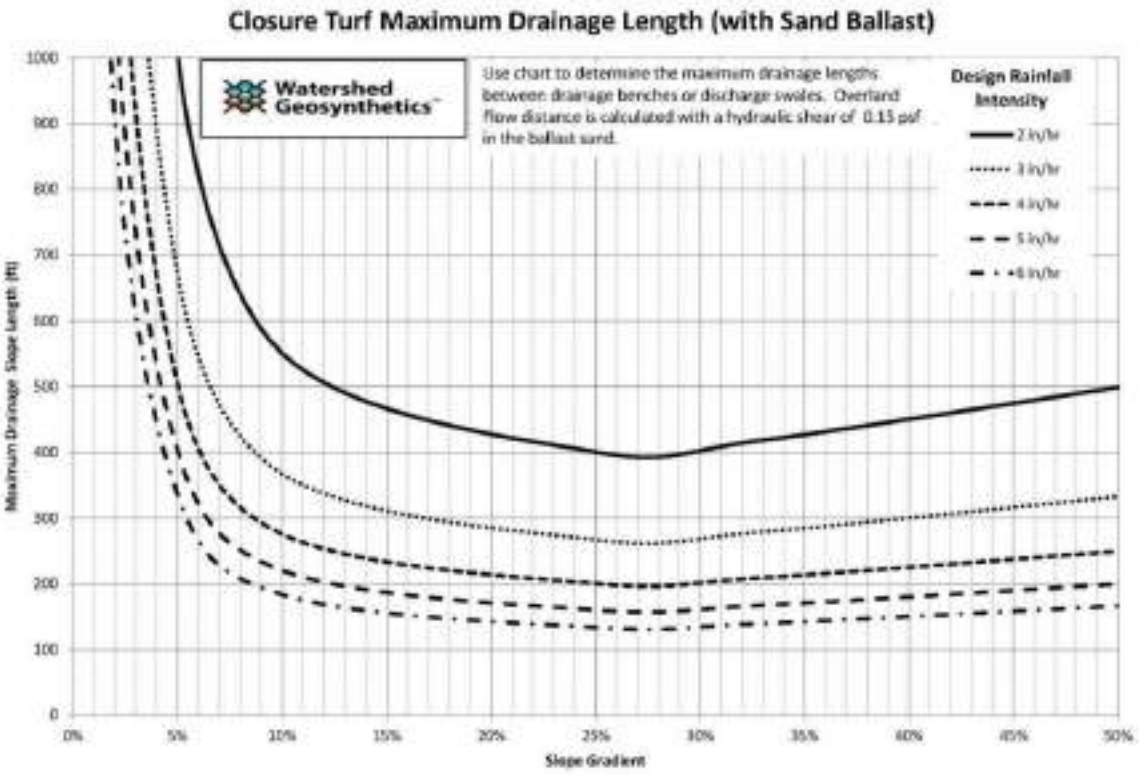
Figure 1



For water erosion protection, ClosureTurf was tested for slope erosion resistance using test method ASTM D6459 conducted by Texas Research International (TRI). In addition, the sand ballast was tested by TRI for concentrated flow using test method ASTM D6460 to determine the maximum allowable hydraulic shear force to avoid sand movement within or removal from the turf blade matrix. These studies resulted in the information presented in Figure 2.

Using the information in Figure 2, design engineers can specify spacing of slope benches to capture slope run-off and convey run-off to discharge points in a safe manner. In the case of CCR impoundments, topdeck slopes are generally less than 5-percent. Inspection of Figure 2 reveals the ClosureTurf system can accommodate large reaches of surface run-off before conveyance structures are required in the hydraulic design.

Figure 2



Final Cover Settlement/Subsidence

The prescriptive final cover design for CCR impoundments is a soil liner as described in Section 257.102(d)(3)(i). However, CCR impoundments typically have very poor bearing strength. Construction of a CCR soil liner will involve use of heavy soil moving equipment. This will result in significant amounts of differential settlement. The Geosynthetic Research Institute investigated the performance of soil liners undergoing differential settlement and found the average allowable elongation of soil liners before cracking develops is 0.31%. Typical settlement induced strain ranged from 2 to 27 percent.

In stark contrast, the break elongation of Agru's LLDPE Supergripnet and Microspike geomembranes are 300 and 400%, respectively. LLDPE resin based geomembrane is typically used for final cover applications due to this compatibility with settlement induced strain.

Conclusion

When compared to the typical performance of a soil liner final cover system, the ClosureTurf final cover system provides equivalent to superior performance when compared to the prescriptive cover minimum standards described in paragraph (d)(3)ii(A) of 40CFR 257.102.

If you have any questions regarding this matter, please call the undersigned at (916) 218-8375.

Very Truly Yours,

AGRU-America, Inc.
Christopher M. Richgels, PE
Western Region Engineer

Cc: Chris Eichelberger, Agru-America
Mike Gnau, Agru-America

Attachment F2:

Longevity, Protection,

and other

considerations

Longevity and Protection Provided by ClosureTurf®

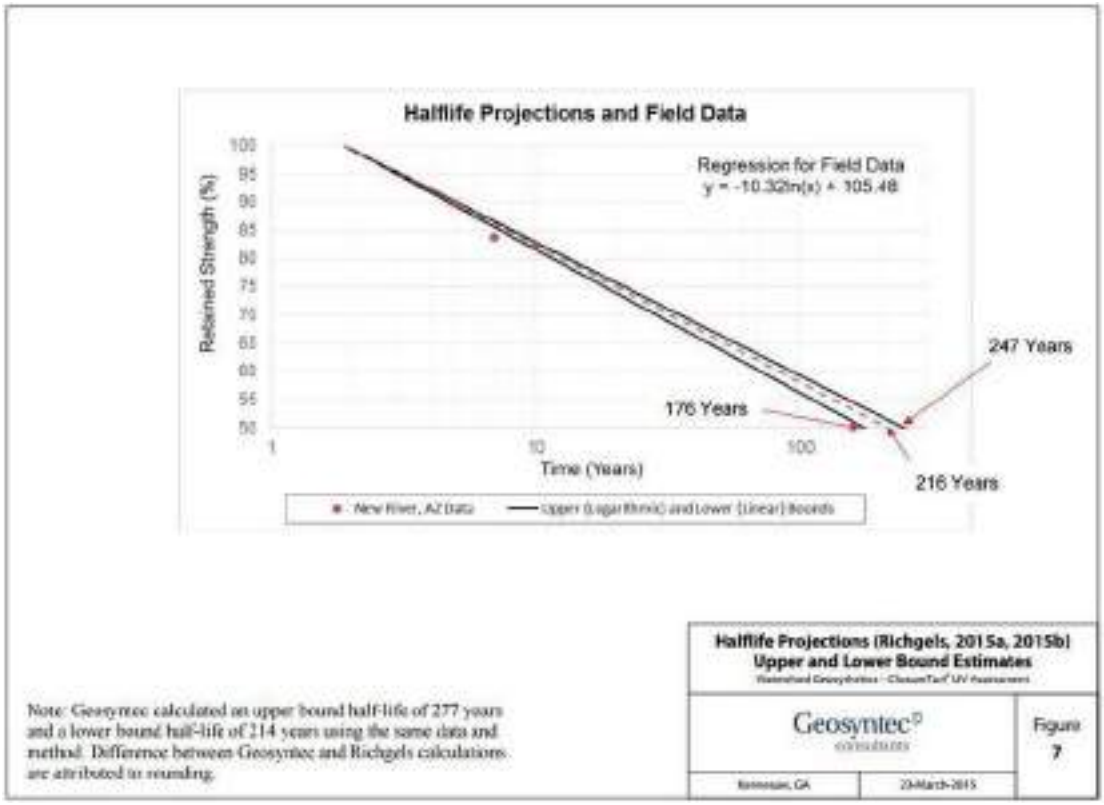
ClosureTurf® is not an exposed cover system, it is a hybrid system that provides full protection of the most critical element of the closure system. ClosureTurf differs from exposed geomembrane systems as follows:

Access and drivability of exposed geomembrane systems are severely limited without means of protecting the geomembrane. In addition, exposed geomembranes are vulnerable to wildlife trafficking. The engineered Turf component serves as a protective ballast providing physical protection and weathering protection.

Since ClosureTurf looks and feels like natural vegetation, it is significantly more aesthetically pleasing than an exposed geomembrane system with hydraulic parameters that do not create fast time of concentrations and energy dissipation issues to the degree of that of exposed membranes.

ClosureTurf has a longer functional longevity than exposed geomembrane systems. For ClosureTurf, the synthetic turf layer provides protection of the structured geomembrane such that it is not exposed to the elements. If properly maintained, the Engineered Turf layer will have a 100+ year functional longevity. The results for 10 years of independent weathering data for the artificial turf yarns are shown in Figure 7. When this data is extrapolated out to 100 years, the yarn has an approximate 65% retained tensile strength. In other words, the design half-life of the engineered turf layer far exceeds 176 years. This longevity has been independently evaluated by multiple organizations who are experienced in the longevity performance of geosynthetics.

Figure 7 - Independent longevity analysis project



Static and Dynamic Load Evaluations

Traffic Loading Evaluation

Rubber tired vehicles, and some steel-track equipment, are allowed to drive on the ClosureTurf® system. Typically, on slopes, we suggest vehicles with ground pressures less than 60 psi, and on flat decks (2% or less) and designed access roads, we suggest vehicles with tire pressures less than 100 psi. Detailed calculations for puncture of the geomembrane from wheel loading have been performed as well as lateral movement on account of vehicle braking have been performed on numerous applications for final cover.

Aerodynamic Evaluation

ClosureTurf has features that help mitigate the forces of wind. These include a porous surface to break the vacuum, and turf blades that will increase the aerodynamic boundary conditions and react against the wind causing a resistance to the uplift component.

The ClosureTurf System was evaluated in the wind tunnel at the Georgia Tech Research Institute (GTRI). It was tested up to 120 mph without uplift. Based on these results, the ClosureTurf System is projected to withstand 150+ mph winds when properly designed. The photo in Figure 8 shows the test at 170 fps (120 mph).

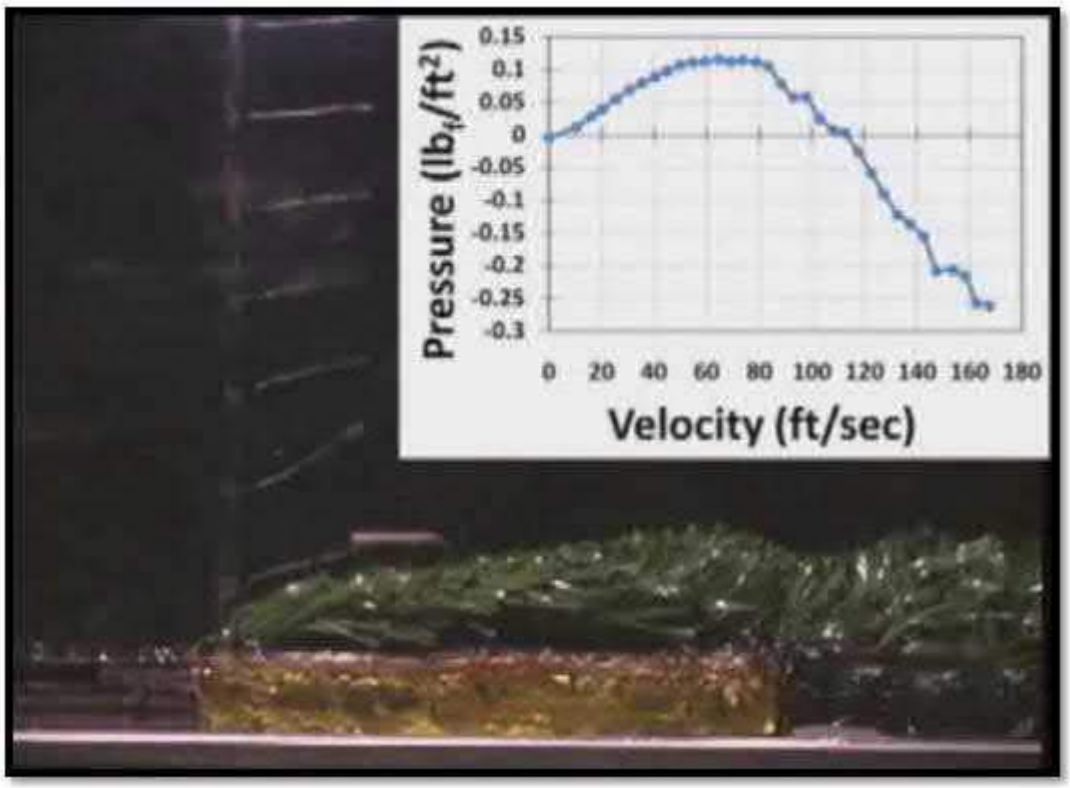


Figure 8 – Aerodynamic Evaluation of ClosureTurf® at GTRI

Carbon Footprint

ClosureTurf® has approximately 1/5 the carbon footprint of the Subtitle D traditional prescription cover system. The factors influencing the carbon footprint, and other environmental impacts, are related to reduction of 350 haul trucks per acre that is normally required to haul the adequate amount of cover to meet the specifications of the regulatory prescriptive cover. Other impacts include the destruction of land for borrow soil, sediment from land disturbance. The details of the carbon footprint calculations are shown in the following chart in Figure 9.

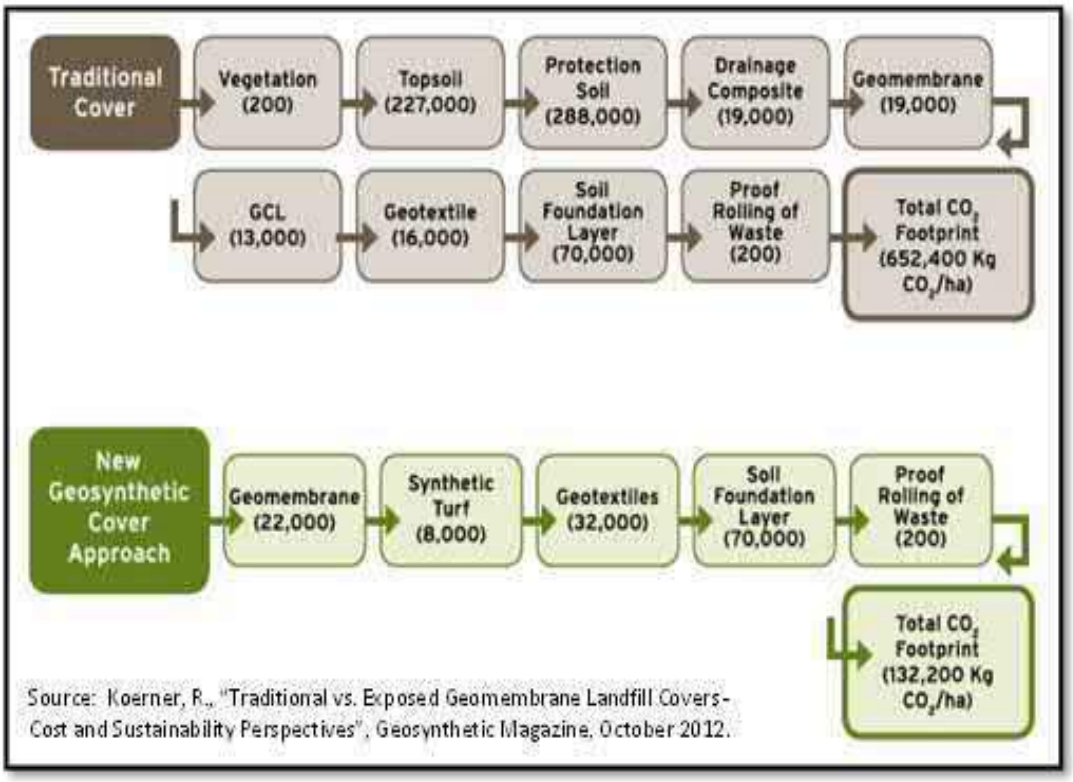


Figure 9 – Carbon Footprint Evaluation of ClosureTurf vs. Traditional Cover

Emission Control

The ClosureTurf system prevents fugitive emissions by totally encapsulating the closed areas. When integrated with conventional gas collection systems, higher collection efficiency along with reduced oxidation potential of the waste mass can be expected. If the patented ClosureTurf Surficial Gas Collection system is utilized, high collection efficiency, no oxidation potential along with significant reduction in condensate generation can be realized. Slope stability issues associated with landfill gas buildup beneath the soil/membrane (prescriptive) caps are diminished with the ClosureTurf system as a result of no soil loading, there is nothing to fail. The ClosureTurf system also has patented designed automatic relief valves to compensate for gas buildup pressure during periods of malfunction of the primary gas collection systems.

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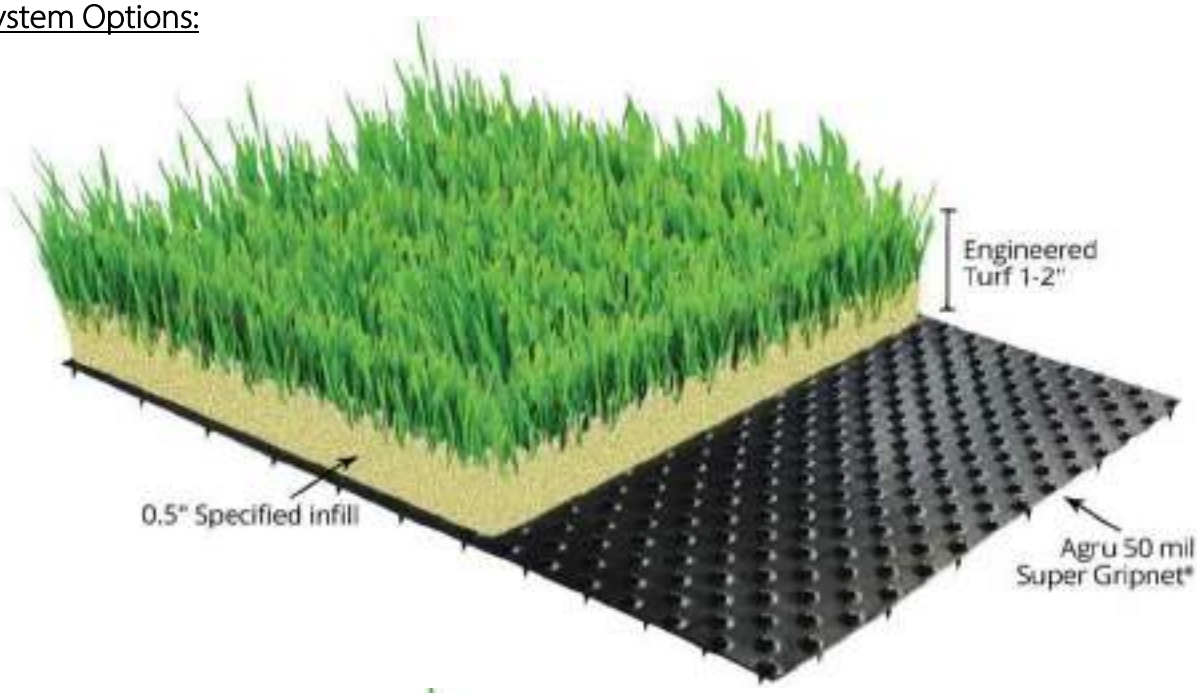
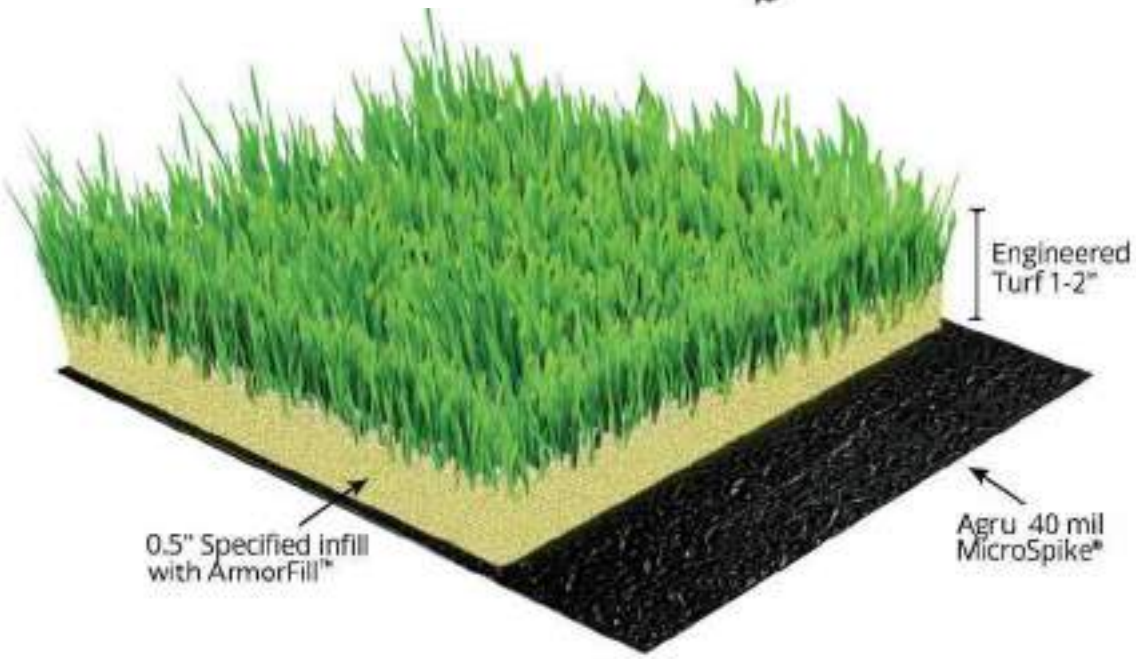
CLOSURETURF® SYSTEM & DESIGN

System Options:





$2.50/Square Foot ± 10%*

* Site-specific analysis and recommendation will include a more targeted budget estimate

Components:

1. Structured HDPE or LLDPE Geomembrane

AGRU MicroSpike® (40 mil)
Used on slopes < 3.5H:1V

Top

Bottom

AGRU Super GripNet® (50 or 60 mil)
Used for **drainage** on slopes >3.5H:1V for increased interface friction

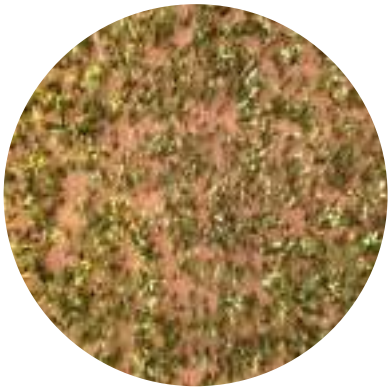
2. Engineered Turf

Olive

Blend

Tan

3. Specified Infill



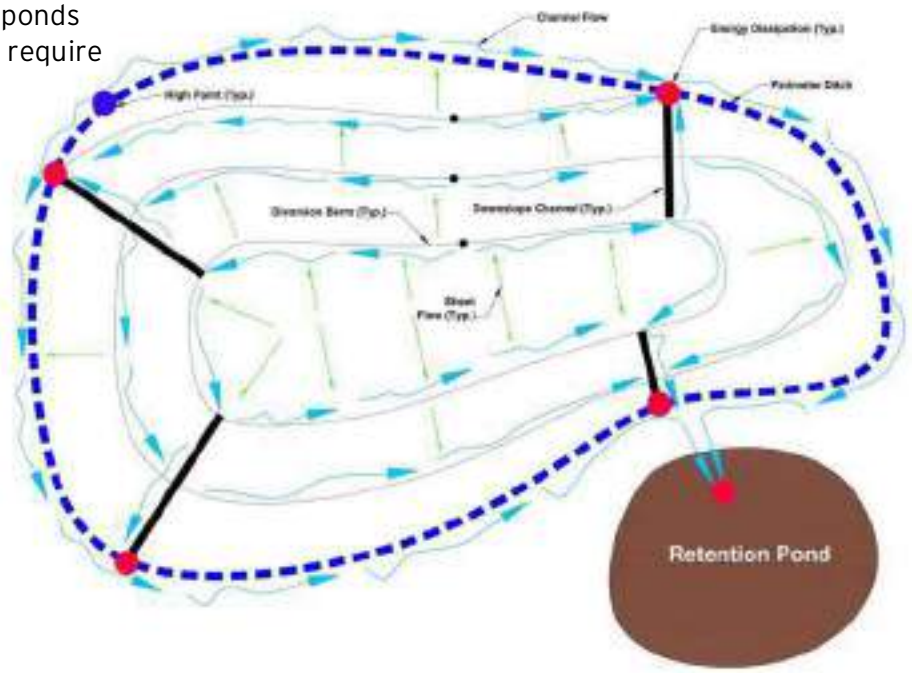
ASTM C-33 Sand
For typical flat areas and sheet flow on slopes

ArmorFill™
For higher velocities; use with benchless cover and MicroSpike membrane

HydroBinder®
For areas where designer would normally spec riprap, pipe or articulated concrete block

Typical Hydrology Design

- Mitigate the volume & sheer forces with diversion berms
  - Channelize the storm water
  - Helps convey off of cover system
- Benches go to downchutes
- Downchutes go to retention ponds
  - ClosureTurf does not require sediment settlement



HydroBinder™ Features & Benefits

HydroBinder is a specialized pozzolanic infill created specifically for bench drains, downchutes and perimeter channels on landfill covers. It will flex and move with typical differential settlements that occur on permanent covers. It provides superior hydraulic performance capable of handling high sheer stress and large flows resulting in very high velocities.

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CLOSURETURF® INSTALLATION

1. Subgrade Preparation

2. Surficial Gas Management System (if applicable)

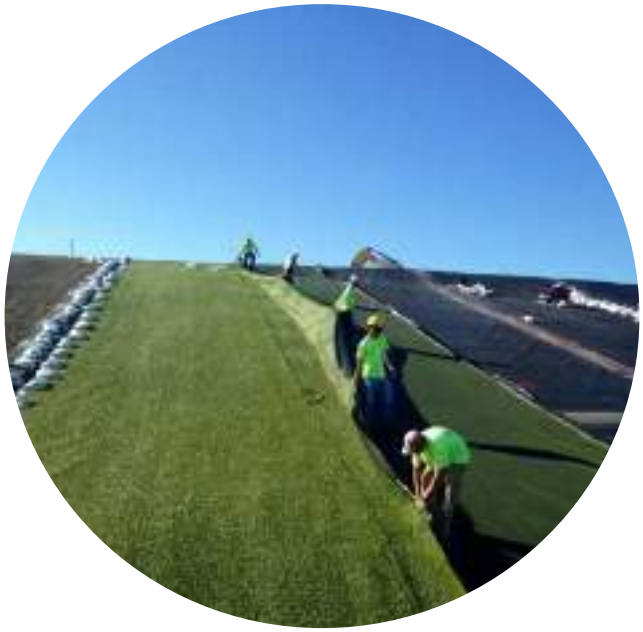
3. Geomembrane Liner

Geomembrane arrives on site in rolls.

Workers manually unroll the membrane down the slope.

Geomembrane seams are heat welded together.

4. Engineered Turf



Workers manually unroll the engineered turf down the slope and position for seaming.

Turf seams are heat welded together.

5. **Sand Infill**

Sand slinger evenly distributes sand on the engineered turf.

Sand is brushed into the turf.

Sand is sprayed with ArmorFill™ (if applicable).

Sand bound with ArmorFill.

6. Malfunction Relief Valves

Before valve is installed.

After valve is installed.

ClosureTurf integrates easily with traditional gas systems.

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CLOSURETURF® WATER QUALITY

When considering a final cover system for a landfill, it is not only important to keep the water out, you must also ensure that nothing detrimental comes off the surface and lands in the water carried off your site.

Closed landfills can generate large amounts of surface runoff. With a traditional soil cap, rainstorms will ultimately carry off sediment and dissolved materials such as fertilizers and chemical components. They also require a water collection area to allow the sediment to settle out before it can be released off site. This requires more space, more monitoring and ultimately more dollars.

Because soil loss from runoff is virtually eliminated with ClosureTurf®, water quality is no longer an issue. The sand infill component acts as a natural filter as the water moves down the slope and surface water runoff pond maintenance can be reduced proportional to the area covered. When retention ponds no longer require sediment storage and sediment baffles, overall volume of the pond is significantly increased. Surface water runoff areas that are lined with a cementitious infill will no longer need water quality orifices, sediment removal berms and sediment routing baffles installed in the sediment ponds. In fact, the name "sediment pond" may be changed to "surface water pond" because there is no longer a significant sediment element contributing to the total volume required. Also, the ponds can be considered DE-tention ponds rather than RE-tention ponds because water is only held long enough to mitigate the design-storm event. Another unique feature of ClosureTurf is the ability to rely on sheet flow versus accumulated concentrated flows (such as exists with on-slope berms and down chutes). This results in dramatically increasing time of concentration, and therefore the amount of sediment pond storage volume when compared to a vegetative cover.

One of the most important issues concerning proper site erosion control is the turbidity of the surface water as it is discharged from the site. A third party analysis was performed that compared turbidity on a closed cell of ClosureTurf versus a cell with a soil cover cap at the same landfill. The study was done at a site having a history of NTU exceedance due to the very fine sediment soils that are common to the region. Data samples collected showed ClosureTurf at 11 NTU's and the soil cap at 371 NTU's (shown in image on right). After years of attempting a wide variety of erosion control methods, the landfill owner was finally able to get well below the minimum Turbidity values required by the regulations.

The hydrology and erosion elimination characteristics of ClosureTurf provide many environmental benefits that contribute to water quality. It results in very low storm water runoff turbidity and provides water quality improvement across the spectrum. But perhaps, most importantly, it can provide repeatable water quality results for every design storm event so that no matter where or when the water flows off site, you can be rest assured it's clean.

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Borrow Soil

Borrow pits necessitate the destruction of land. Often times this land is native, undisturbed and it is only being destroyed to provide soil for a landfill cover. Eliminating the need for a borrow pit makes environmental as well as economical sense. Depending upon the proximity of borrow sources, soil can be a costly item to get on site. Not only does ClosureTurf eliminate this layer, it also reduces the need for construction vehicles to transport.

Incremental Closures

ClosureTurf makes it easy to install in smaller, incremental closures. The sooner full cells can be capped, the sooner gas is controlled and captured and leachate is reduced, providing significant savings for the owner.

Accelerated Project Schedule

The consistency offered by a standardized system such as ClosureTurf® provides efficiencies that can be easily realized, from pre-design through construction. From standardized construction details, to a reduction in site elevation surveys, including the elimination of the typical 24" (600 mm) soil layer across the entire surface of the closure cap. A significantly larger amount of closure acreage can be constructed versus a traditional soil cover, effectively allowing more projects to be constructed with a given set of fixed resources. Typically, ClosureTurf installs at least 50% faster than traditional covers.

Post Closure Care

The annual maintenance costs for ClosureTurf runs, on average, more than 90% lower than those for a traditional soil and vegetated cover system. The following is an example of a maintenance activity comparison.

Traditional Cap	ClosureTurf
Mowing (4 events per year)	Not Required
Erosion Control (2 events per year)	Not Required
Reseeding (1/3 area once per year)	Not Required
Fertilizing (1/3 area once per year)	Not Required
Soil Replacement (typical 1 ton/per acre per year avg – per EPA)	Sand infill replacement (<2% total area per 5 years)
Pond Cleanout (avg once per every 4 years)	Not Required
Major Storm Repair (4 hours equipment after 1 event/year)	Not Required
Site Inspection (1 inspection per quarter)	Site inspection (Every 5 to 10 years)
Financial assurance (-2% per year)	Financial assurance (-2% per year)

Attachment F3:

Case Study

COVANTA ENERGY: TAKING THE MAINTENANCE HEADACHES OUT OF POST-CLOSURE

ClosureTurf®

Facility Name
Carver-Marion-Wareham Landfill
Ward Hill Neck Landfill

Location
Carver, MA & Haverhill, MA

Owner
Covanta Energy

Engineer
Civil and Environmental Consultants- Raynham, MA

Installer
New England Liner Systems, Inc.

Project Type
Energy from Waste Ash Monofills

Year Completed
2015 & 2016

Size
4 acres & 12 acres

Covanta puts an end to constant slope repair with a stable and cost-effective closure technology.

With more than 60 acres of closed landfill space to manage, Steve Melloni, Covanta Energy's Regional Landfill Manager, has a lot on his plate. Most of his closed waste to energy ash landfills are traditional Subtitle D vegetation caps. His site supervisors oversee the monthly maintenance of mowing and the occasional reseeding.

"Most of our maintenance is typical with grass," said Melloni. "However, when inclement weather strikes much like it has in the last two years, we are on standby to manage any repercussions. That could include costly repairs such as rebuilding slopes, replacing soil and re-establishing vegetation. "

770.777.0386 • www.closureturf.com

WG WatershedGeo® Unearthing Solutions

In 2014, Melloni and his team began evaluating an alternative closure system called ClosureTurf® for the their 12-acre Carver-Marion-Wareham Landfill in Carver, MA. This particular site overlooks Buzzards Bay making it heavily exposed to weather elements such as wind, rain and snow. With these extreme conditions, they anticipated the slopes would weaken, become unstable, and require constant rebuilding. The ClosureTurf system offered a solution that eliminated that risk, Melloni said. "Once we did our research and evaluated other sites, we focused on the long-term aspects of the system and found that ClosureTurf required very little maintenance, if any, after installation. That was a slam dunk for us."

ClosureTurf meets and exceeds the requirements set forth by the EPA in Subtitle D. It is a three component system that eliminates the need for soil all together.

"While ClosureTurf has many advantages, we really liked that it provided around 12,000 cy of extra capacity for ash," explained Melloni. "Because the two feet of soil is not required, we were able to use that space to our advantage."

With the internal decision solidified, the next step proved to be the most challenging. Covanta submitted their application to the regional Massachusetts Department of Environmental Protection (DEP) office. Because this would be the first use of ClosureTurf in the state, the agency wanted some time to do its homework and fully evaluate each component of the system. With time constraints to complete the project looming, the DEP agreed to allow ClosureTurf to be used on the 4-acre top deck but required the use of a traditional vegetation system on the side slopes.

According to Melloni, site conditions proved to be somewhat challenging for installation. "With 30 mph winds, the main concern was getting the Agru Super GripNet® geomembrane to lay down nice and tight in order to avoid wrinkles and maximize performance. The crew did an amazing job and lots of care was given to ensure the membrane went in correctly."

"Another thing we experienced on site was when we began installing the engineered synthetic turf, gas began to build-up and we started to see pockets form," he said. "We eliminated this by installing a specialized ClosureTurf gas vent on every acre. Once the relief values were in place, the turf laid down perfectly. We were able to incorporate this seamlessly with our traditional gas collection system."

Underneath the ClosureTurf system, gas is generated and rises to the surface where a vacuum created by the differential pressures is vented through the surficial gas collection foot. This proved to be an efficient method of gas collection while reducing the amount of condensate that needed to be managed.

As far as satisfaction levels to date, Melloni said, "The site has performed exceptionally well. The last two summers have been some of our hottest and we have experienced some torrential down pours.

The ClosureTurf system has held up wonderfully with no maintenance to date."

In fact, the Covanta team was so impressed with the CMW project, they decided to use ClosureTurf on a separate site in Haverhill, MA. "This project was actually approved by a different agency that governs our Northeast region so we had different people evaluating ClosureTurf," explained Melloni. "Once the product was presented and vetted, it was approved to use on all twelve acres of our Haverhill site. Again, we were able to increase ash capacity and consider the cost savings with maintenance."

The Haverhill site design was a little different than the previous site, explained Melloni. "We had big diversion berms along the side slopes on this site. In fact, these are the first things you see when you drive up to the site. We chose the olive green ClosureTurf product and my first inclination was that you would see this fake green colored turf right off the bat. However, the grass and sand infill have blended together so well that you get a very natural-looking, grass-like appearance. I am very pleased with just how real this site looks."

The back sides of the diversion berms were another area where ClosureTurf defied design. "The back of the berm transitions from 2:1 slopes to 3:1," said Melloni. "I was concerned that the sand infill would trap and build, and ultimately look out of place. Surprisingly, even with all of the rain, we've had no wash overs and the sand has stayed in place very well."

As with any landfill site, managing water flow effectively can prove to be challenging and very important to the functionality of the design. Created specifically for down chutes, bench drains and perimeter channels, HydroBinder® cementitious infill provides superior hydraulic performance capable of handling large flows on steep gradients. "Our action swales on this site turned out to be some of the best we've ever done," said Melloni. "With the water velocity and pressure we get, I was concerned the turf would balloon up and not sit tight on the ground, however the HydroBinder weighted it down perfectly. There is no bubbling effect and the water flows down smoothly and cleanly."

Because ClosureTurf requires no soil or fertilizing, stormwater runoff is clean of debris. The sand infill provides a natural filter for water running off of the slopes which dramatically improves water quality, making it an effective BMP for Clean Water Act requirements.

Covanta plans to continue using ClosureTurf in additional site designs. Melloni and his team are extremely happy with the product.

"I love to show our ClosureTurf sites off," said Meloni. "Its hard to imagine a product like this working so well until you see it in action. Our sites have performed beautifully and I constantly remind everyone of the cost benefit this has brought to the table."

Crews work to pull the Super GripNet® geomembrane tight during windy conditions.

ClosureTurf® on CMW Landfill top deck compared to grass on side slopes.

HydroBinder® is used in the slope downchutes to handle high sheer stress and flows.

ClosureTurf relief valves are installed every acre.

Aerial view of Haverhill Landfill during installation.

ClosureTurf product (US Patent Nos. 7,682,105 and 8,585,322; Canadian Patent No. 2,663,170; and other Patents Pending) and registered trademarks are the property of Watershed Geosynthetics, LLC.

Attachment F4:

Technical Note on Design Life

Technical Note

Design Life of ClosureTurf®

The ClosureTurf® Final Cover System is projected to last well over one hundred (100) years, provided it is installed and maintained in accordance with Watershed Geosynthetics' standard specifications. This duration exceeds the current post-closure regulatory period of 30 years by more than 3 times. During that time, the average maintenance cost of the ClosureTurf system will be roughly 10 to 20% of the cost for maintenance of a traditional soil cover system.

ClosureTurf Components

To better understand system longevity, it is helpful to break down the system into its components and explain the function of each component. A cross-section of the ClosureTurf system is shown in Figure 1 to aid the discussion.

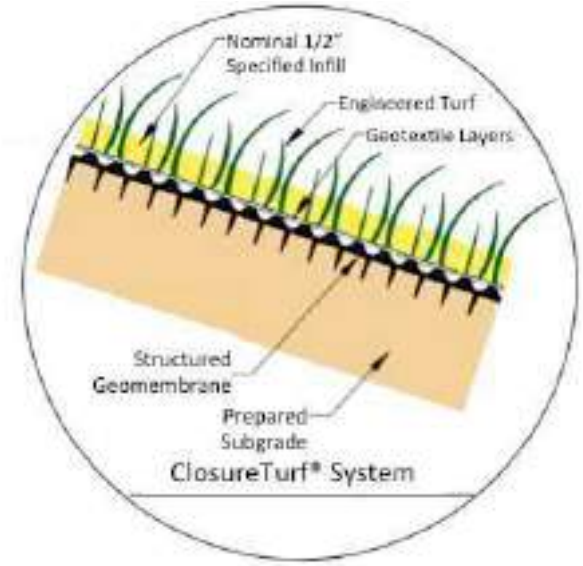

Figure 1. ClosureTurf® Cross-Section

Starting at the prepared subgrade and moving vertically through the cross-section of the system, the first component is the structured geomembrane. The structural geomembrane layer creates an impermeable hydraulic barrier providing the actual environmental containment. Moving upward through the cross-section, the second component is the engineered turf layer. The engineered turf layer is comprised of two distinct parts: (1) a double-layer woven geotextile backing with enhanced ultraviolet (UV) resistance; and (2) polyethylene turf fibers (or yarns) tufted into the woven geotextiles. The third, and final, component of the ClosureTurf system is the specified infill. The specified infill is an angular, specifically graded sand resting on the geotextile backing and within the individual turf fibers of the engineered turf layer.

UV Protection

The geomembrane is covered by the engineered turf and sand protecting the geomembrane from UV exposure. Based upon research by Geosynthetic Institute (GSI) [Koerner et al., 2011 and Koerner et al., 2012], a covered geomembrane has an expected lifetime (i.e., a half-life) of several hundred years. The sand infill and turf fibers provide UV shielding of the geotextile backing of the engineered synthetic turf. With the sand infill in place, the geotextile backing will remain intact and in place covering the structured geomembrane, allowing the geomembrane to realize its full design life. The sole component of the ClosureTurf system exposed to UV is the turf fibers.

Longevity of Turf Fibers

Longevity of the turf fibers dictates the design life of the ClosureTurf system. UV longevity testing on the turf fibers indicates the half-life is projected to be over two hundred years, as presented in Attachment 1, *Literature Review and Assessment of ClosureTurf® UV Longevity* prepared by Geosyntec Consultants. At year 100, the turf fibers are projected to have approximately 60% of the original tensile strength. The average tensile strength of virgin turf fibers is approximately 35 lbs per fiber. Therefore, the tensile strength at year 100 is projected to be approximately 20 lbs per fiber, which is significantly greater than the estimated minimum tensile strength necessary for the turf fibers to perform in application (i.e., approximately 2.5 to 3.5 lbs per fiber). Turf fiber tensile strength values over time compared to the required service value are presented in Figure 2.

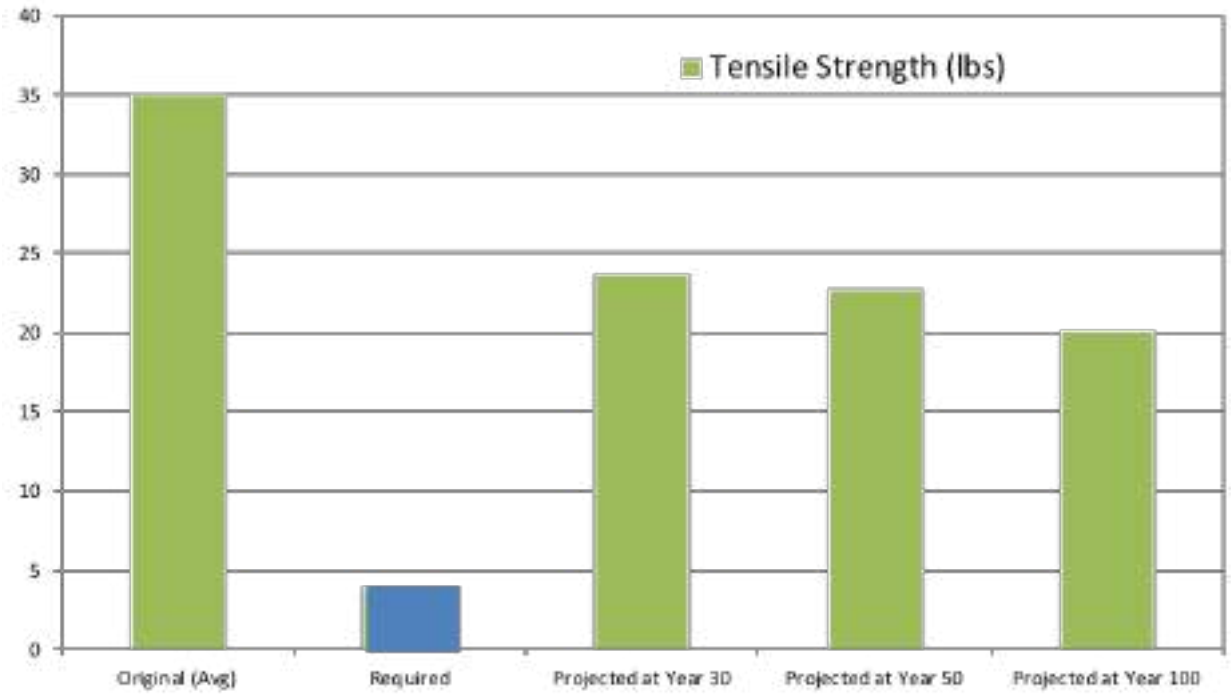

Figure 2. ClosureTurf® Fiber Tensile Strength

Field samples of turf fibers have been collected and tested for tensile strength at an independent laboratory. Samples were collected at two ClosureTurf installations, the LaSalle-Grant Landfill in Louisiana and the Saufley Field Road Landfill in Florida. The field sample turf exposure times ranged from five to eight years. The retained tensile strength of the turf field samples was compared with the laboratory UV testing results in New River, Arizona, as presented in Figure 3. Field performance of the engineered turf tensile strength matches or exceeds results from laboratory testing of UV exposure.

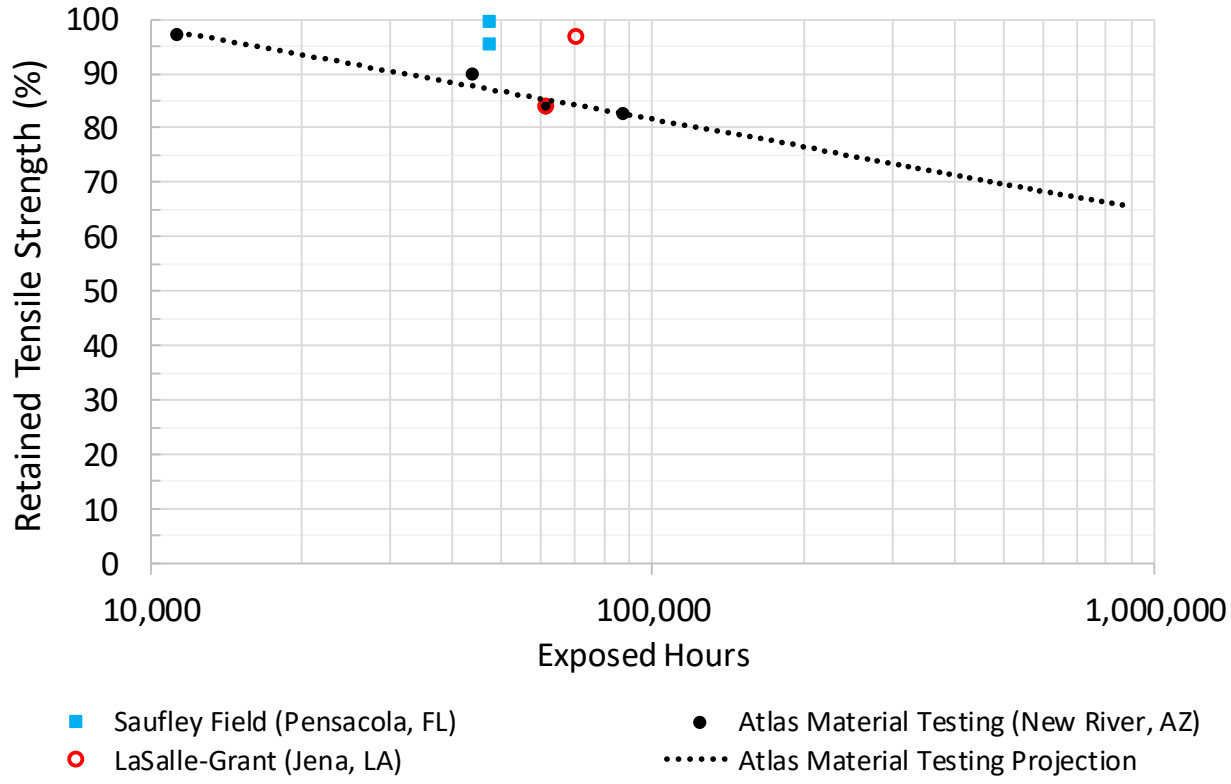

Figure 3. ClosureTurf® Fiber Tensile Strength, Field Performance

Maintenance Cost

As with any closure system, regular maintenance activities are required with the ClosureTurf system. Standard maintenance activities include, primarily, periodic visual inspection (e.g., once per quarter or once per year) and localized sand placement to cover exposed geotextile backing, as needed, at five-year intervals. The average maintenance cost for the system will typically be 10 to 20% of the cost for maintenance of a traditional soil cover system. Watershed Geosynthetic's experience with existing ClosureTurf installations suggests an average budgetary amount for maintenance is $150 to $250 per acre per year. As a comparison, a typical soil cover system has an estimated average maintenance cost of $1,200 to $1,500 per acre per year.

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Attachment 1

Literature Review and Assessment of ClosureTurf® UV Longevity

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15 May 2015

José Urrutia, P.E.
Vice President of Engineering
Watershed Geosynthetics
11400 Atlantis Place, Suite 200
Alpharetta, GA 30022

Subject: Literature Review and Assessment of ClosureTurf® UV Longevity

Dear Mr. Urrutia:

Watershed Geosynthetics, Inc. (Watershed) has patented an alternative landfill closure system termed, ClosureTurf®. ClosureTurf® consists of high-density polyethylene (HDPE) grass blades tufted through a polypropylene (PP) geotextile backing which overlies Super Gripnet®, an HDPE or linear low-density polyethylene (LLDPE) geomembrane manufactured by AGRU America Inc. The addition of a layer of sand ballast during installation completes the system. The sand ballast provides cover for the lower portion of the HDPE grass blades, the PP geotextile backing, and the Super Gripnet® (Figure 1). The ClosureTurf® system, therefore, is a "hybrid" closure system in the sense that it is neither a traditional soil cover or an exposed geomembrane. ClosureTurf® has been used to close a number of landfills throughout the United States. A select list of sites where it has been used is shown in Table 1. Applications extend to other facilities as well, such as capping of coal ash ponds.

Watershed has requested that Geosyntec Consultants, Inc. (Geosyntec) provide an assessment of the longevity of the ClosureTurf® system with regard to UV degradation. Since ClosureTurf® has elements (i.e., the HDPE grass blades) that are permanently exposed to UV radiation, this assessment will be particularly focused on the exposed portion of the system. However, the UV longevity of the PP geotextile backing and HDPE geomembrane will also be addressed by reference.

Geosyntec's approach to this assessment has been to conduct a literature review of pertinent documents available (journal papers, white papers, presentations, etc.), distill the results of the review, and perform limited analysis. This report concludes with a summary of the review and analysis along with brief discussion for recommendations.

EXECUTIVE SUMMARY

The UV longevity assessment of the ClosureTurf® system (Figure 1) began with a literature review. In general, relatively little published information was discovered regarding exposed HDPE grass blade degradation. The information that is available consists of retained tensile strength test results of HDPE grass blades after exposure (1, 5, 7 and 10 years) at a field test facility in New River, Arizona (Watershed, 2014). Extrapolation of this data by Watershed (2014) resulted in a prediction of 65% retained tensile strength after 100 years of service. In addition, Richgels *et al* (2015) published half-life (i.e., 50% retained tensile strength) predictions of exposed HDPE grass blades using a laboratory data release from the Geosynthetics Institute (GSI) on HDPE geomembrane strips exposed to UV lamp irradiation. Richgels *et al* (2015) obtains an upper bound and lower bound half-life predictions of 247 years and 176 years, respectively. Extrapolation of the field data from New River, Arizona yielded a half-life of 216 years.

Geosyntec checked the calculations shown in Richgels *et al* (2015) and obtained 277 years and 214 years for the upper and lower bound estimates of HDPE grass blade half-life. Differences in the results between Geosyntec and Richgels *et al* (2015) are attributed to rounding. Geosyntec attempted to repeat these calculations for actual performance requirements (i.e., 12.5% of original tensile strength) of the HDPE grass blades rather than a randomly assigned half-life, however the predictions resulted in service lives that were too lengthy to be reasonable. The most likely explanation is that the laboratory data has not degraded enough to allow for service life predictions using 12.5% retained tensile strength. Future data releases from GSI will aid in providing more accurate predictions below the half-life.

Based on Richgels *et al* (2015) predictions, as well as the prediction given in Watershed (2014) it appears that the half-life of the HDPE grass blades exposed to Arizona-like conditions is on the order of 100 years. These results are promising; however additional field test data is needed to improve the half-life predictions, particularly since half-life predictions for exposed HDPE geomembrane are also approximately 100 years (Koerner *et al*, 2015). Understanding the differences in weathering between HDPE grass blades in a synthetic turf and an HDPE geomembrane will provide additional insight into the similar half-life predictions of the two geosynthetics. Finally, the service life of the HDPE grass blades in the ClosureTurf® system should ideally be based on its performance requirements rather than a half-life which will result in a longer service life prediction.

In addition to the HDPE grass blades, there are two unexposed elements of the ClosureTurf® system: (i) the PP geotextile backing for turf component; and (ii) the Super Gripnet® which consist of a HDPE geomembrane (see Figure 1).

Watershed has incorporated UV degradation inhibitors into the PP geotextile backing which, according to Watershed has lead to an improvement in UV resistance by a factor of 14 over the original prediction of 65% retained tensile strength after 100 years (Watershed, 2014). Koerner (2011) has estimated that covered HDPE geomembrane will have a half-life of 446 years at 20 degrees Celsius and 265 years at 25 degrees Celsius.

Therefore, the most critical component of the ClosureTurf® appears to be the exposed HDPE grass blades when it comes to UV degradation. However, degradation of the HDPE grass blades to unserviceable levels can be remediated by replacement of the turf component of the ClosureTurf® system.

BACKGROUND AND LITERATURE REVIEW SUMMARY

In total, Geosyntec has reviewed approximately 40 technical documents to date. The database is a combination of documents provided to Geosyntec by Watershed as well as documents collected by Geosyntec. A complete reference list of the documents in the database can be made available upon request.

In general, relatively little information was found on the topic of exposed HDPE grass blades with respect to degradation due to UV radiation. The documents that were obtained and reviewed are listed below.

1. Field test data provided by Watershed from the New River, Arizona testing facility on the HDPE grass blades (Watershed, 2014).

2. Testing results (Atlas-MTS) discussing the UV longevity of polyethylene and polypropylene grass used for outdoor European athletic facilities.

3. Technical paper by Richgels, *et al.* (2015a) published in the conference proceedings for Geosynthetics 2015 in Portland, Oregon.

4. Presentation by Richgels., C. at the Geosynthetics Conference for 2015 in Portland, Oregon (Richgels, 2015b).

5. Presentation by Diguilio, D. at the Northern New England SWANA Conference on 25 September 2013 (Diguilio, 2013).

The following documents on the topic of HDPE Geomembrane degradation due to UV exposure were reviewed and found to contain useful information regarding this assessment.

1. Geosynthetic Research Institute (GRI) White Paper #6 (Koerner *et al.*, 2011). This white paper contained degradation data (% retained strength and elongation) on laboratory aged samples of 1.5 mm HDPE geomembrane. Aging was completed using a UV Fluorescent device per ASTM D7238 at 70 degrees Celsius (^{o}C).

2. Geosynthetic Institute (GSI) webinar presentation by Koerner *et al.*, (2015). This presentation contained a slide that compared predicted (laboratory vs. field) half-life of geomembranes of various resins, including HDPE, as well as a suggestion for estimating lower bound half-life.

3. Journal paper authored by Rowe *et al.* (2010) published in the Journal of Geotechnical and Geoenvironmental Engineering.

DISCUSSION OF DOCUMENTS AND DATA

The data from the New River, AZ testing facility on the artificial grass component of ClosureTurf® (Watershed, 2014) appears to be the only data set of its kind in our compiled database. The data consists of tensile property testing from field samples exposed to the Arizona environment at approximate exposure periods of 1, 5, 7 and 10 years. At each of the four exposure periods, 20 samples were tested for a total of 80 tests. The average values for tensile strength retained at each corresponding time period is 97%, 90%, 84% and 83%, respectively (Figure 2).

One additional data point was found in the Atlas-MTS document. That data point indicated that approximately 90% of tensile strength of polyethylene grass would be available after 20 years of field exposure assuming average European climatic conditions (temperature, irradiance, etc.). However, the average European irradiance is approximately one-half to one-third that of Arizona (Figure 3) notwithstanding temperature effects. Therefore, the Atlas-MTS data point will be consistent with the data from the New River, AZ facility in the 7 to 10 year time frame once adjusted for the relative levels of exposure and temperature between Europe and Arizona. As such, this data point will not extend the exposure duration covered by the New River, AZ data.

The paper and corresponding presentation by Richgels (2015a, 2015b) utilized the laboratory data released from the GSI on UV degradation of HDPE samples to make upper and lower bound estimates of the field half-life of the HDPE grass blades. The upper bound method utilizes Arrhenius

modeling of lab data to project exposure times at half-life to site temperatures combined with ratios of UV irradiance between the laboratory lamp and monthly average irradiance at New River, AZ to develop half-life loss per month. A similar procedure using a linear extrapolation (rather than Arrhenius) was demonstrated for a lower bound estimate. The Watershed (2014) field data set was plotted in between the upper and lower bound estimates. This method is further discussed in the section below titled, "HDPE Grass Blade Service Life Calculations".

Koerner *et al.* (2011) discusses the UV longevity of both exposed and unexposed geomembranes made from various resins, including HDPE based on GSI's laboratory testing program. This document is particularly useful in regard to the ClosureTurf® elements that are considered non-exposed (i.e., the PP geotextile backing for the turf component and the underlying HDPE geomembrane).

The presentation by Koerner *et al.* (2015) includes estimates of half-life of exposed HDPE geomembranes as well as a recommendation for linear data extrapolation as a lower bound limit that was implemented by Richgels (2015b).

PERFORMANCE REQUIREMENTS

The definition of service life of an HDPE (or other resin) geosynthetic (grass blades and geotextiles/geomembranes) typically invokes the half-life criteria. However, the half-life criteria is arbitrary and while useful as a general indicator for comparison it does not directly relate to any aspect of field performance for ClosureTurf® or any other geosynthetic. Therefore it is more appropriate to define the service life in terms of field requirements placed on the material.

HDPE Grass Blades

For the case of the HDPE grass blades on the ClosureTurf® system, tensile strength requirements fall in the range of 2.5 to 3.5 lbs, based on applied loads of pullout forces from equipment operation and water runoff forces (Diguilo, 2013). The ClosureTurf® HDPE grass blades are manufactured with 20 lbs. of tensile strength immediately following the process (Diguilo, 2013). Therefore, without considering a factor of safety, the required tensile strength of the HDPE grass blade is equal to approximately 12.5% to 17.5% of original strength capacity.

PP Geotextile Backing and HDPE Geomembrane

Performance requirements for the PP geotextile backing and HDPE geomembrane depend on more site-specific parameters (e.g., steepness of slopes, seismicity, etc.) than the HDPE grass blades. Therefore until a parametric study is completed which will define the performance requirements over a range of expected conditions, the half-life will have to be used as a benchmark for degradation of the PP geotextile and HDPE geomembrane.

HDPE GRASS BLADE SERVICE LIFE CALCULATIONS

In order to develop a prediction for the longevity of the HDPE grass blades with respect to UV degradation, Geosyntec implemented the method found in Richgels (2015a, 2015b) for two levels of retained tensile strength. The first level is the 50% of tensile strength, or half-life, criterion that is commonly used as a benchmark for geosynthetic service life. Geosyntec performed this calculation to compare our results with the results presented by Richgels (2015a, 2015b). Once the half-life estimates were calculated, Geosyntec attempted to repeat the calculations using a retained tensile strength of 12.5% of an HPDE grass blade.

Half-Life Estimation (50% of Retained Strength)

The assessment utilized by Richgels (2015a, 2015b) begins with a laboratory data release from GSI (Figure 4). The data includes retained tensile strength of HDPE samples that have been incubated under a UV lamp at elevated temperatures, which accelerates the UV weathering process in accordance with ASTM D7238.

As mentioned, the GSI data includes samples tested at three elevated temperatures: (i) 80 degrees Celsius (^{o}C); (ii) 70^{o}C; and (iii) 60^{o}C. The testing program appears to have originally included only the 70^{o}C data, with the 80 ^{o}C and 60^{o}C testing added at a later date (therefore, weathering is not as advanced). The 70^{o}C data set has reached approximately 66%, while the 80^{o}C and 60^{o}C data sets have reached approximately 78% and 86%, respectively. Nonetheless, logarithmic extrapolations to 50% retained strength were performed for each data set. The amount of exposure time (on a log scale) corresponding to the 50% retained strength plotted vs. the inverse of the corresponding temperature (80^{o}C, 70^{o}C and 60^{o}C) is shown in Figure 5. Figure 5 allows for extrapolation to find the laboratory exposure time required to achieve 50% retained strength at temperatures lower than the test temperatures (i.e., actual field temperatures).

Once the curve is defined relating any temperature to a level of laboratory lamp exposure, the remaining task is to develop a relationship between laboratory exposure and field exposure for a

particular site. In this case, the testing site in New River, AZ where Watershed has performed tests on HDPE grass blades, was selected.

Richgels (2015a, 2015b) presents monthly averages at the site for: (i) peak turf temperature; and (ii) irradiance as a fraction of the laboratory lamp irradiance. Using these two values for a given month combined with the Arrhenius model, an estimate of half-life loss per month is obtained. Summation of the half-life lost per month over a year yields the annual half-life loss. The inverse of the annual half-life loss is the predicted half-life in years. Using this method, Richgels obtains a half-life of approximately 247 years, while Geosyntec obtained a half-life of 277 years using the same data (Table 2). The difference is attributable to rounding errors in the logarithmic projections.

Following the suggestion of Koerner *et al.* (2015), Richgels (2015b) treated the results of the half-life mentioned above as an upper bound estimate. For the lower bound estimate, Koerner *et al.* (2015) suggests performing a linear extrapolation of the laboratory data to lower field temperatures, rather than using the Arrhenius model.

With the linear extrapolation, the ratio of monthly irradiance to laboratory lamp irradiance is scaled linearly to calculate the number of months required to reach half-life at 80C, 70C and 60C. Linear extrapolations per month are made from the elevated temperatures to the corresponding peak turf temperature in that month. The resulting half-life loss per month is summed to obtained half-life loss per year. The inverse of that result is the half-life in years. Richgels (2015b) calculates a half-life of 176 years using this linear model. Geosyntec's calculation using the same data resulted in a half-life of 214 years (Table 3 and Figure 6). The difference in the calculations is approximately the same as with the calculation using the Arrhenius (logarithmic) model.

Figure 7 shows the calculated upper (Arrhenius - logarithmic) and lower (linear) bound curves calculated by Richgels (2015b) along with the field data on the HDPE grass blades provided by Watershed (2014). As shown in Figure 7, the trend line fit to the field data falls in between the upper and lower bound curves produced by Richgels (2015b). Note that the first point from the field data at approximately 1 year is omitted from the trend line. This is because the first data point is assumed to be within the anti-oxidant phase of degradation rather than the polymer oxidation stage as suggested by Rowe *et al.* (2010). Additional discussion regarding the stages of degradation for polyolefin materials can be found in CUR 243 (2012).

Service Life Estimation Based on Performance Requirements (12.5% of Retained Strength)

Geosyntec repeated the calculations discussed above for the estimation of half-life, but extrapolated the GSI laboratory data down to 12.5% rather than 50% at 80C, 70C and 60C. Upper bound

(Arrhenius – logarithmic) and lower bound (linear) estimates were 2,500 years and 2,043 years, respectively.

These estimates of service life are simply too large to be reasonable. A likely explanation is that the samples tested at 80C, 70C and 60C have not degraded enough to produce accurate predictions at 12.5% retained strength. As previously mentioned, the data for 80C has reached 78% retained strength; the data for 70C has reached 66% retained strength; and the data for 60C has reached 86% retained strength. Therefore, the extrapolation for each of these data sets to 50% retained strength will be much more accurate than extrapolations to 12.5%. In addition, small uncertainties in log-based extrapolations will greatly influence results.

For these reasons, it is not practical or useful at this time to quantitatively assess service life in terms of actual performance requirements when those requirements are substantially below the half-life. There is some value, however in a qualitative use of performance requirements in comparisons with half-life estimates (i.e., to establish the factor of safety remaining at 50% degradation).

SUMMARY AND CONCLUSIONS

Geosyntec's literature review of approximately 40 documents yielded few sources of UV degradation data for exposed HDPE grass blades. Relevant data that was found included the field test data from the New River, AZ testing facility provided by Watershed (2014) and one data point from Atlas-MTS. The Atlas-MTS data point indicated that HDPE grass blades in average European climatic conditions would retain approximately 90% of its original strength after 20 years of field exposure. Taking into account the differences in temperature and UV irradiance between New River, AZ and European averages, the data point is consistent with the New River, AZ test data in the 7 to 10 year range.

Following the method presented in Richgels (2015a, 2015b) for HDPE grass blades, Geosyntec calculated an upper bound half-life of 277 years compared with Richgels 247 years using the Arrhenius (semi-log) extrapolations to site temperatures and ratio of laboratory lamp to field irradiance. Geosyntec calculated a lower bound half-life based on linear temperature extrapolations, as suggested by Koerner *et al.* (2015), of 214 years compared with 176 years obtained by Richgels (2015b). The differences between Geosyntec and Richgels calculations were attributed to rounding. As shown in Figure 7, the field data from New River, AZ suggests a half-life of 216 years when considering only the last three data points (i.e., polymer oxidation stage).

Another prediction of HDPE grass blade degradation is included in Watershed (2014) using the same (New River, AZ) field data. That prediction of retained tensile strength at 100 years of service life is 65%.

Therefore, it appears that the half-life of the HDPE grass blades will be on the order of 100 years based on the existing field data set and extrapolation methods found in the literature and presented herein. The results are promising; however additional field test data is needed to improve the half-life prediction, particularly since the half-life predictions for exposed HDPE geomembranes are also approximately 100 years (Koerner, 2015). Half-life predictions presented herein will also need to be revisited when additional labratory data is released from the GSI testing program.

Geosyntec attempted to calculate the service life of the HDPE grass blades using 12.5% of retained strength, rather than an arbitrarily assigned half-life. However, the calculation resulted in unreasonably long service life. This result is likely due to uncertainties in extrapolating the laboratory data released from GSI down to the 12.5% retained strength level. The data release has degraded to 78%, 66% and 86% for the 80 ^{o}C, 70 ^{o}C, and 60 ^{o}C test temperatures. Therefore, extrapolations to 50% may be warranted while extrapolations to 12.5% may not be until additional lab data is available. That being said, it should be recognized that half-life, or 50% of retained strength, has a factor of safety of 2.8 to 4.0 when considering the tensile capacity performance requirements of HDPE grass blades.

With regard to the unexposed elements of the ClosureTurf® system, Watershed (2014) indicates that the retained tensile strength of the PP geotextile backing prior to the addition of UV inhibitors is 65% after 100 years. This estimate is based on exhumed samples of the geotextile from the LaSalle-Grant Landfill in Louisiana. According to Watershed (2014), the addition of proprietary UV inhibitors to the PP geotextile backing has led to an improvement in UV resistance by a factor of 14. The final geosynthetic in the ClosureTurf® system is the covered HDPE geomembrane. Koerner (2011) estimates that the half-life of a covered HDPE geomembrane is 446 years at 20C, and 265 years at 25C. Furthermore, the degradation of the unexposed elements of the ClosureTurf® system invoke the half-life criteria. As discussed with regard the exposed HPDE grass blades, actual performance requirements should ideally be used to determine system longevity. However, the existing testing programs need to be allowed to degrade further before projections to lower values are made.

It is worth reiterating that applications of ClosureTurf® in areas of the United States where the UV irradiance and the temperatures are lower will result in longer half-life predictions than discussed above. In some cases (e.g., the Northeastern States), the differences will likely be quite large when compared with Arizona.

Finally, once UV degradation of the most susceptible component of ClosureTurf® (i.e., the exposed HDPE grass blades) does result in a tensile break, replacement of the HDPE grass and PP geotextile backing can be performed.

CLOSING

Geosyntec appreciates the opportunity to assist Watershed in the development of its ClosureTurf® products. Questions and comments may be directed to either of the undersigned at 678-202-9500.

Sincerely,

Will Tanner, P.E.
Project Engineer

Ming Zhu, Ph.D., P.E.
Senior Engineer

Attachments: References
Tables
Figures

Copies to: Bill Gaffigan (Geosyntec)
Mike Ayers (Watershed)

REFERENCES

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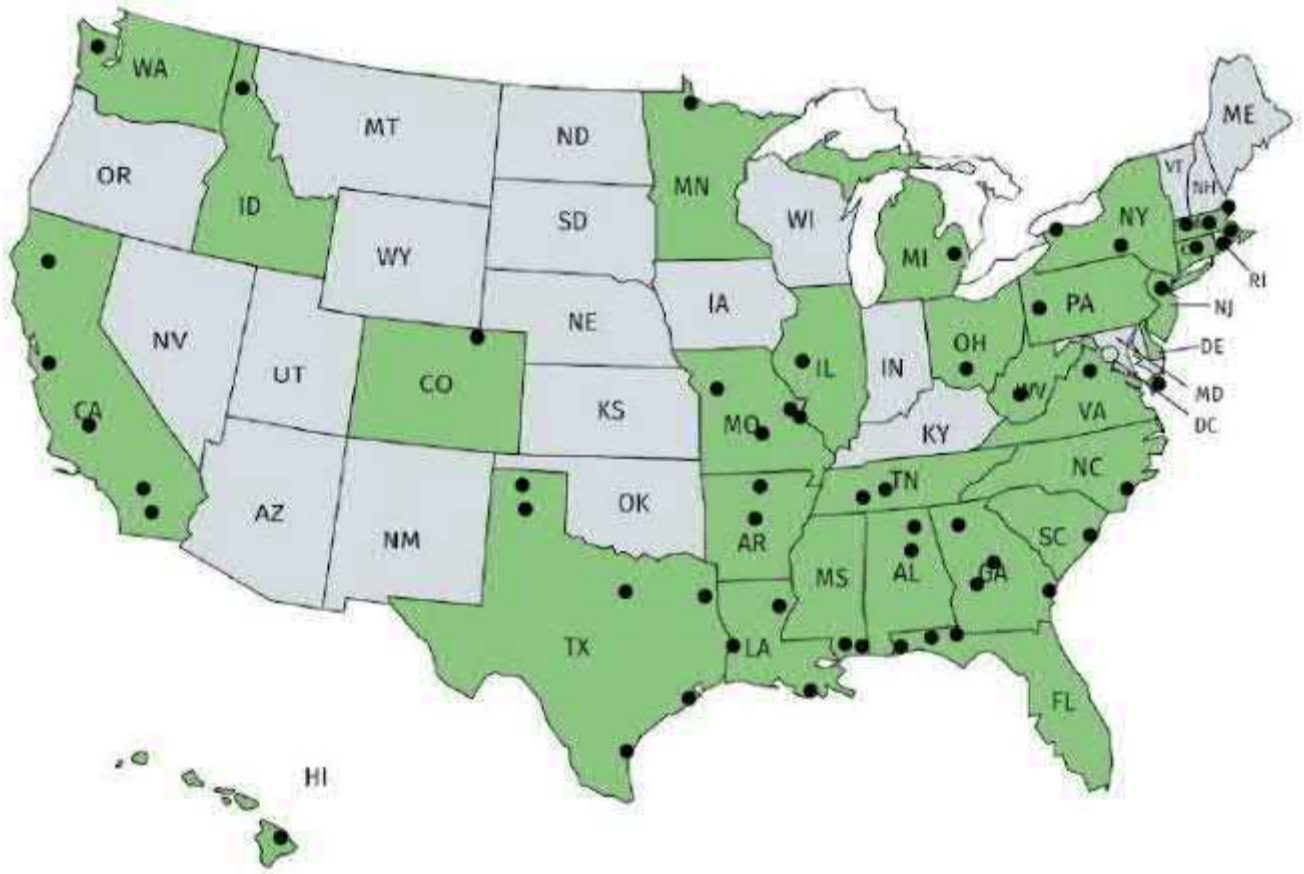
Attachment F5:

ClosureTurf Project Map

ClosureTurf® Project Map



- First installation completed in 2009
- To date, approximately 2,000 acres installed or being installed at 60 sites in 30 states
- Project size ranging from a few acres to over 150 acres
- Warm and cold climates and severe weather conditions (hurricanes, storms, and high winds)

Attachment F6:

Fire Resistance

WG WatershedGeo®
Unearthing Solutions®
ClosureTurf®
Fire Resistance Testing

Test Highlights

Site owners must provide corrective action cost estimates for wildfire dangers. Vegetated surfaces provide fuel for fire propagation to other combustible structures such as gas collection systems. ClosureTurf® does not have the same fire exposure as vegetative caps as shown in the following slides. In short:

- **None of the ASTM studies burned through the Super Gripnet component of ClosureTurf®. This positive result is important when considering active gas control may be near the site perimeter where burning embers may fall.**
- **ClosureTurf® demonstrated performance results that would qualify it as Class C rated fire resistant in a qualified laboratory test. Depending on the interpretation of ASTM E108 failure modes, it may even be classifiable as Class A fire resistant when applied at landfills.**

ASTM E108 was conducted to test the fire resistance of ClosureTurf®

- ASTM Test Method E108 was originally designed to test asphalt composite roof shingles for fire resistance.
- This investigation performed the Burning Brand Test (Section 10 of ASTM E108)
- Test conducted with 3 different brand sizes, Class A, B and C.

Brand Construction

Brands constructed using nominal 1x1 (¾ ” x ¾” finished) pine stock. Strips were spaced ¼” apart. Class A brand built with 36 each 12” long strips. Class B brand built with 18 each 6” long strips. Class C brand made with 1-1/2” long piece of 2x2 pine stock with perpendicular saw kerfs on opposite sides per ASTM E108 specifications.

Brand Curing

ASTM E108 specifications recommend curing the brands in an oven for 24 hours at an oven temperature between 105°F and 120°F. These brands were cured at 150°F overnight.

Test Pad Preparations

Subgrade was stripped of vegetation and bladed smooth with a straight shovel. ClosureTurf® test pads were prepared using dimensions specified in ASTM E108 – 4’-4” by 3’-4”

Sand Ballast Application

Each test pad received 60 pounds of a medium to coarse sand in accordance with ClosureTurf's recommended sand infill specification. This is an equivalent unit weight of 5 psf spread to approximately ½" deep. The sand was poured evenly over the pads and raked in place per manufacturer's installation guidelines.

Class A brand applied

The Class A brand was ignited over briquettes in a kettle-style grill. Each large face was placed on coals for 30 seconds. Each side face was placed on coals for 45 seconds each. The brand was fully aflame after side face coal applications.

Class A brand Fully Involved

Note melted turf blades in immediate proximity of brand. The turf did not ignite nor self-propagate fire away from brand. Slight wind developed during test fanning flames to one side.

Class B Brand Test

The Class B brand was ignited over briquettes in a kettle-style grill. Each face was placed on coals for 30 seconds.

Class C Brand Test

The Class C brand was ignited over briquettes in a kettle-style grill. Four of the brand faces was placed on coals for 30 seconds for a total of 2 minutes of coal exposure.

Brand Tests Nearing Completion

The Class A brand finished burning with open flame approximately 30 minutes after placement. No fire propagation away from brand to the ClosureTurf occurred. Class B and C brand tests achieved same results.

Post Fire Inspections

Class A Brand

The Class A brand was nearly entirely consumed. Only a few small pieces of brand were left after fire test completion. Grass tufts were melted up to 3 inches away from brand edge in melt zone. Sand discolored under brand within burn zone.

Class A Brand Test

Downwind side of Class A brand exhibited slightly larger melt zone – up to 5 inches.

Class A Brand Test

Upon peeling back the turf component, it was found the turf had melted on to the Super Gripnet geomembrane (SGN) in the burn zone. Observe the studs in the drainage matrix. Those were intact up to the boundary of the brand. The entire system was pulled back to observe if the fire had burned through the SGN.

Class A Brand Test

The underside of the SGN displayed observable effects from the fire but was not broached. The burn zone boundary is being pointed out. Observe the wet conditions of the subgrade by the condensed water in the upper left corner of the photo. Some of the soil beneath the burn zone was dry and adhering to the SGN. Spikes beneath the burn zone were gone, while spikes in areas immediately neighboring the burn zone were intact.

Class A Brand Test

The Class A brand burn zone damage to the SGN was essentially the dimensions of the brand – 12” x 12”. Note the studs in the immediate vicinity of the burn zone were completely intact. The SGN exhibited some deformation from the burn zone causing the undulations observed. Studs with the burn zone were flattened.

Class A Brand Test

Close up views of burn zone boundary. Turf melted on to SGN and underside of SGN. Note studs on upper side and spikes on underside were intact and totally unaffected by the fire.

Class B Brand Test

The Class B brand was also nearly entirely consumed. Only a few pieces of brand left after fire test completion. Grass tufts were melted up to 3 inches away from brand edge. Sand discolored under brand but retained natural color within melt zone. Note larger melt zone on downwind side of brand (5”).

Class B Brand Test

Sand discoloration beneath the burn zone was also observed in the Class B brand test. The underside of the SGN displayed observable melting from the fire but was not broached. Again dry soil was found adhering to the SGN underside even though the subgrade was moist at test commencement.

Class B Brand Test

The Class B brand melt zone was slightly larger than the dimensions on the brand – 7-1/2" 7-1/2". Note the studs in the immediate vicinity of the burn zone were completely intact. Studs with the burn zone were flattened.

Class C Brand Test

The Class C brand was stuck to the underlying grass tufts after the fire had gone out. The brand was not fully consumed by the fire. Note sand discoloration under the brand and minor melting of nearby grass tufts .

Class C Brand Test

The Class C brand displayed no melting affect on the woven geotextile component in the turf. There were no observable impacts to the SGN either.

Summary

Site owners must provide corrective action cost estimates for wildfire dangers. Vegetated surfaces provide fuel for fire propagation to other combustible structures such as gas collection systems. ClosureTurf® does not have the same fire exposure as vegetative caps as shown in the following slides. In short:

- **None of the ASTM studies burned through the Super Gripnet component of ClosureTurf®. This positive result is important when considering active gas control may be near the site perimeter where burning embers may fall.**
- **ClosureTurf® demonstrated performance results that would qualify it as Class C rated fire resistant in a qualified laboratory test. Depending on the interpretation of ASTM E108 failure modes, it may even be classifiable as Class A fire resistant when applied at landfills.**

Attachment F7:

Aerodynamic Testing

AERODYNAMIC UPLIFT PROPERTIES TESTING OF CLOSURETURF® SYSTEM

Extensive independent, third party aerodynamic testing has been performed on ClosureTurf® at the Florida International University Wall of Wind Experimental Facility at the International Hurricane Research Center in Miami, Florida, the Georgia Tech Research Institute Aerospace, Transportation and Advanced Systems Laboratory in Atlanta, Georgia, and at ViGYAN, a private research facility located in Hampton, Virginia since 1979. A description of aerodynamic testing procedures and test results are provided in this document. Additional testing and evaluations performed on ClosureTurf include steady state hydraulic performance of infill movement and multiple other performance and material properties tests. Those testing descriptions and results are available in separate documents. Please contact Watershed Geosynthetics for additional information.

FULL-SCALE AERODYNAMIC EVALUATIONS

ClosureTurf was tested for three distinct aerodynamic performance characteristics at three different facilities. Testing at the Florida International University Wall of Wind Experimental Facility determined ClosureTurf performance in a "worst-case scenario" when installed on a flat roof. Georgia Tech Research Institute testing determined aerodynamic lift and drag forces acting on the tufted geosynthetic around the perimeter and at the interior of an installation. And, the ViGYAN facility tested ClosureTurf response to wind gust conditions.

WALL OF WIND

The Wall of Wind Experimental Facility at the International Hurricane Research Center is an open jet wind tunnel with a combined 12-fan system capable of repeatable testing at wind speeds up to 157 miles per hour. The full-scale ClosureTurf test was designed to evaluate infill options for roof installations in worst-case scenarios of an installation on a flat roof, high wind speeds (up to facility capacity), critical wind attack angle and parapet wall height ratio

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Wall of Wind testing was conducted on a square, wooden building covering approximately 125 square feet and measuring five feet tall built on a rotating platform. The simulated roof was constructed atop the building using plywood sheathing, free floating foam board (allowing uplift) and ClosureTurf® with pea gravel infill. A 16-inch-high parapet surrounded the roof perimeter creating a worst-case building-to-parapet height ratio of 0.12 as previously identified by others[1]. The completed test structure is presented in Figure 1.

Figure 1: ClosureTurf® Wall of Wind Test Installation

The test procedure utilized a wind profile representative of open terrain exposure, and a wind attack angle directly impinging the building face was considered zero degrees. Five wind attack angles were tested as presented in Figure 2. Tests began at a wind speed of 20 miles per hour and attack angle of zero degrees. At each tested attack angle, wind speed was incrementally increased each minute to the facility maximum wind speed, provided no observable lift or imminent failure was observed. The maximum average 1-minute wind speed was 150 miles per hour and the maximum 3-second gust was 151 miles per hour. Wind patterns and outlines of vortices were visible during testing. Testing in progress is presented in Figure 3. There was minimal gravel movement and no appreciable loss of infill. Infill thickness remained consistent across the roof and there was no evidence of scarifying of the infill. ClosureTurf would make an excellent lightweight roof ballast and protection system, even in hurricane prone areas.

[1] Asghari Mooneghi, M. (2014). *Analytical and Experimental Methodologies for Predicting Peak Loads on Building Envelopes and Roofing Systems*. FIU Electronic Theses and Dissertations. Paper 1546. https://digitalcommons.fiu.edu/etd/1546/.

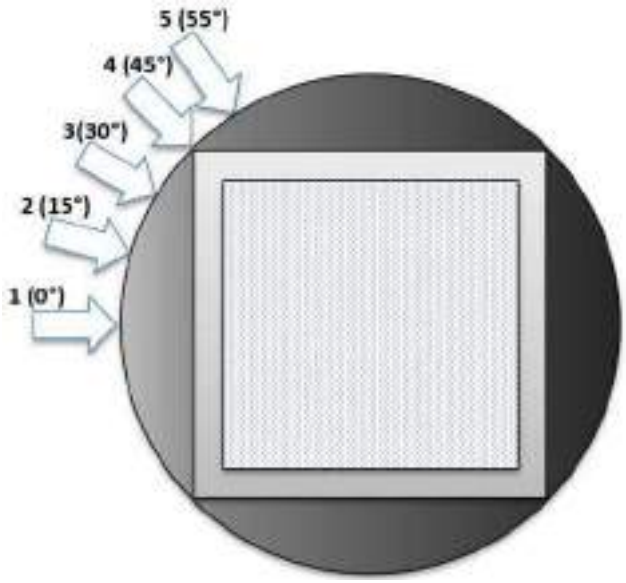

Figure 2. ClosureTurf® Wind Attack Angles at the Wall of Wind

Figure 3. ClosureTurf® Wall of Wind Testing in Progress

GEORGIA TECH RESEARCH INSTITUTE

The Georgia Tech Research Institute (GTRI) Aerospace, Transportation & Advanced Systems Laboratory subsonic model test facility tested the aerodynamic properties and ballast requirements of the tufted geosynthetic component of ClosureTurf® at wind speeds up to 118 miles per hour. The full-scale test was designed to evaluate lift and drag forces acting on the tufted component of an installation around the perimeter and on an interior section. Results were used for determining required infill thickness to counteract wind induced aerodynamic lift

The tufted component was tested in two configurations. The first test represented the perimeter of an installation. The second configuration represented the interior area away from the perimeter. Both installations were tested on a flat, level surface representative of level terrain.

GTRI testing was conducted on a 43 x 6 1/8 inch (width x length) full-scale installation. A plywood support base was overlain with foam representing a soil layer. The foam was covered with the geomembrane followed by tufted geosynthetic. During interior condition testing, larger installations were placed immediately upstream and downstream of the test section. During perimeter condition testing, the upstream tufted material was removed exposing the test section perimeter. The test configuration is presented in Figure 4.

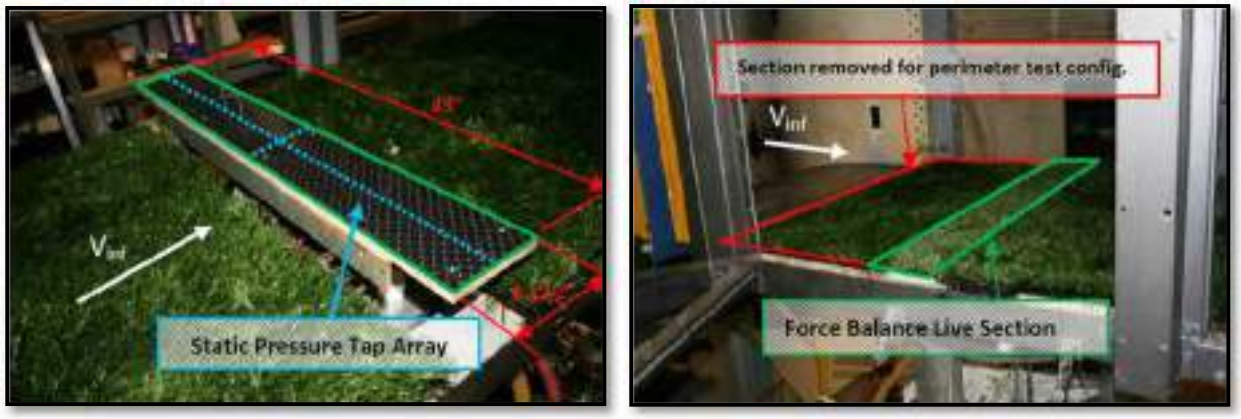

Figure 4. ClosureTurf® GTRI Test Configuration

Test results were surprising: higher velocities produce less lift and require less infill material. Figure 5 presents perimeter condition testing in progress at 118 miles per hour (174 feet per second). The inset figure displays the perimeter lift force data measurements increasing at lower velocities, peaking at approximately 44 miles per hour (65 feet per second) and steadily decreasing. Interior conditions exhibited a similar increasing/decreasing lift force pattern.

The ClosureTurf® system disruption of the boundary layer and downward flexing blades naturally decrease system uplift at higher velocities. These properties in conjunction with infill, produce a stable installation in hurricane force winds when properly designed, constructed and maintained

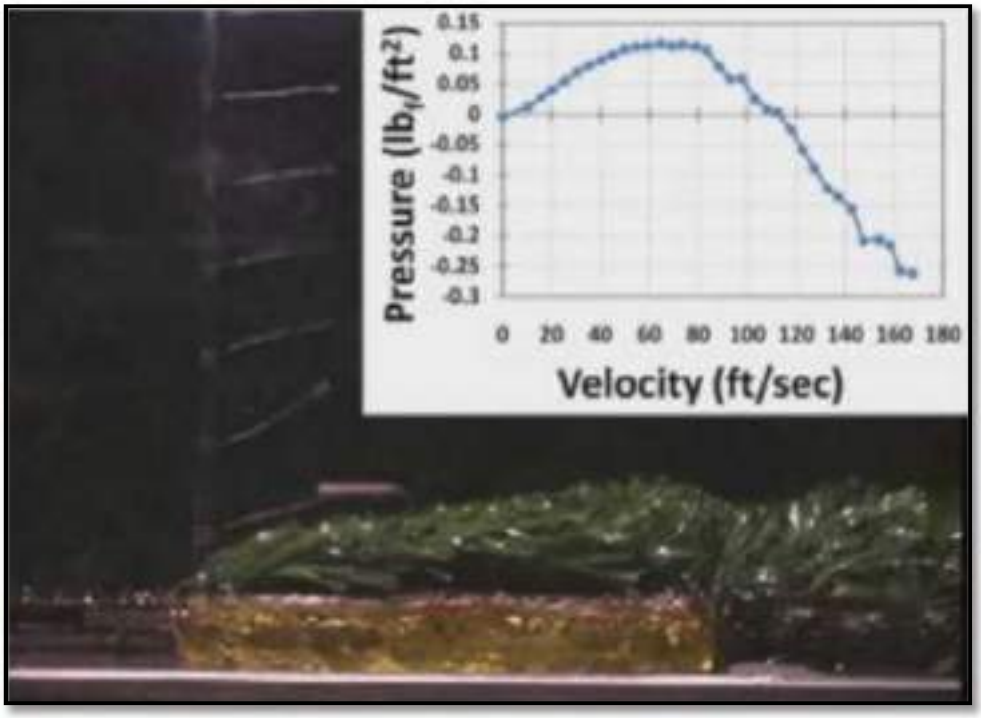

Figure 5. ClosureTurf® Lift and Drag Testing at GTRI

ViGYAN

The ViGYAN Inc. wind tunnel is located in the Aero-Fluids Laboratory building at the Langley Research and Development Park in Hampton, Virginia. The open return design tunnel has been serving the aerodynamic testing requirements of government agencies and commercial customers since 1988 in addition to supporting on-going, internal research and development. The full-scale testing assessed resilience of an interior section of the ClosureTurf® tufted geosynthetic component to a sudden gust of wind.

ViGYAN testing was conducted on a plywood base measuring 4 feet by 6 feet (width x length). Three sections of tufted geosynthetic each measuring two feet wide (6 feet total) were installed on a plywood base. The upstream and downstream sections were secured to the plywood base with heavy duty double-sided tape. The middle section was secured to the plywood base at the downstream edge, only. As a safety precaution, thin wire was also secured across the sample to prevent the sample from blowing down the tunnel if it were to pull completely away from the ground board. The product installation is presented in Figure 6 prior to placement in the wind tunnel.

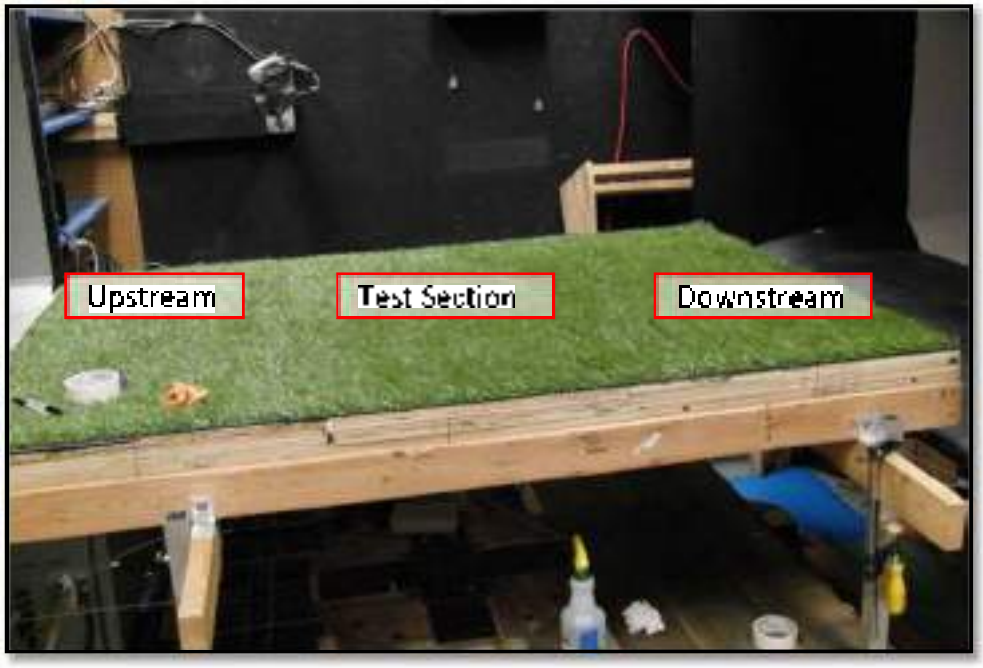

Figure 8. ClosureTurf® Wind Gust Testing at ViGYAN

During testing, three video cameras recorded the installation with instantaneous wind speed overlain on the video feed. One of the cameras was positioned to provide a side view of the installation to capture any movement should movement occur. Initial wind speed was approximately 26 miles per hour. Once a wind gust began, peak wind speed for the gust was attained within 2-3 seconds.

After 22 wind gust tests and a maximum gust speed of 110 miles per hour, the tufted geosynthetic did not pull away from the installation. The installation remained in place.

LIMITATIONS

ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable. However, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.

Attachment G:

Veneer Stability Analysis

Veneer Stability Analysis

DB Wilson Station Special Waste Landfill Facility

Big Rivers Electric Corporation

Project number: 60631499

July 27, 2021

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I. PURPOSE

The purpose of this analysis is to evaluate the veneer stability of the proposed final cover system at the DB Wilson Station Special Waste Landfill Facility by evaluating shallow translational failure potential in those areas. These calculations are being provided in response to the NOD – No. 3, pursuant to 401 KAR 45:110 Section 5(2)(e), dated July 2, 2021, and in compliance with the Environmental Protection Agency's (EPA) *Disposal of Coal Combustion Residuals From Electric Utilities, Final Rule* (CCR Rules), which became effective October 14, 2015. The CCR Rules state that there should be a stability assessment of aboveground embankments and that the closure must provide for major slope stability to prevent the sloughing or movement of the cover system during closure and throughout the post-closure care period.

This analysis is intended to determine the minimum shear strength parameters necessary to maintain stability of the final cover system based on the minimum required factors of safety for shallow uniformly loaded slopes. Typically, these values are used in specifications for future construction.

II. SITE AND PROJECT DESCRIPTION

The shallow translational failure analysis is performed as part of the Special Waste Landfill Closure Plan and Groundwater Corrective Action Permit Application for the existing landfill site located approximately 3,000 feet north of Kentucky Route 85 and east of the Green River in Centertown, Kentucky.

The following sections summarize the methodology, assumptions, and results of the shallow translational failure analysis. For further detail on the specific calculations performed, refer to the corresponding data provided in the Attachments.

III. CONFIGURATION OF THE FINAL COVER SYSTEM

Shallow translational/veneer stability was analyzed for the ClosureTurf® final cover system. Conservative assumptions and parameters for the stability models were chosen for each of the analyses, including modeling the maximum design grades and longest typical design slopes. **Figure 1** depicts the final cover system based on the proposed facility design.

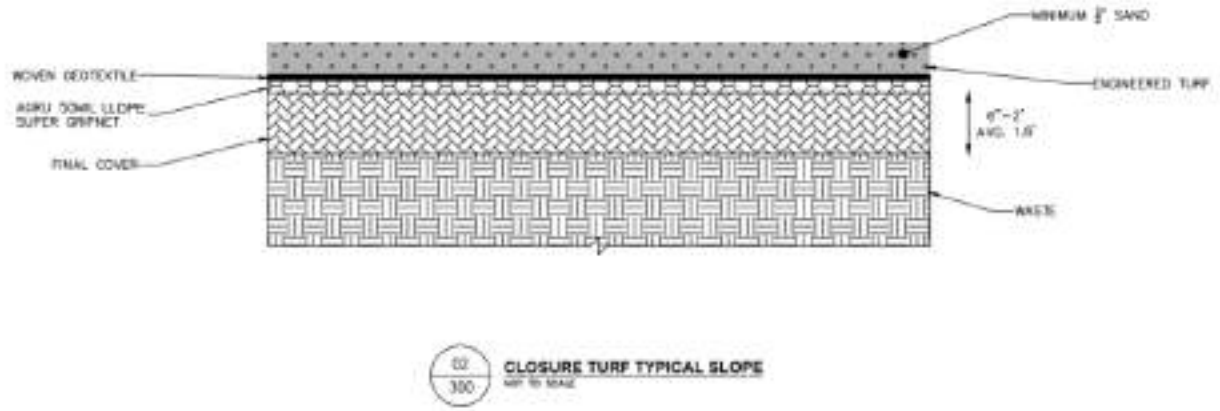

Figure 1. DB Wilson Station Phase I Final Cover Detail Design

IV. SHALLOW TRANSLATIONAL FAILURE ANALYSIS – METHODOLOGY

Analysis of the sliding potential of relatively thin cover soil layers (veneer) above both geosynthetic and subsurface soils (i.e. geomembranes (GM), geosynthetic clay liners (GCL), geocomposite) is important. This is because the underlying barrier materials generally represent a low interface shear strength boundary with respect to the soil placed above them, and the geosynthetics are oriented precisely in the direction of potential sliding.

The method used in this analysis closely follows the methods outlined by Koerner and Soong (Koerner and Soong, 2005). The analysis is performed by use of force equilibrium to balance the driving forces due to gravity pulling on the cover soils and the resistance to sliding due to friction between the underlying subsurface and cover material. Resistance to sliding is also due in part to the toe support (passive wedge) located at the base of the sliding mass. This is conceptually illustrated in **Figure 2**.

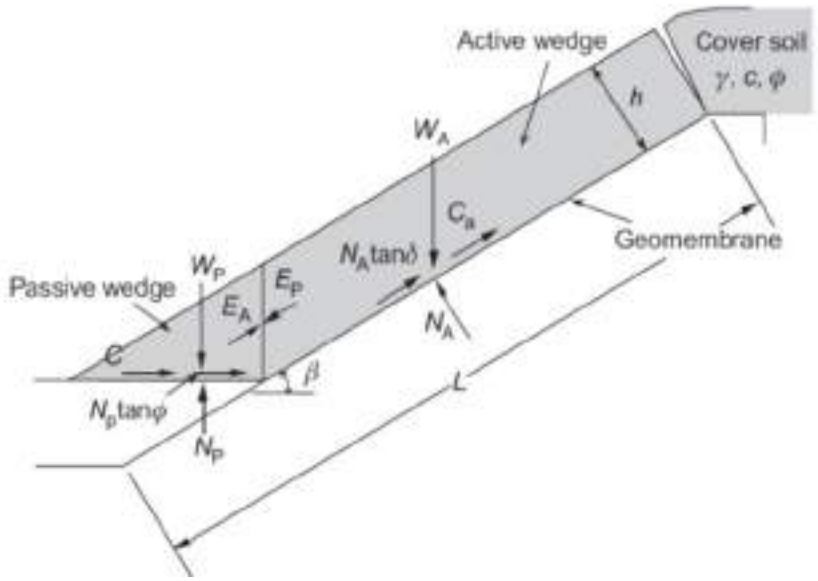

Figure 2. Conceptual Veneer Stability Analysis Cross Section/Free Body Diagram

Where,

W_A = Total Weight of the Active Wedge
W_P = Total Weight of the Passive Wedge
N_A = Effective Force Normal to the Failure Plane of the Active Wedge
N_P = Effective Force Normal to the Failure Plane of the Passive Wedge
γ = Unit Weight of the Cover Soil
h = Thickness of the Cover Soil
L = Length of Slope Measured Along the Geomembrane
β = Soil Slope Angle Beneath the Geomembrane
ϕ = Friction Angle of The Cover Soil
δ = Interface Friction Angle Between Cover Soil and Geomembrane
C_a = Adhesive Force Between Active Wedge Cover Soil and Geomembrane
c_a = Adhesion Between Active Wedge Cover Soil and the Geomembrane
C = Cohesive Force Along the Failure Plane of The Passive Wedge
c = Cohesion of the Cover Soil
E_A = Interwedge Force Acting on the Active Wedge from the Passive Wedge
E_P = Interwedge Force Acting on the Passive Wedge from the Active Wedge
FS = Factor of Safety Against Cover Soil Sliding on the Geomembrane

The shallow translational failure analysis is analyzed by fully satisfying the equilibrium of forces in the vertical and horizontal directions. By taking force summation parallel to the slope and comparing the resisting force with the driving or mobilizing force, a global factor of safety (FS) results:

$$FS = \frac{\sum \text{Resisting Forces}}{\sum \text{Driving Forces}}$$

As noted in the procedure contained in the Koerner and Soong paper, the FS for veneer stability (as depicted in **Figure 2**) is determined by solving the following quadratic equation:

$$FS = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

Where,

$$a = (W_A - N_A cos\beta)cos\beta$$

$$b = -\begin{bmatrix} (W_A - N_A cos\beta)sin\beta tan\varphi \\ +(N_A tan\delta + C_a)sin\beta cos\beta \\ +sin\beta(C + W_P tan\phi) \end{bmatrix}$$

$$c = (N_A tan\delta + C_a)sin^2\beta tan\phi$$

When the calculated FS value falls below 1.0, sliding of the cover soil on the geomembrane is to be anticipated.

Typically, slope stability analyses require a static FS between 1.4 and 2.0 (or potentially higher if unknown conditions warrant it). A FS of 1.5 is commonly used for landfill cap and liner systems designed for long term static conditions and peak strength. For short term conditions, a lower FS is usually warranted commensurate with the consequences of failure and the duration of the temporary condition. A lower FS is also warranted where residual strength parameters are used in the analysis.

For this analysis, the following loading conditions and factors of safety were considered based on the anticipated probability and consequences of failure and are explained further below:

- Static Conditions (Peak Strength): FS ≥ 1.50 (long term conditions)
- Static Conditions (Full Drainage Layer): FS ≥ 1.10

- Static Conditions (Equipment Loads): FS ≥ 1.25
- Seismic Conditions: FS ≥ 1.00
- Static Conditions (Residual Strength): FS ≥ 1.10

An FS of 1.5 was used for the final cover system static analysis utilizing peak strength.

The remaining analyses and the corresponding factors of safety represent temporary or extreme conditions, where a lower FS is warranted. These conditions exist where:

- Significant deformation along the interface has occurred and residual strength conditions have been mobilized.
- A large storm water event has occurred, and the sand infill layer is not saturated or has no free water due to drainage capacity of the underlying Super Gripnet being greater than flow from the storm water event.
- Additional temporary forces act on the slope, such as construction equipment or a seismic event.

Based on the results of the ClosureTurf® hydraulic shear analysis, the total flow on the slope is less than the internal drainage capacity of the underlying Super Gripnet. Hence, the stability analysis, including seepage forces, assumes the infiltration from the design storm water event will be properly conveyed such that there will be no hydraulic head within the sand infill layer.

Also note that this analysis for equipment load only accounts for the weight of the vehicle and assumes very small and gradual acceleration and deceleration on the slope such that it can be neglected. It also assumes placement of the material beginning from the toe of slope progressing to the top.

V. SELECTION OF PARAMETERS

For the final cover system, the following assumptions and design parameters were used. Slope lengths and angles used in all analyses correspond to the most conservative cross-section and representative of existing landfill slopes.

a. Slope Geometry

The slopes of final cover system will be the same as existing slopes with a maximum slope of 3H:1V with intermittent surface water swales benched into the waste mass. Based on the final grades, which will be similar to existing grades, the average elevation change between the intermittent benches is approximately 30 feet and the maximum typical slope length is approximately 95 feet. For a holistic analysis, the entire landfill cap from toe to crest was also analyzed. However, due to the greater slope angle between

intermittent benches, the stability between the intermittent benches is considered the "worst case" condition.

b. Layers

Layers and layer thicknesses for the cover system are anticipated as follows:

Table 1. Layer Summary for the Final Cover System

THICKNESS	LAYER
Final Cover System	
n/a	Engineered Turf
0.5 in	Sand Infill
n/a	Agru 50mil LLDPE Super Gripnet (GM)
n/a	Existing Cover Soil (Sandy Silty Clay) *
n/a	CCR Waste

n/a – thickness of layer is small (negligible)
* Existing cover soil thickness ranges from less than 6 inches to more than 2 feet with an average of approximately 1.6 feet. New fill placement will be in 6 to 8-inch compacted lifts to achieve final grades, where applicable.

c. Critical Interfaces

The critical interfaces analyzed represent preferential pathways for mass sliding. Critical interfaces in the cover system are typically between adjacent geosynthetic materials or between geosynthetic and soil materials. The geosynthetics are of negligible thickness, so the depth to the failure surface does not require adjustment for the individual components when they are stacked.

For the final cover system, the critical interfaces analyzed are as follows:

- Geomembrane (GM)/Existing Cover Soil Layer (EC)

For each system, a minimum shear strength envelope was determined for each critical interface condition. The most conservative envelope developed from the various conditions is anticipated to be used to develop material specifications for use in construction.

d. Material Parameters

The various material parameters used in the veneer analyses are tabulated in **Table 2**.

Table 2. Final Cover and Bottom Liner Variables

PARAMETER	VALUE	COMMENTS
Final Cover		
Dry Unit Weight of Sand Infill, $\gamma_{D\text{-}CS}$	95 pcf	Assumed loose sand relative density
Moisture Content of Sand Infill, $w_{F\text{-}CS}$	0%	Assumed based on thin layer and exposure
Specific Gravity of Slope Cover Soil, G_S	2.55	Based on tested Sand Infill samples
Friction Angle of Sand Infill, ϕ	28 deg	Conservatively assumed for loose sand infill.
Cohesion of Sand Infill, c	0 psf	
PARAMETER	**VALUE**	**COMMENTS**
Equipment Loads		
Weight of Construction Equip (W_b)	39,918 lbs	CAT D6 LGP Dozer
Length of Equip. Track (w)	10.2 ft	CAT D6 LGP Dozer
Width of Equip. Track (b)	2.8 ft	CAT D6 LGP Dozer
Seismic Loads		
Seismic Coefficient (Cover)	0.135 g	Based on one half of site-specific crest PGA in accordance with the guidance presented in EPA Publication EPA/600/R-95/05 (Richardson, et al., 1995) titled “RCRA Subtitle D (258) Seismic Design Guidance for Municipal Solid Waste Landfill Facilities” to limit permanent seismic deformations to less than 1-foot.

VI. RESULTS OF ANALYSIS

The analysis consists of finding strength parameters (i.e., friction angle, ϕ and cohesion, c) for a given interface to meet required factors of safety against translational failure. In the case of geosynthetic interfaces, the term adhesion is used instead of cohesion. Cohesion strictly relates to clay particle interaction, whereas adhesion refers to the physical interaction of geosynthetic surfaces. Mathematically, these terms are interchangeable.

The results of the analysis are summarized below. Detailed calculations are included as **Attachment A**. The minimum peak and residual shear strength parameters for each condition are included in graphical form in **Attachment B**.

a. Final Cover System Shear Strength Parameters

Assuming cohesion/adhesion is equal to zero, the minimum required shear strength parameters for the final cover system are as follows in **Table 3** below. Additional minimum values where cohesion/adhesion are non-zero are included in **Attachment B.**

Table 3. Final Cover Minimum Calculated Required Friction Angle

CONDITION	PEAK INTERFACE FRICTION, ϕ (DEGREES)*	FACTOR OF SAFETY
Static (Gravitational Forces Only)	26.5	1.50
Static (Additional Seepage Forces)	20.1	1.10
Static (Equipment Loads)	22.6	1.25
Seismic	26.3	1.00

*Calculations of friction angles assume interface adhesion (c) is equal to zero.

The factor of safety for the gravitational forces only condition based on peak strength controls the veneer stability design of the final cover system.

In **Attachment A**, the factors of safety for the two static loading conditions (additional seepage forces and equipment loads) and the seismic loading condition were computed based on a minimum interface friction angle between the Agru 50mil LLDPE Super Gripnet and existing cover soil of 26.5 degrees, as determined by the controlling gravitational forces only loading condition. The actual minimum interface friction angle computed for each condition is shown in **Table 3**.

Preconstruction testing with actual materials is anticipated to be conducted to verify that the materials used exhibit interface properties above the minimum shear strength envelope.

b. Residual Strength

The acceptable material specifications are anticipated to be based on the materials' peak strengths. However, should the cover system be temporarily acted upon by an outside force that causes the post-peak strength to be mobilized, there may be some displacement of the cap system. Movement will occur along the interface with the lowest peak strength. This will then mobilize the residual/large-displacement strength of that particular interface. If residual strength for the interface with the lowest peak strength is

above the minimum shear strength envelope (as depicted in **Attachment B)**, the cap system is anticipated to stabilize after the temporary loading condition ends.

The minimum shear strength parameters, assuming residual strength is mobilized for the final cover system and cohesion/adhesion is equal to zero, are shown in **Table 4**. Additional minimum values where cohesion/adhesion are non-zero are included in **Attachment B.**

Table 4. Minimum Calculated Friction Angles

CONDITION	RESIDUAL INTERFACE FRICTION, ϕ (DEGREES)*	FACTOR OF SAFETY
Final Cover - Static	20.1	1.10

*Calculations of friction angles assume interface adhesion (c) is equal to zero.

Preconstruction testing with actual materials is anticipated to be conducted to verify that the materials used exhibit interface properties above the minimum shear strength envelope.

c. Additional Studies

Following receipt of NOD 3 and subsequent discussions with members of the Department of Environmental Protection's Energy and Environment Cabinet, AECOM conducted additional studies in support of the previously submitted veneer stability analysis. Additional information utilized included landfill peak crest acceleration and laboratory interface direct shear testing results, provided to Big Rivers by WatershedGeo in a letter report dated January 26, 2021, to evaluate performance of the final cover system.

The provided laboratory results indicated interface direct shear testing was performed on representative samples of existing landfill cover soils and proposed Super Gripnet geomembrane. The cover soil was nominally tamped in place, to conservatively represent the materials to be in loose condition in the field, for the tests.

Using the full peak crest acceleration of 0.27g and assuming adhesion is zero (0), the required interface friction angle, between the ClosureTurf Super Gripnet and loose cover soils, was calculated as 33.1 degrees, corresponding to the target factor of safety of 1.0.

Based on the laboratory test results, the peak interface friction angle and adhesion were 33.6 degrees and 4 psf, respectively. These values were plugged into the veneer stability formulations to determine the resulting factors of safety, and results are summarized in **Table 5**.

Table 5. Final Cover Factors of Safety Using Peak Laboratory Results

CONDITION	TARGET FACTOR OF SAFETY	RESULTS
Static (Gravitational Forces Only)	1.50	5.19
Static (Additional Seepage Forces)	1.10	2.00
Static (Equipment Loads)	1.25	1.99
Seismic (Using ½ of Crest PGA =0.135g)	1.00	3.52
Seismic (Using Full Crest PGA =0.27g)	1.00	2.66

Laboratory test results indicated a residual interface friction angle of 31.3 degrees. Results of the residual strength are summarized in **Table 6**.

Table 6. Final Cover Factor of Safety Using Residual Laboratory Results

CONDITION	TARGET FACTOR OF SAFETY	RESULTS
Final Cover - Static	1.10	1.83

In addition, a deformation analysis utilizing the full crest acceleration (0.27 g) and Simplified Seismic Slope Displacement Procedures (Bray, 2007) was performed to evaluate the performance of the ClosureTurf final cover under shallow sliding conditions. Based on the analysis, about 0.3 cm or 0.12-in was the estimated displacement of the final cover system assuming 0.27 g as the spectral acceleration for design earthquake, indicating minimal anticipated displacement. A summary of the calculation is presented as **Attachment D**.

VII. Conclusions

A representative cross-section of the existing landfill slopes, representing the most conservative slope configuration within the proposed special waste landfill footprint, was analyzed for veneer stability to determine the minimum required shear strength parameters for the cap system. The minimum interface shear strength requirements are within a reasonable range for the type of materials specified in the design. **The results of the preconstruction interface testing indicated that even in loose condition, the existing cover soils will provide adequate interface strength in conjunction with the proposed Super Gripnet. In addition, minimal seismic induced displacement is anticipated at full crest acceleration within the ClosureTurf final cover system**. It is the responsibility of the project's design and construction certifying engineer to verify that the materials meet the minimum requirements specified for interface strength as part of this analysis. This testing and verification are outside the current scope of work.

VIII. REFERENCES

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Bray, J. D. (2007) Simplified Seismic Slope Displacement Procedures. 4th International Conference on Earthquake Geotechnical Engineering, June 25-28, 2007. Theme Paper-Seismic Slope Stability.

IX. ATTACHMENTS

Attachment A: Detailed Calculations

Attachment B: Graphical Strength Envelope

Attachment C: Sand Infill Hydraulic Stability Calculations

Attachment D: Estimation of Seismic Slope Displacement

ATTACHMENT A

Detailed Calculations

AECOM	BIG RIVERS ELECTRIC COMPANY	JOB	60631499		
500 West Jefferson Street, Ste 1600	DB WILSON STATION	SHT NO	1	OF	9
Louisville, KY 40502	COVER VENEER STABILITY	CALC BY	SKI	DATE	05/13/21
Tel. (502) 569-2301	PHASE I LANDFILL CLOSURE PLAN	CHK BY	MK	DATE	05/13/21
		SCALE	NA		

Objective:

Determine the veneer stability of the cover system at the DB Wilson Phase I Landfill.

Method:

Use methods outlined in the paper by Koerner and Soong, Analysis and *Design of Veneer Cover Soils* published in Geosynthetics International, 2005, 12, No.1.

Procedure:

Determine the static stability of the veneer cover system to evaluate the minimum factor of safety for the cover system. Balance the forces as shown in Figure 1 and compare to the required factor of safety (FS).

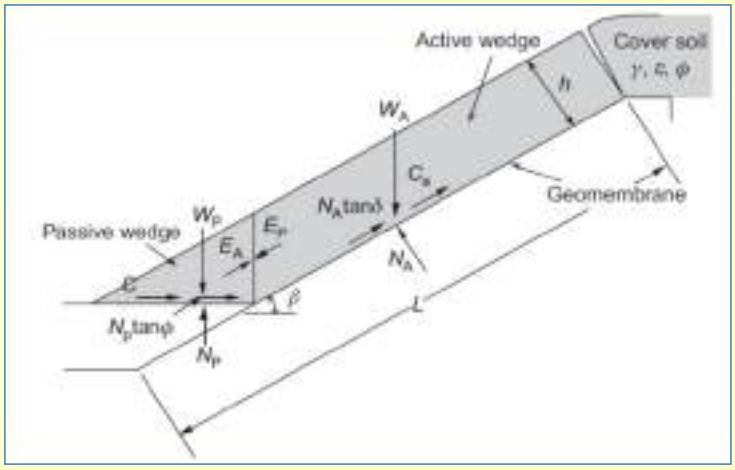

Figure 1. Limit equilibrium forces involved in a finite length slope analysis for a uniformly thick cover soil

Determine: Static factor of safety for cover system based on gravitational forces only and peak strength.

Assumptions:

1. No geosynthetic reinforcements
2. No interface adhesion for geosynthetic components.
3. No tension allowed in geosynthetics
4. Minimum cohesion for multilayered systems

ClosureTurf with Sand Infill(CT)/Agru 50mil HDPE Super Gripnet (GM) and Slope Parameters	CT/GM		Utilized		Source
Thickness (h)	0.04	0.00	0.0	ft	Design
Dry Unit Weight (γ_D)	95.0	0.0	95.0	pcf	Conservatively Assummed
Mois. Cont. (field cond.) (w_F)	0.0	0.0	0.0	%	Conservatively Assummed
Avg Field Unit Wt (γ)	-	-	95.0	pcf	
Reference Stress	-	-	3.8	psf	
Min. Friction Angle (ϕ)	28.0	0.0	28.0	deg	Conservatively Assumed
Min. Cohesion (c)	0.0	0.0	0.0	psf	Conservatively Assumed
Slope Angle Beneath the Geom. (β)	-	-	18.43	deg	Design
Ht. of Slp. Meas. Along Geom. (H_L)	-	-	30.00	ft	Design
Lng. of Slp. Meas. Along Geom. (L)	-	-	94.89	ft	
Inter. Frict. Angle for critical interface. (δ)	-	-	26.5	deg	Min. shear strength parameters from interface shear testing
Adhesion for GT & GM (c_a)	-	-	0.0	psf	
Required Factor of Safety (FS_R)	-	-	1.50		Min. req. FS for long term conditions

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Active Wedge Calculations

Determine the total weight of the active wedge (W_A),the effective force normal to the failure plan of the active wedge (N_A), the adhesive force between the cover soil of the active wedge and the geomembrane (C_a), and the interwedge force acting on the active wedge from the passive wedge (E_A) using the following eqs:

$$W_A = \gamma h^2\left(\frac{L}{h} - \frac{1}{\sin\beta} - \frac{\tan\beta}{2}\right) = 375 \text{ lbs} \qquad N_A = W_A\cos\beta = 356 \text{ lbs}$$

$$C_a = c_a\left(L - \frac{h}{\sin\beta}\right) = - \text{ lbs} \qquad E_A = \frac{(FS)(W_A - N_A\cos\beta) - (N_A\tan\delta + C_a)\sin\beta}{\sin\beta(FS)} = 0 \text{ lbs}$$

Passive Wedge Calculations

Determine the total weight of the passive wedge (W_P),the effective force normal to the failure plan of the passive wedge (N_P), the cohesive force along the failure plane (C), and the interwedge force acting on the passive wedge from the active wedge (E_P) using the following eqs:

$$W_P = \frac{\gamma h^2}{\sin 2\beta} = 0 \text{ lbs} \qquad C = \frac{ch}{\sin\beta} = - \text{ lbs}$$

$$E_P = \frac{C + W_P\tan\phi}{\cos\beta(FS) - \sin\beta\tan\phi} = 0 \text{ lbs} \qquad N_P = W_P + E_P\sin\beta = 0 \text{ lbs}$$

Static Factor of Safety

Determine the calculated Factor of Safety (FS_A) using a quadratic equation relationship where the constants are defined as follows:

$$a = (W_A - N_A\cos\beta)\cos\beta = 36 \text{ lbs/ft}$$

$$b = -\left[\begin{array}{l}(W_A - N_A\cos\beta)\sin\beta\tan\phi \\ +(N_A\tan\delta + C_a)\sin\beta\cos\beta \\ +\sin\beta(C + W_P\tan\phi)\end{array}\right] = (60) \text{ lbs/ft}$$

$$c = (N_A\tan\delta + C_a)\sin^2\beta\tan\phi = 9 \text{ lbs/ft}$$

Results Have Converged

FS_R =	1.50	
FS_A =	1.50	
Min. Peak δ	26.5	deg
Min. Peak c_a	0.0	psf

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Determine: Static factor of safety for cover system based on additional seepage forces.

Procedure:

Determine the static stability of the veneer cover system to determine the minimum required interface friction angle for all engineered components of the cover system. Balance the forces as shown in Figure 1 and the required factor of safety (FS) then solve for minimum interface shear strength parameters. Account for seepage forces in drainage layer as noted in Figure 2.

Assumptions:

In addition to the static case assumptions:
1. Seepage is parallel to slope

2. Based on results of H&H model, total flow on the slope is less than the internal drainage capacity of Super Gripnet.

3. Hence, no hydraulic head in sand infill.

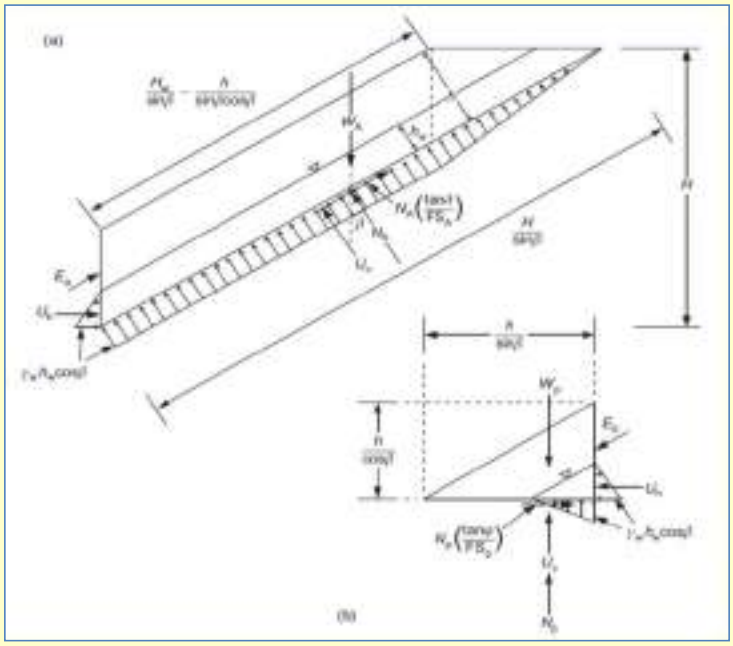

Figure 2. Limit equilibrium forces involved in finite-length slope of uniform cover soil with parallel-to-slope seepage build-up: (a) active wedge; (b) passive wedge

ClosureTurf with Sand Infill(CT)/Agru 50mil HDPE Super Gripnet (GM) and Slope Parameters	CT/GM	0	Utilized		Source
Thickness (h)	0.04	0.0	0.0	ft	Design
Dry Unit Weight (γ_D)	95.0	0.0	95.0	pcf	Conservatively Assummed
Mois. Cont. (field cond.) (w_F)	0.0	0.0	0.0	%	Conservatively Assummed
Avg Field Unit Wt (γ)	-	-	95.0	pcf	
Specific Gravity of the (G_S)	2.55		2.55		Based on tested Sand Infill samples
Unit Weight of Water (γ_W)	-	-	62.4	pcf	
Saturated Unit Weight (γ_{SAT})	-	-	120.1	pcf	
Min. Friction Angle (ϕ)	28.0	0.0	28.0	deg	Conservatively Assumed
Min. Cohesion (c)	0.0	0.0	0.0	psf	Conservatively Assumed
Slope Angle Beneath the Geom. (β)	-	-	18.4	degrees	Design
Ht. of Slp. Meas. Along Geom. (H_L)	-	-	30.00	ft	Design
Lng. of Slp. Meas. Along Geom. (L)	-	-	94.9	ft	
Depth of Water in DL (h_W)	-	-	0.00	ft	Based on results of Sand Infill Hydraulics Calculations
Inter. Frict. Angle for GT & GM (δ)	-	-	26.50	deg	Min. shear strength parameters from interface shear testing
Adhesion for GT & GM. (c_a)	-	-	0.0	psf	
Required Factor of Safety (FS_R)	-	-	1.10		Min. req. FS for temporary conditions

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Active Wedge Calculations

Determine the total weight of the active wedge (W_A), resultant of the pore pressures acting on the interwedge surfaces (U_h), resultant of the pore pressures acting perpendicular to the slope (U_n), the effective force normal to the failure plan of the active wedge (N_A), and the interwedge force acting on the active wedge from the passive wedge (E_A) using the following eqs:

$$W_A = \frac{\gamma_D(h-h_W)[2H\cos\beta-(h+h_W)]}{\sin 2\beta} + \frac{\gamma_{SAT}(h_W)(2H\cos\beta-h_W)}{\sin 2\beta} \quad = \quad 376 \text{ lbs}$$

$$U_h = \frac{\gamma_w h_W^2}{2} \quad = \quad 0.00 \text{ lbs} \qquad U_n = \frac{\gamma_w(h_w)(\cos\beta)(2H\cos\beta-h_w)}{\sin 2\beta} \quad = \quad - \text{ lbs}$$

$$N_A = W_A\cos\beta + U_h\sin\beta - U_n \quad = \quad 356 \text{ lbs}$$

$$E_A = W_A\sin\beta - U_h\cos\beta - \frac{N_A\sin\delta}{(FS)} \quad = \quad (26) \text{ lbs}$$

Passive Wedge Calculations

Determine the total weight of the passive wedge (W_P), resultant of the vertical pore pressures acting on the passive wedge (U_V), and the interwedge force acting on the pass wedge from the active wedge (E_P) using the following eqs:

$$W_P = \frac{\gamma_D(h^2-h_w^2)+\gamma_{SAT}h_w^2}{\sin 2\beta} \quad = \quad 0.3 \text{ lbs} \qquad U_V = U_h\cot\beta \quad = \quad 0.0 \text{ lbs}$$

$$E_P = \frac{U_h(FS)-(W_P-U_V\tan\phi)}{\sin\beta\tan\phi-\cos\beta(FS)} \quad = \quad 0 \text{ lbs}$$

Static Factor of Safety w/ Seepage Forces

Determine the calculated Factor of Safety (FS_A) using a quadratic equation relationship where the constants are defined as follows:

$$a = W_A\sin\beta\cos\beta - U_h\cos^2\beta + U_h \quad = \quad 113 \text{ lbs/ft}$$

$$b = -W_A\sin^2\beta\tan\phi + U_h\sin\beta\cos\beta\tan\phi - N_A\cos\beta\tan\delta - (W_P-U_V)\tan\phi \quad = \quad (188.7) \text{ lbs/ft}$$

$$c = N_A\sin\beta\tan\delta\tan\phi \quad = \quad 30 \text{ lbs/ft}$$

Allow Exceeds Req'd - OK		
FS_R =	1.10	
FS_A =	1.50	
Min. Peak δ	26.5	deg
Min. Peak c_a	0.0	psf

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Determine: Static factor of safety for cover system based on additional equipment loads.

Procedure:

Determine the static stability of the veneer cover system to determine the minimum required interface friction angle for all engineered components of the cover system. Balance the forces as shown in Figure 1 and the required factor of safety (FS) then solve for minimum interface shear strength parameters. Account for equipment loads (W_b) as final cover is placed as noted in Figure 3.

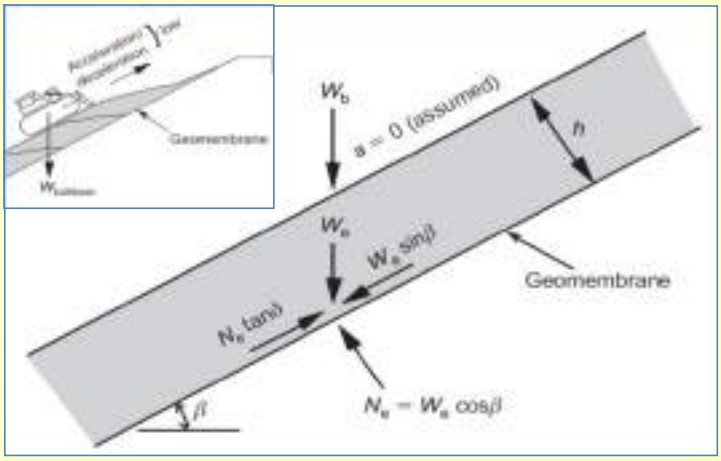

Figure 3. Additional load due to construction equipment moving on cover soil.

Assumptions:

In addition to the static case assumptions:
1. The equipment pushes material up slope leaving a toe buttress behind.
2. The equipment accelerates slowly with no sudden starts or turns to minimize additional loads besides the weight of the machine.

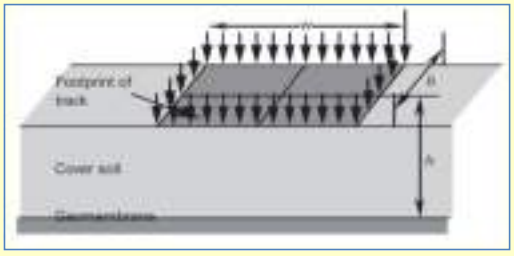

Figure 4. Illustration of stress distribution from overlying equipment.

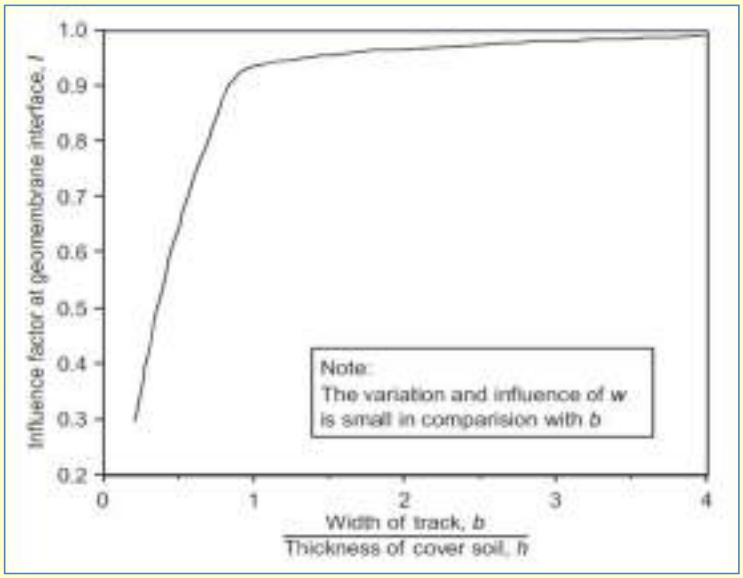

Figure 5. Values of influence factor I to dissipate surface force through cover soil to geomembrane interface (after Poulos and Davis 1974)

Equipment Parameters			Source
Equiv. Equipment Load per Unit Width (W_e)	10494829	lbs	$W_e = qwI$
Influence Factor at the Geom. Interface (I)	1472.29		See Figure 5 above.
Track Width to Cover Soil Thickness Ratio (b/h)	67.15		
Distributed Equipment Load (q)	699	psf	$q = W_b/(2 \times w \times b)$
Weight of Equipment (W_b)	39,918	lbs	Typical weight of CAT D6 LGP dozer
Length of Equipment Track (w)	10.20	ft	Typical track dimensions of CAT D6 LGP dozer
Width of Equipment Track (b)	2.80	ft	

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ClosureTurf with Sand Infill(CT)/Agru 50mil HDPE Super Gripnet (GM) and Slope Parameters

	CT/GM	0	Utilized		Source
Thickness (h)	0.04	0.0	0.0	ft	Design
Dry Unit Weight (γ_D)	95.0	0.0	95.0	pcf	Conservatively Assummed
Mois. Cont. (field cond.) (w_F)	0.0	0.0	0.0	%	Conservatively Assummed
Avg Field Unit Wt (γ)	-	-	95.0	pcf	
Min. Friction Angle (ϕ)	28.0	0.0	28.0	deg	Conservatively Assumed
Min. Cohesion (c)	0.0	0.0	0.0	psf	Conservatively Assumed
Slope Angle Beneath the Geom. (β)	-	-	18.4	deg	Design
Ht. of Slp. Meas. Along Geom. (H_L)	-	-	30.00	ft	Design
Lng. of Slp. Meas. Along Geom. (L)	-	-	94.89	ft	
Inter. Frict. Angle for GT & GM. (δ)	-	-	26.5	deg	Min. shear strength parameters from interface shear testing
Adhesion for GT & GM. (c_a)	-	-	0.0	psf	
Required Factor of Safety (FS_R)	-	-	1.25		Min. req. FS for temporary conditions

Active Wedge Calculations

Determine the total weight of the active wedge (W_A),the effective force normal to the failure plan of the active wedge (N_A), the adhesive force between the cover soil of the active wedge and the geomembrane (C_a), and the interwedge force acting on the active wedge from the passive wedge (E_A) using the following eqs:

$$W_A = \gamma h^2\left(\frac{L}{h} - \frac{1}{\sin\beta} - \frac{\tan\beta}{2}\right) + W_e$$ = 10,495,205 lbs $N_A = W_A \cos\beta$ = 9,956,912 lbs

$$C_a = c_a\left(L - \frac{h}{\sin\beta}\right)$$ = - lbs $E_A = \frac{(FS)(W_A - N_A\cos\beta) - (N_A\tan\delta + C_a)\sin\beta}{\sin\beta(FS)}$ = (653,451) lbs

Passive Wedge Calculations

Determine the total weight of the passive wedge (W_P),the effective force normal to the failure plan of the passive wedge (N_P), the cohesive force along the failure plane (C), and the interwedge force acting on the passive wedge from the active wedge (E_P) using the following eqs:

$$W_P = \frac{\gamma h^2}{\sin 2\beta}$$ = 0 lbs $C = \frac{ch}{\sin\beta}$ = - lbs

$$E_P = \frac{C + W_P\tan\phi}{\cos\beta(FS) - \sin\beta\tan\phi}$$ = 0 lbs $N_P = W_P + E_P\sin\beta$ = 0 lbs

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Static Factor of Safety w/ Equipment Load

Determine the calculated Factor of Safety (FS_A) using a quadratic equation relationship where the constants are defined as follows:

$$a = (W_A - N_A \cos\beta)\cos\beta \quad = \quad 995{,}175 \text{ lbs/ft}$$

$$b = -\begin{bmatrix}(W_A - N_A \cos\beta)\sin\beta\tan\phi \\ +(N_A \tan\delta + C_a)\sin\beta\cos\beta \\ +\sin\beta(C + W_P \tan\phi)\end{bmatrix} \quad = \quad (1{,}665{,}288) \text{ lbs/ft}$$

$$c = (N_A \tan\delta + C_a)\sin^2\beta\tan\phi \quad = \quad 263822 \text{ lbs/ft}$$

Allow Exceeds Req'd - OK		
FS_R =	1.25	
FS_A =	1.50	
Min. Peak δ	26.5	deg
Min. Peak c_a	0.0	psf

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		SCALE	NA		

Determine: Static factor of safety for cover system based on additional seismic loads.

Procedure:

Determine the static stability of the veneer cover system to determine critical factor of safety for all engineered components of the cover system. Balance the forces as shown in Figure 1 and compare to the required factor of safety (FS). Account for seismic loads (C_S) as noted in Figure 6.

Assumptions:

In addition to the static case assumptions:
1. Seismic force acts on the centroid of the cover soil.
2. Seismic force is horizontal.

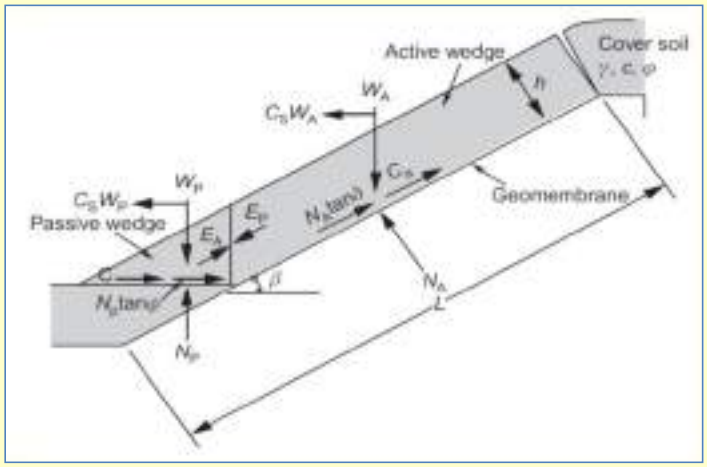

Figure 6. Limit equilibrium forces involved in pseudo-static analysis using average seismic coefficient.

ClosureTurf with Sand Infill(CT)/Agru 50mil HDPE Super Gripnet (GM) and Slope Parameters	CT/GM	0	Utilized		Source
Thickness (h)	0.0	0.0	0.0	ft	Design
Dry Unit Weight (γ_D)	95.0	0.0	95.0	pcf	Conservatively Assummed
Mois. Cont. (field cond.) (w_F)	0.0	0.0	0.0	%	Conservatively Assummed
Avg Field Unit Wt (γ)	-	-	95.0	pcf	
Min. Friction Angle (ϕ)	28.0	0.0	28.0	deg	Conservatively Assumed
Min. Cohesion (c)	0.0	0.0	0.0	psf	Conservatively Assumed
Slope Angle Beneath the Geom. (β)	-	-	18.4	degrees	Design
Ht. of Slp. Meas. Along Geom. (H_L)	-	-	30.00	ft	Design
Lng. of Slp. Meas. Along Geom. (L)	-	-	94.89	ft	
Inter. Frict. Angle for GT & GM. (δ)	-	-	26.5	deg	Min. shear strength parameters from interface shear testing
Adhesion for GT & GM. (c_a)	-	-	0.0	psf	
Seismic Coefficient (C_S or K_S)	-	-	0.135	%g	One half of crest PGA per EPA Publication EPA/600/R-95/051
Required Factor of Safety (FS_R)	-	-	1.00		Min. req. FS for seismic conditions

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Active Wedge Calculations

Determine the total weight of the active wedge (W_A),the effective force normal to the failure plan of the active wedge (N_A), the adhesive force between the cover soil of the active wedge and the geomembrane (C_a), and the interwedge force acting on the active wedge from the passive wedge (E_A) using the following eqs:

$$W_A = \gamma h^2\left(\frac{L}{h} - \frac{1}{\sin\beta} - \frac{\tan\beta}{2}\right) = 375 \text{ lbs} \qquad N_A = W_A\cos\beta = 356 \text{ lbs}$$

$$C_a = c_a\left(L - \frac{h}{\sin\beta}\right) = \text{-} \text{ lbs} \qquad E_A = \frac{(FS)(C_S W_A + N_A\sin\beta)}{(FS)\cos\beta} + \frac{(N_A\tan\delta + C_a)\cos\beta}{(FS)\cos\beta} = 350 \text{ lbs}$$

Passive Wedge Calculations

Determine the total weight of the passive wedge (W_P),the effective force normal to the failure plan of the passive wedge (N_P), the cohesive force along the failure plane (C), and the interwedge force acting on the passive wedge from the active wedge (E_P) using the following eqs:

$$W_P = \frac{\gamma h^2}{\sin 2\beta} = 0 \text{ lbs} \qquad C = \frac{ch}{\sin\beta} = \text{-} \text{ lbs}$$

$$E_P = \frac{C + W_P\tan\phi - C_S W_P(FS)}{\cos\beta(FS) - \sin\beta\tan\phi} = 0 \text{ lbs} \qquad N_P = W_P + E_P\sin\beta = 0 \text{ lbs}$$

Seismic Factor of Safety

Determine the calculated Factor of Safety (FS_A) using a quadratic equation relationship where the constants are defined as follows:

$$a = (C_S W_A + N_A\sin\beta)\cos\beta + C_S W_P\cos\beta = 158 \text{ lbs/ft}$$

$$b = -\begin{bmatrix}(C_S W_A + N_A\sin\beta)\sin\beta\tan\phi \\ +(N_A\tan\delta + C_a)\cos^2\beta \\ +(C + W_P\tan\phi)\cos\beta\end{bmatrix} = (187) \text{ lbs/ft}$$

$$c = (N_A\tan\delta + C_a)\cos\beta\sin\beta\tan\phi = 28 \text{ lbs/ft}$$

Allow Exceeds Req'd - OK

FS_R =	1.00	
FS_A =	1.01	
Min. Peak δ	26.5	deg
Min. Peak c_a	0.0	psf

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		SCALE	NA		

Determine: Static factor of safety for cover system based on residual strength.

Procedure:

Determine the static stability of the veneer cover system to evaluate the critical factor of safety for all engineered components of the cover system. Balance the forces as shown in Figure 1 and then compare to the required factor of safety (FS).

Assumptions:

No additional assumptions

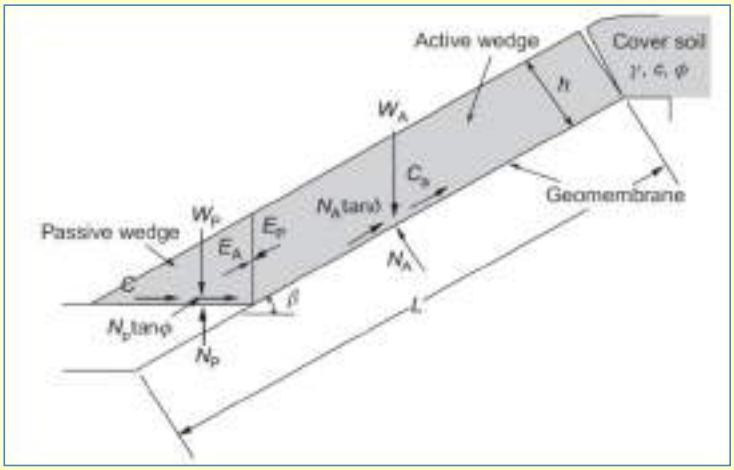

Figure 7. Limit equilibrium forces involved in a finite length slope analysis for a uniformly thick cover soil

ClosureTurf with Sand Infill(CT)/Agru 50mil HDPE Super Gripnet (GM) and Slope Parameters	CT/GM	0	Utilized		Source
Thickness (h)	0.0	0.0	0.0	ft	Design
Dry Unit Weight (γ_D)	95.0	0.0	95.0	pcf	Conservatively Assummed
Mois. Cont. (field cond.) (w_F)	0.0	0.0	0.0	%	Conservatively Assummed
Avg Field Unit Wt (γ)	-	-	95.0	pcf	
Reference Stress	-	-	3.8	psf	
Min. Friction Angle (ϕ)	28.0	0.0	28.0	deg	Conservatively Assumed
Min. Cohesion (c)	0.0	0.0	0.0	psf	Conservatively Assumed
Slope Angle Beneath the Geom. (β)	-	-	18.4	deg	Design
Ht. of Slp. Meas. Along Geom. (H_L)	-	-	30.00	ft	Design
Lng. of Slp. Meas. Along Geom. (L)	-	-	94.89	ft	
Inter. Frict. Angle for GT & GM. (δ)	-	-	26.5	deg	Min. shear strength parameters from interface shear testing
Adhesion for GT & GM. (c_a)	-	-	0.0	psf	
Required Factor of Safety (FS_R)	-	-	1.10		Min. req. FS

Active Wedge Calculations

Determine the total weight of the active wedge (W_A),the effective force normal to the failure plan of the active wedge (N_A), the adhesive force between the cover soil of the active wedge and the geomembrane (C_a), and the interwedge force acting on the active wedge from the passive wedge (E_A) using the following eqs:

$$W_A = \gamma h^2\left(\frac{L}{h} - \frac{1}{\sin\beta} - \frac{\tan\beta}{2}\right) = 375 \text{ lbs}$$

$$N_A = W_A \cos\beta = 356 \text{ lbs}$$

$$C_a = c_a\left(L - \frac{h}{\sin\beta}\right) = - \text{ lbs}$$

$$E_A = \frac{(FS)(W_A - N_A\cos\beta) - (N_A\tan\delta + C_a)\sin\beta}{\sin\beta(FS)} = (43) \text{ lbs}$$

AECOM 500 West Jefferson Street, Ste 1600 Louisville, KY 40502 Tel. (502) 569-2301	BIG RIVERS ELECTRIC COMPANY COVER VENEER STABILITY PHASE I LANDFILL CLOSURE PLAN	JOB	60631499		
		SHT NO	11	OF	9
		CALC BY	SKI	DATE	5/13/21
		CHK BY	MK	DATE	5/13/21
		SCALE	NA		

Passive Wedge Calculations

Determine the total weight of the passive wedge (W_P),the effective force normal to the failure plan of the passive wedge (N_P), the cohesive force along the failure plane (C), and the interwedge force acting on the passive wedge from the active wedge (E_P) using the following eqs:

$$W_P = \frac{\gamma h^2}{\sin 2\beta} = 0 \text{ lbs} \qquad C = \frac{ch}{\sin \beta} = - \text{ lbs}$$

$$E_P = \frac{C + W_P \tan\phi}{\cos\beta(FS) - \sin\beta\tan\phi} = 0 \text{ lbs} \qquad N_P = W_P + E_P \sin\beta = 0 \text{ lbs}$$

Static Factor of Safety for Residual Strength

Determine the calculated Factor of Safety (FS_A) using a quadratic equation relationship where the constants are defined as follows:

$$a = (W_A - N_A \cos\beta)\cos\beta = 36 \text{ lbs/ft}$$

$$b = -\begin{bmatrix} (W_A - N_A\cos\beta)\sin\beta\tan\phi \\ +(N_A\tan\delta + C_a)\sin\beta\cos\beta \\ +\sin\beta(C + W_P\tan\phi) \end{bmatrix} = (60) \text{ lbs/ft}$$

$$c = (N_A \tan\delta + C_a)\sin^2\beta\tan\phi = 9 \text{ lbs/ft}$$

Allow Exceeds Resid. - OK

FS_R =	1.10	
FS_A =	1.50	
Min. Resid. δ	26.5	deg
Min. Resid. c_a	0.0	psf

ATTACHMENT B

Graphical Strength Envelope

MINIMUM REQUIRED SHEAR STRENGTH FOR FINAL COVER VENEER STABILITY

The following chart depicts the minimum required shear strength values along the interfaces of the engineered components of the final cover system under relatively light uniform loads up to the reference load as illustrated in Figure B.3. The envelope depicts the peak shear strength used in the veneer stability analyses represented in the form of the minimum friction angle (ϕ) required to maintain the required factors of safety in the veneer stability analysis. All engineered components of the final cover system located adjacent to an interface along the slope should have a combination of shear strength parameters (i.e. cohesion/adhesion and friction angle, ϕ) where the mininmum strength for a given normal stress exceeds that of the peak shear strength envelope depicted in Figure B.3. Because the normal stress in the veneer analysis is due to a uniform load from the overlying material, a reference stress representing the commensurate normal stress applied from those materials is included on the chart for use in determining appropriate confining pressure for laboratory testing.

Using this reference stress, the acceptable combination of cohesion/adhesion and friction angle are plotted on Figure B.4. Any combination plotting above and to the right of the peak value curve represents acceptable values for this application as long as the field loads are equal to or less than the reference stress.

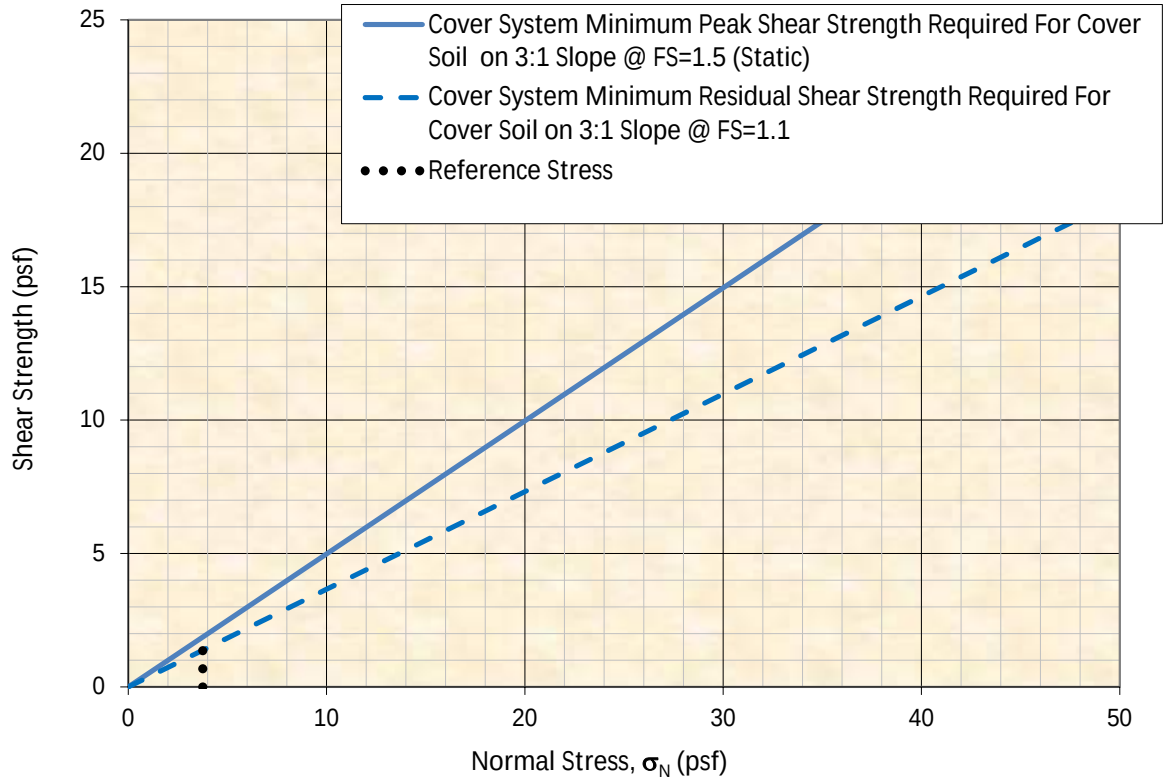

FIGURE B.3

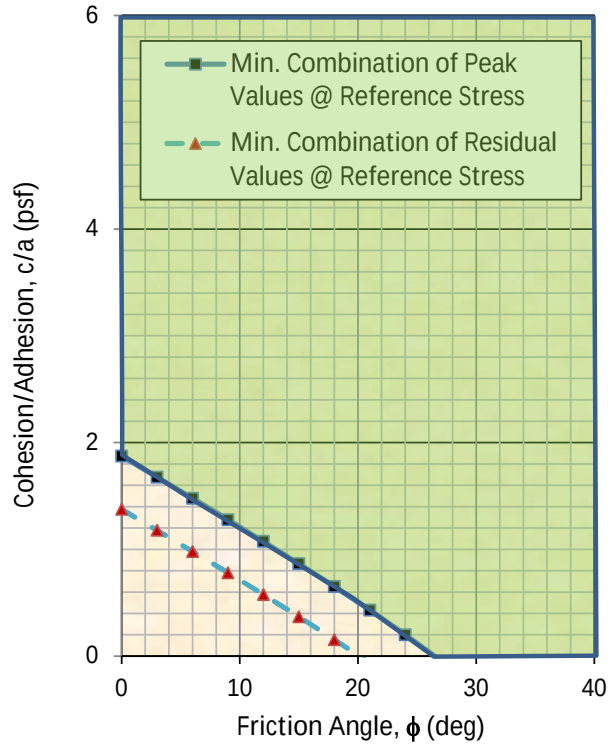

FIGURE B.4

ATTACHMENT C

Sand Infill Hydraulic Stability Calculations

Sand Infill Hydraulic Stability Calculations
Big Rivers Generating Station

Sand infill hydraulic stability in ClosureTurf® has been independently tested by the third-party laboratory, TRI Environmental. A summary of testing and results is provided as Attachment 1. The current ClosureTurf sand infill specification is provided as Attachment 2. Test results demonstrate minimal sand infill mobilization at hydraulic shear values exceeding 1.5 lb/ft^2. The suggested design value for evaluating the potential for infill mobilization is 0.8 lb/ft^2.

Calculations utilizing site specific parameters to estimate hydraulic shear from rainfall runoff are provided. The purpose of the calculations is to evaluate whether the calculated maximum hydraulic shear stress in the sand infill of ClosureTurf exceeds the critical hydraulic shear stress. Three drainage scenarios are evaluated in the following calculations based on the information provided to Watershed Geo by the design engineer. The calculation results are summarized in Table 1 below.

Table 1. Summary of calculation results

Analysis Scenario	Calculated Max. Hydraulic Shear Stress using Super Gripnet® on Top Deck (psf)	Calculated Max. Hydraulic Shear Stress using Super Gripnet® on Side Slope (psf)	Suggested Critical Hydraulic Shear Stress (psf)	Hydraulic Shear Stress (Pass or Fail)
Scenario 1: 55 ft of top deck at 5% slope and 68 ft of side slope at 3.25H:1V	0.0 (Total flow on the top deck is less than the internal drainage capacity of Super Gripnet)	0.0 (Total flow on the slope is less than the internal drainage capacity of Super Gripnet)	0.8	Pass
Scenario 2: 156 ft of side slope at 3.4H:1V	-	0.0 (Total flow on the slope is less than the internal drainage capacity of Super Gripnet)		Pass
Scenario 3: 365 ft of side slope at 6H:1V	-	0.26		Pass

Scenario 1 – 55 ft of Top Deck into 68 ft of Side Slope

The maximum drainage path under Scenario 1 consists of a top deck with an assumed 5% slope with a drainage length of approximately 55 ft that then continues onto a 3.25H:1V side slope with a drainage length of approximately 68 ft.

Design Parameters:

Top Deck:

- Drainage length: L_1 = 55 ft (see Figure 1)
- Slope: S_1 = 5%
- Slope angle: $\alpha_1 = \tan^{-1}(5/100) = 2.86°$
- Hydraulic gradient: i_1 = 5% or 0.05
- Manning's roughness coefficient: n_1 = 0.22 (for slope $\leq$ 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 5% or i = 0.05):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.05^{0.624} = 1.89\ gpm/ft$
  - Transmissivity: $\theta_{i=0.05} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{1.89}{0.05} = 7.82 \times 10^{-3}\ m^2/sec$

Side Slope:

- Drainage length: L_2 = 68 ft (see Figure 1)
- Slope: S_2 = 30.8% (3.25H:1V)
- Slope angle: $\alpha_2 = \tan^{-1}(1/3.25) = 17.1°$
- Hydraulic gradient: i_2 = 30.8% or 0.308
- Manning's roughness coefficient: n_2 = 0.12 (for slope > 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 3.25H:1V or i = 0.308):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.308^{0.624} = 5.89\ gpm/ft$
  - Transmissivity: $\theta_{i=0.308} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{5.89}{0.308} = 3.96 \times 10^{-3}\ m^2/sec$

Other Design Parameters:

- Design rain fall intensity (see Figure 2, the 25-yr, 1-hr in NOAA precipitation data):

$$R = 2.35\frac{in}{hr} = 0.196\frac{ft}{hr}$$

- Critical hydraulic shear stress of ClosureTurf with manufactured sand infill:

τ_C = 0.8 psf (see Attachment 1)

Step 1: Calculate the maximum hydraulic shear stress of flow on the top deck

Flow rate on the top deck under the design rainfall intensity (assuming unit width of 1 ft of final cover):

$$q_1 = L_1 \cdot R \cdot \cos\alpha_1 = 55ft \times 0.196\frac{ft}{hr} \times \cos 2.86° = 10.76\frac{ft^2}{hr} = 0.0029\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.05} \cdot i_1 = 7.82 \times 10^{-3}\frac{m^2}{sec} \times 0.05$$
$$= 7.82 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.05 = 15.14\frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q_1' = q_1 - q_{int} = 10.76\frac{ft^2}{hr} - 15.14\frac{ft^2}{hr} = -4.38\frac{ft^2}{hr} < 0$$

Because the internal drainage capacity of Super Gripnet is greater than the flow rate, no water is expected to flow within the sand infill layer. Therefore, the hydraulic shear stress in the sand infill is zero and no erosion of sand infill is expected to occur.

Step 2: Calculate the maximum hydraulic shear stress of flow on the side slope

Water from the top deck will continue to flow onto the side slope. The total flow at the end of the side slope is:

$$q_{total} = q_1 + q_2 = q_1 + L_2 \cdot R \cdot \cos\alpha_2 = 10.76\frac{ft^2}{hr} + \left(68ft \times 0.196\frac{ft}{hr} \times \cos 17.1°\right)$$
$$= 23.49\frac{ft^2}{hr} = 0.0065\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.308} \cdot i_2 = 3.96 \times 10^{-3}\frac{m^2}{sec} \times 0.308$$

$$= 3.96 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.308 = 47.24 \frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q'_{total} = q_{total} - q_{int} = 23.49 \frac{ft^2}{hr} - 47.24 \frac{ft^2}{hr} = -23.75 \frac{ft^2}{hr} < 0$$

Because the internal drainage capacity of Super Gripnet is greater than the flow rate, no water is expected to flow within the sand infill layer. Therefore, the hydraulic shear stress in the sand infill is zero and minimal sand infill mobilization is expected to occur.

Scenario 2 – 156 ft of Side Slope at 3.4H:1V

The maximum drainage path under Scenario 2 consists of a side slope with a 3.4H:1V slope and a drainage length of approximately 156 ft that does not receive flow from a top deck.

Design Parameters:

Side Slope:

- Drainage length: L_1 = 156 ft (See Figure 1)
- Slope: S_1 = 29.4% (3.4H:1V)
- Slope angle: $\alpha_1 = \tan^{-1}(1/3.4) = 16.4°$
- Hydraulic gradient: i_1 = 29.4% or 0.294
- Manning's roughness coefficient: n_1 = 0.12 (for slope > 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 29.4% or i = 0.294):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.294^{0.624} = 5.72\ gpm/ft$
  - Transmissivity: $\theta_{i=0.294} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{5.72}{0.294} = 4.03 \times 10^{-3}\ m^2/sec$

Other Design Parameters:

- Design rain fall intensity (see Figure 2, the 25-yr, 1-hr in NOAA precipitation data):

$$R = 2.35\frac{in}{hr} = 0.196\frac{ft}{hr}$$

  Critical hydraulic shear stress of ClosureTurf with manufactured sand infill: $\tau_C = 0.8\ psf$ (see Attachment 1)

Step 1: Calculate the maximum hydraulic shear stress of flow on the slope

Flow rate on the slope under the design rainfall intensity (assuming unit width of 1 ft of final cover):

$$q_1 = L_1 \cdot R \cdot \cos\alpha_1 = 156ft \times 0.196\frac{ft}{hr} \times \cos 16.4° = 29.33\frac{ft^2}{hr} = 0.0081\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.294} \cdot i_1 = 4.03 \times 10^{-3}\frac{m^2}{sec} \times 0.294$$

$$= 4.03 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.294 = 45.89 \frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q_1' = q_1 - q_{int} = 29.33 \frac{ft^2}{hr} - 45.89 \frac{ft^2}{hr} = -16.56 \frac{ft^2}{hr} < 0$$

Because the internal drainage capacity of Super Gripnet is greater than the flow rate, no water is expected to flow within the sand infill layer. Therefore, the hydraulic shear stress in the sand infill is zero and minimal sand infill mobilization is expected to occur.

Scenario 3 – 365 ft of Side Slope at 6H:1V

The maximum drainage path under Scenario 3 consists of a side slope with a 6H:1V slope and a drainage length of approximately 365 ft that does not receive flow from a top deck.

Design Parameters:

Side Slope:

- Drainage length: L_1 = 365 ft (See Figure 1)
- Slope: S_1 = 16.7% (6H:1V)
- Slope angle: $\alpha_1 = \tan^{-1}(1/6) = 9.46°$
- Hydraulic gradient: i_1 = 16.7% or 0.167
- Manning's roughness coefficient: n_1 = 0.12 (for slope > 10%; See Watershed Geo's ClosureTurf Design Manual)
- Geomembrane type: Super Gripnet (with internal drainage layer)
- Transmissivity of ClosureTurf with Super Gripnet (use the data in Figure 3, the ClosureTurf transmissivity test report by SGI to calculate the transmissivity at the slope of 16.7% or i = 0.167):
  - Flow Rate: $q = 12.28 \times i^{0.624} = 12.28 \times 0.167^{0.624} = 4.02\ gpm/ft$
  - Transmissivity: $\theta_{i=0.167} = 0.00020697 \times \frac{q}{i} = 0.00020697 \times \frac{4.02}{0.167} = 4.98 \times 10^{-3}\ m^2/sec$

Other Design Parameters:

- Design rain fall intensity (see Figure 2, the 25-yr, 1-hr in NOAA precipitation data):

$$R = 2.35\frac{in}{hr} = 0.196\frac{ft}{hr}$$

- Critical hydraulic shear stress of ClosureTurf with manufactured sand infill: $\tau_C = 0.8\ psf$ (see Attachment 1)

Step 1: Calculate the maximum hydraulic shear stress of flow on the slope

Flow rate on the slope under the design rainfall intensity (assuming unit width of 1 ft of final cover):

$$q_1 = L_1 \cdot R \cdot \cos\alpha_1 = 365ft \times 0.196\frac{ft}{hr} \times \cos 9.46° = 70.56\frac{ft^2}{hr} = 0.0196\frac{ft^2}{s}$$

Part of the flow is expected to be through the internal drainage channel of the Super Gripnet (i.e., the space within the drainage studs of Super Gripnet). The internal flow capacity of ClosureTurf with Super Gripnet is:

$$q_{int} = \theta_{i=0.167} \cdot i_1 = 4.98 \times 10^{-3}\frac{m^2}{sec} \times 0.167$$

$$= 4.98 \times 10^{-3} \times \frac{(3.28ft)^2}{\left(\frac{1}{3600}\right)hr} \times 0.167 = 32.21\frac{ft^2}{hr}$$

The remaining flow will be through the turf and sand infill:

$$q_1' = q_1 - q_{int} = 70.56\frac{ft^2}{hr} - 32.21\frac{ft^2}{hr} = 38.35\frac{ft^2}{hr} = 0.0106\frac{ft^2}{s}$$

The flow rate:

$$q_1' = v_1 \cdot A_1 = v_1 \cdot (H_1 \times 1\,ft) = v_1 \cdot H_1$$

Where, H_1 is flow depth on the slope (ft). Using the Manning's Equation and assuming the hydraulic radius equals to the flow depth (in ft):

$$v_1 = \frac{1.49}{n_1} H_1^{\frac{2}{3}} \sqrt{S_1}$$

Therefore,

$$q_1' = v_1 \cdot H_1 = \frac{1.49}{n_1} H_1^{\frac{2}{3}} \sqrt{S_1} \cdot H_1 = \frac{1.49}{n} H_1^{\frac{5}{3}} \sqrt{S_1}$$

Solve the above equation for H_1,

$$H_1 = \left(\frac{q_1' \cdot n_1}{1.49 \cdot \sqrt{S_1}}\right)^{\frac{3}{5}} = \left(\frac{0.0106 \times 0.12}{1.49 \cdot \sqrt{0.167}}\right)^{\frac{3}{5}} = 0.025ft$$

The maximum hydraulic shear stress by the water flow on slope:

$$\tau_1 = \gamma_w \cdot H_1 \cdot S_1 = 62.4\frac{lb}{ft^3} \times 0.025\,ft \times 0.167 = 0.26\,psf < \tau_c = 0.8\,psf, \textbf{PASS}!$$

The calculated maximum hydraulic shear stress in the sand infill is less than the critical hydraulic shear stress, indicating minimal sand infill mobilization is expected to occur.

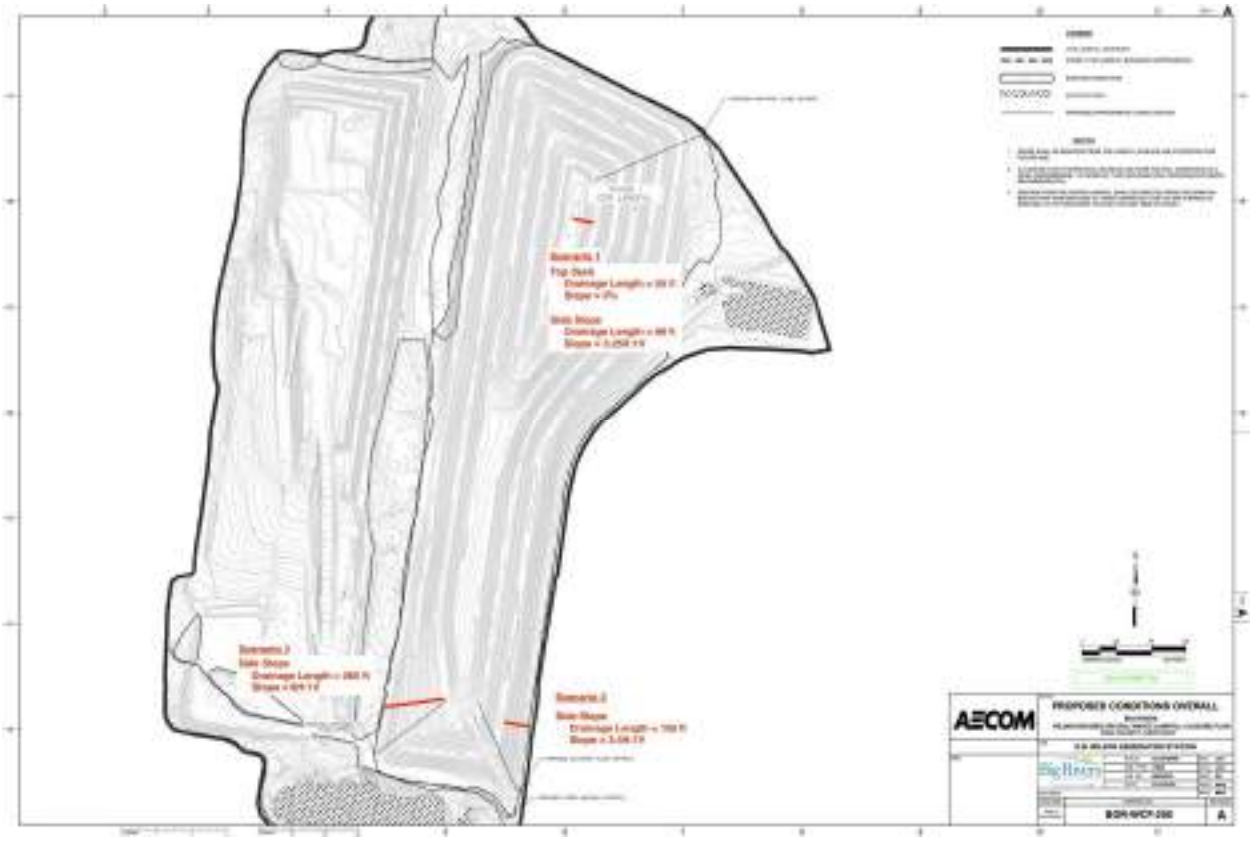

Figure 1. Grading plan with drainage paths identified

WG WatershedGeo™ Unearthing Solutions

9/16/2020

Precipitation Frequency Data Server

NOAA Atlas 14, Volume 2, Version 3
Location name: Hartford, Kentucky, USA*
Latitude: 37.4782°, Longitude: -86.8488°
Elevation: 513.99 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.352 (0.323-0.382)	0.413 (0.380-0.450)	0.476 (0.438-0.518)	0.527 (0.483-0.572)	0.591 (0.539-0.642)	0.637 (0.578-0.694)	0.685 (0.618-0.745)	0.730 (0.654-0.796)	0.786 (0.698-0.859)	0.829 (0.730-0.910)
10-min	0.562 (0.516-0.611)	0.660 (0.608-0.719)	0.762 (0.701-0.829)	0.842 (0.772-0.915)	0.941 (0.858-1.02)	1.01 (0.921-1.10)	1.09 (0.982-1.18)	1.16 (1.04-1.26)	1.24 (1.10-1.36)	1.31 (1.15-1.43)
15-min	0.702 (0.645-0.763)	0.830 (0.764-0.904)	0.964 (0.887-1.05)	1.07 (0.977-1.16)	1.19 (1.09-1.30)	1.29 (1.17-1.40)	1.38 (1.24-1.50)	1.46 (1.31-1.59)	1.57 (1.39-1.71)	1.64 (1.44-1.80)
30-min	0.962 (0.885-1.05)	1.15 (1.06-1.25)	1.37 (1.26-1.49)	1.54 (1.42-1.68)	1.77 (1.61-1.92)	1.94 (1.76-2.11)	2.11 (1.90-2.29)	2.27 (2.04-2.48)	2.49 (2.21-2.72)	2.65 (2.34-2.91)
60-min	1.20 (1.10-1.31)	1.44 (1.32-1.57)	1.76 (1.62-1.91)	2.01 (1.84-2.18)	2.35 (2.15-2.56)	2.62 (2.38-2.85)	2.90 (2.62-3.16)	3.19 (2.86-3.48)	3.57 (3.17-3.91)	3.87 (3.41-4.25)
2-hr	1.45 (1.34-1.57)	1.74 (1.61-1.89)	2.14 (1.98-2.32)	2.46 (2.27-2.66)	2.89 (2.66-3.13)	3.23 (2.95-3.50)	3.58 (3.25-3.88)	3.95 (3.55-4.29)	4.45 (3.95-4.84)	4.84 (4.26-5.29)
3-hr	1.58 (1.47-1.71)	1.89 (1.76-2.05)	2.33 (2.16-2.53)	2.68 (2.48-2.90)	3.17 (2.91-3.42)	3.56 (3.26-3.85)	3.96 (3.60-4.29)	4.39 (3.96-4.75)	4.97 (4.43-5.41)	5.44 (4.79-5.95)
6-hr	1.95 (1.81-2.12)	2.34 (2.17-2.54)	2.88 (2.66-3.12)	3.33 (3.07-3.60)	3.97 (3.63-4.28)	4.49 (4.09-4.85)	5.05 (4.55-5.46)	5.64 (5.04-6.11)	6.47 (5.69-7.04)	7.16 (6.22-7.81)
12-hr	2.35 (2.16-2.58)	2.82 (2.59-3.10)	3.47 (3.19-3.81)	4.02 (3.67-4.41)	4.79 (4.35-5.24)	5.43 (4.90-5.94)	6.11 (5.46-6.69)	6.83 (6.04-7.49)	7.86 (6.85-8.63)	8.70 (7.48-9.59)
24-hr	2.84 (2.63-3.07)	3.41 (3.17-3.69)	4.24 (3.93-4.58)	4.92 (4.55-5.31)	5.90 (5.42-6.36)	6.71 (6.13-7.23)	7.57 (6.87-8.17)	8.49 (7.63-9.18)	9.80 (8.68-10.6)	10.9 (9.52-11.8)
2-day	3.42 (3.16-3.71)	4.10 (3.79-4.45)	5.09 (4.71-5.53)	5.92 (5.45-6.42)	7.11 (6.51-7.71)	8.10 (7.37-8.80)	9.17 (8.27-9.97)	10.3 (9.21-11.3)	12.0 (10.5-13.2)	13.4 (11.6-14.7)
3-day	3.64 (3.37-3.94)	4.36 (4.04-4.73)	5.42 (5.01-5.87)	6.30 (5.81-6.83)	7.57 (6.94-8.20)	8.64 (7.86-9.37)	9.78 (8.82-10.6)	11.0 (9.84-12.0)	12.8 (11.3-14.0)	14.3 (12.4-15.8)
4-day	3.86 (3.58-4.18)	4.62 (4.29-5.01)	5.75 (5.32-6.22)	6.68 (6.17-7.23)	8.03 (7.37-8.70)	9.17 (8.35-9.93)	10.4 (9.38-11.3)	11.7 (10.5-12.8)	13.6 (12.0-14.9)	15.2 (13.2-16.8)
7-day	4.52 (4.17-4.95)	5.42 (5.00-5.94)	6.78 (6.23-7.43)	7.96 (7.29-8.71)	9.73 (8.84-10.6)	11.3 (10.2-12.3)	13.0 (11.6-14.2)	14.8 (13.1-16.4)	17.7 (15.3-19.6)	20.1 (17.1-22.5)
10-day	5.09 (4.71-5.55)	6.10 (5.63-6.64)	7.57 (6.97-8.24)	8.82 (8.11-9.61)	10.7 (9.75-11.6)	12.3 (11.1-13.4)	14.0 (12.6-15.3)	15.9 (14.2-17.5)	18.8 (16.4-20.7)	21.2 (18.2-23.5)
20-day	6.99 (6.55-7.47)	8.30 (7.78-8.88)	9.98 (9.34-10.7)	11.3 (10.6-12.1)	13.2 (12.3-14.1)	14.7 (13.6-15.7)	16.3 (15.0-17.4)	17.9 (16.3-19.2)	20.1 (18.2-21.7)	21.9 (19.7-23.9)
30-day	8.59 (8.09-9.15)	10.2 (9.56-10.8)	12.0 (11.3-12.8)	13.5 (12.7-14.4)	15.5 (14.6-16.5)	17.1 (16.0-18.2)	18.7 (17.4-20.0)	20.4 (18.8-21.8)	22.5 (20.6-24.2)	24.2 (22.0-26.2)
45-day	10.8 (10.2-11.4)	12.7 (12.0-13.4)	14.8 (14.0-15.6)	16.4 (15.5-17.3)	18.4 (17.4-19.5)	20.0 (18.8-21.2)	21.5 (20.1-22.8)	23.0 (21.4-24.4)	24.8 (23.0-26.5)	26.3 (24.2-28.1)
60-day	12.9 (12.3-13.6)	15.2 (14.4-16.0)	17.5 (16.6-18.4)	19.2 (18.2-20.2)	21.3 (20.2-22.4)	22.9 (21.6-24.1)	24.4 (22.9-25.7)	25.7 (24.1-27.2)	27.4 (25.6-29.0)	28.6 (26.6-30.4)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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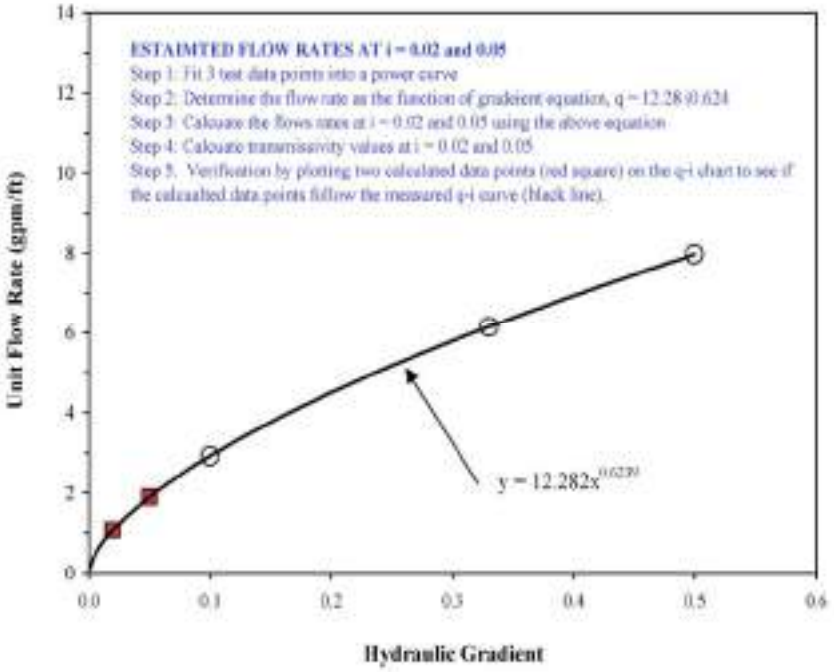
Figure 2. NOAA Precipitation Data

CLOSURETURF LLC -LANDFILL COVER SYSTEM
HYDRAULIC TRANSMISSIVITY TESTING (ASTM D 4716)
Test Configuration (from Top to Bottom): Sand Layer/Polytex Artificial Grass with Geotextile Side Down/ Agru 50-mil Super Gripnet LLDPE Geomembrane with Studs Side Up



Test No	Flow Direction	Specimen Size Width x Length (in. x in.)	Total Normal Stress[1] σ_n (psf)	Seating Time t (hour)	Hydraulic Gradient i (-)	Transmissivity $\theta = 0.00020697\left(\frac{q}{i}\right)$ (m^2/sec)	Flow Rate $q = 12.28 i^{0.624}$ (gpm/ft)	q' (l/min/m)
					0.02	1.11E-02	1.07	
					0.05	7.84E-03	1.84	
1	MD	12 x12	47	0.25	0.10	6.04E-03	2.92	36.3
2	MD	12 x12	47	0.25	0.33	3.86E-03	6.15	76.4
3	MD	12 x12	47	0.25	0.50	3.30E-03	7.97	99.0

NOTE:
Total normal stress = Sand weight (sand + steel plate + surcharge) divided by the plan area of test specimen (1 square ft). A normal stress of 47 psf is approximately the minimum load stress required to keep the specimen from uplifting.

SGI TESTING SERVICES, LLC

DATE TESTED:	1/11/2013
FIGURE NO.	A-1
PROJECT NO.	SGI10007
DOCUMENT NO.	
FILE NO.	

Figure 3. Transmissivity test report of ClosureTurf with internal drainage layer

Attachment 1

Evaluation of Sand Infill Criteria for ClosureTurf®

Attachment 2

ClosureTurf® Sand Infill Specification

This ClosureTurf® Specification document has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor / Installer with a general guidance specification. All information, recommendations and suggestions appearing in this specification concerning the use of our products are based upon experience, tests and data believed to be reliable; however, this information should not be used or relied upon for any specific application without independent professional examination and verification of its accuracy, suitability and applicability. The independent professional shall edit this document to suit the site-specific project design criteria. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Watershed Geosynthetics LLC as to the effects of such use or the results to be obtained, nor does Watershed Geosynthetics LLC assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. ClosureTurf® is a U.S. registered trademark which designates a product from Watershed Geosynthetics LLC. This product is the subject of issued U.S. and foreign patents and/or pending U.S. and foreign patent applications. Nothing herein is to be construed as permission to grant license or as a recommendation to infringe any patent.

SECTION 31 05 16

ClosureTurf® SAND INFILL COMPONENT

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes:

Specifications for approved Sand Infill Component of the patented ClosureTurf® System.

1.02 RELATED SECTIONS

Section 31 23 13 - Subgrade preparation (Upper 6 inches of subgrade only)

Section 01 42 00 - References and Definitions

Section 01 60 00 - ClosureTurf® Product Specification

Section 01 60 00 - ClosureTurf® MicroDrain® Product Specification

Section 01 60 01 - ClosureTurf® MicroSpike® Product Specification

Section 01 73 19 - ClosureTurf® Installation Specification

Section 31 05 16 - ClosureTurf® Sand Infill Specification

Section 03 49 01 - Alternate HydroBinder® Infill Specification

Section 23 51 23 - ClosureTurf® HDPE Pressure Relief Valve Specification

PART 2: PRODUCTS

2.01 DESCRIPTION

Sand Infill Component of the ClosureTurf® System shall meet the fine aggregate angularity, specific gravity and grain size distribution as specified by WatershedGeo in this Specification.

A. Fine aggregate angularity shall be tested in accordance with ASTM C 1252 / AASHTO T 304, *Standard Test Methods for Uncompacted Void Content of Fine Aggregate (as Influenced by Particle Shape, Surface Texture, and Grading). Method A.* Method A uncompacted void content shall be greater than or equal to 40%.

B. Sand infill specific gravity shall be tested in accordance with ASTM C 128 / AASHTO T 84, *Standard Test Method for Relative Density (Specific Gravity) and Absorption of Fine Aggregate.* Bulk oven-dry specific gravity shall be greater than or equal to 2.40.

C. Sand infill grain size distribution shall be tested in accordance with ASTM C 136 / AASHTO T 27, *Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.* The grain size distribution shall be as prescribed in Table 1 and presented in Figure 1.

Table 1. Sand Infill Grain Size Distribution

		3/8" (9.5 mm)	≤	100%
90%	≤	#4 (4.75 mm)	≤	100%
50%	≤	#8 (2.36 mm)	≤	85%
25%	≤	#16 (1.18 mm)	≤	65%
10%	≤	#30 (0.60 mm)	≤	45%
0	≤	#50 (0.30 mm)	≤	30%
0	≤	#100 (0.15 mm)	≤	10%
0	≤	#200 (0.075 mm)	≤	5%

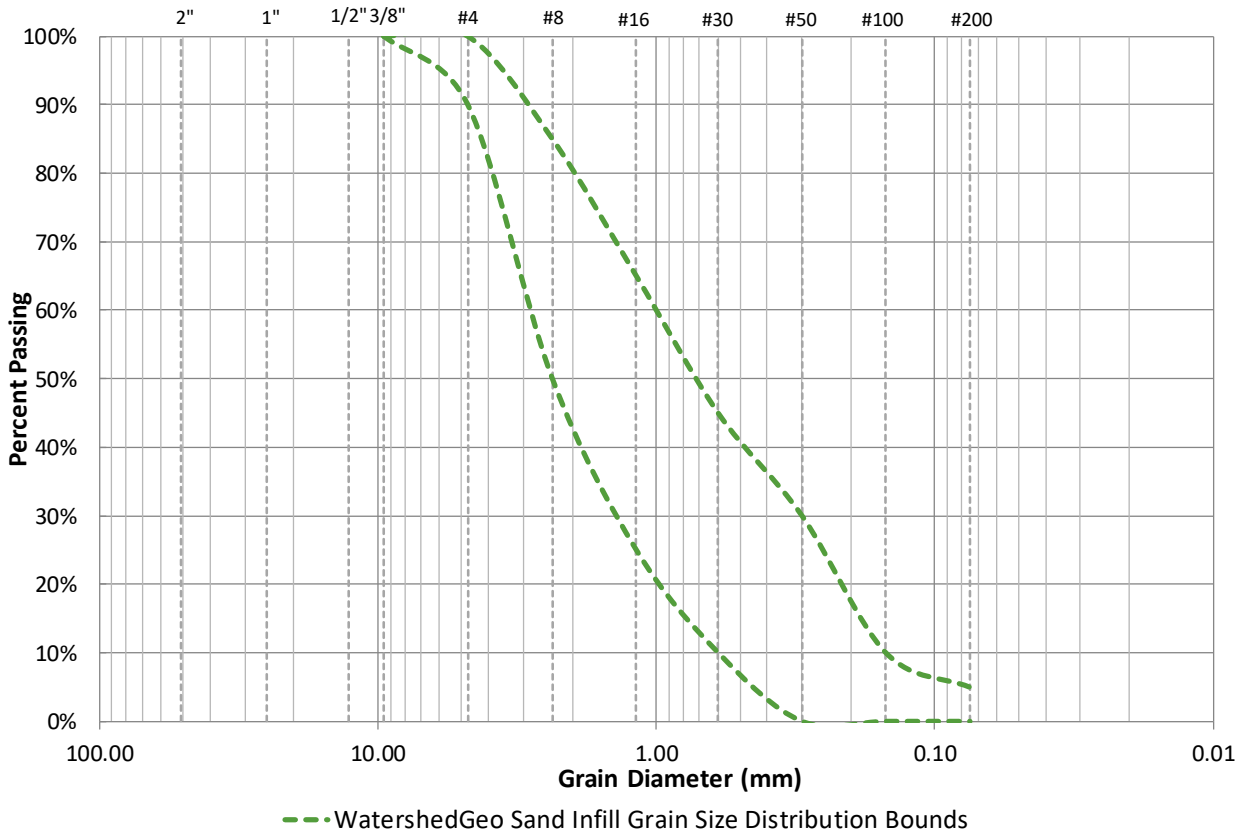


Figure 1: ClosureTurf® Specified Infill Grain Size Distribution

D. Documentation of sand infill conformance with ASTM C 136 / AASHTO T 27, ASTM C 128 / AASHTO T 84 and ASTM C 1252 / AASHTO T 304 shall be submitted to the specified CQA personnel.

E. Subsequent to initial verification of specification conformance, sand infill shall have grain size distribution conformance verified and documented for each 175 cubic yards to be installed.

PART 3: EXECUTION:

Not Used. See Section 01 73 19 ClosureTurf® Installation Specifications.

END OF SECTION

ATTACHMENT D

Estimation of Seismic Slope Displacement

Project Wilson Phase I Landfill ClosureTurf Final Cover
Subject Estimation of Seismic Slope Displacement
Method Simplified Seismic Slope Displacement Procedures (Bray, 2007)
Calc By SKI Date 07/27/21
Chk By VG Date 07/27/21

Input Parameters

H	0.01	m	Height of ClosureTurf Final Cover
Vs	213	m/s	Shear wave velocity along toe/base of landfill 700 ft/s
k_y	0.28		Seismic coefficient that produces FS = 1 [From Veneer Stability (Backcalculated)]
T_s	0.00	sec	Estimate for fundamental period of waste = 4*H/V_s
$S_a(1.5T_s)$	0.27		Spectral acceleration for design earthquake at T=1.5*T_s
M	7.7		New Madrid Seismic Zone

Probability of "Zero" Displacement

$$P(D = 0) = 1 - \Phi(-1.76 - 3.22\ln(k_y) - 0.484(T_s)\ln(k_y) + 3.52\ln(S_a(1.5T_s)))$$

P(D="0") = 0.9883888 98.84% Chance of "zero" displacement

Predicted Displacement

$$\ln(D) = -1.10 - 2.83\ln(k_y) - 0.333\left(\ln(k_y)\right)^2 + 0.566\ln(k_y)\ln(S_a(1.5T_s))$$

ln(D) = -1.29746
D = 0.2732249

median = 0.3 cm
anticipated range = 0.1 to 0.5 cm

aecom.com

Attachment G1:

Deterministic Seismic Hazard Analysis

Site-Specific Seismic Hazard Analysis

DB Wilson Station Special Waste Landfill Facility

Big Rivers Electric Corporation

Project number: 60631499

May 11, 2021

Prepared for:

Big Rivers Electric Corporation

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Appendices

Appendix A – DEEPSOIL Files

1. Introduction

A site-specific deterministic seismic hazard analysis (DSHA) was performed for the DB Wilson Generating Station Special Waste Landfill Facility to develop site-specific ground motions. The DSHA was performed for bedrock material to provide seismic ground motions as input to site response and engineering analysis of the facility. A site response analysis was performed to modify the bedrock ground motions and develop site-specific response spectra for both the toe and crest of the Phase I CCR (Coal Combustion Residuals) landfill facility. The landfill consists of approximately 166 feet of waste material (POZ-O-TEC). The landfill is founded on mine spoils overlying shale bedrock. The facility is located in Ohio County, Kentucky, approximately 900 m north of Kentucky Route 85 and east of the Green River near Centertown, Kentucky (Figure 1).

2. Seismotectonic Setting and Historical Seismicity

The current tectonic setting of eastern North America on a passive margin, several thousand kilometers from any active plate boundary, makes it difficult to explain the seismicity in the region in terms of a simple plate-tectonic model (Ebel and Kafka, 1991). In fact, the last major tectonic activity in the eastern U.S. took place during the Mesozoic.

The occurrence of seismicity in the absence of significant tectonic activity in this region is complicated by the inability to characterize individual structures that may have been active in recent times, e.g., late Quaternary. The regional seismicity generally does not delineate any clear active structural boundaries to serve as a guide in mapping active faults that may be correlated with seismic activity (with a few notable exceptions) (Ebel and Kafka, 1991).

The most widely accepted interpretation of the cause of seismicity in the eastern North America is that earthquakes result from the reactivation of ancient structures in the present-day stress field (Ebel and Kafka, 1991). The central and eastern U.S. (CEUS) is part of a broad mid-plate compressive stress province that includes most of Canada (Zoback and Zoback, 1991). Based on a compilation of focal mechanism data, Ebel and Kafka (1991) report that the current stress field over this large region is in a relatively uniform east-northeast direction of maximum horizontal compression. This direction of maximum horizontal compression corresponds well to the direction of absolute plate motion of the North American Plate. This suggests that a far-field tectonic source such as ridge-push or basal drag at the Mid-Atlantic Ridge may be the primary source of stress in the mid-plate region (Zoback and Zoback, 1991). Most of the ancient structures and zones of weakness in the eastern U.S. trend approximately north-northeast, largely resulting from east-west directed continental collision and rifting events.

The stress regime, along with the structural features developed through the geologic history described above controls the occurrence and localization of seismicity in the region. It is generally agreed, as manifested in recent regional source characterizations for seismic hazard assessments in the eastern U.S. that, in contrast to the plate boundary faults that control seismic hazard in the western U.S., seismicity and consequent hazard in the east is largely controlled by pre-existing zones of weakness that are favorably oriented in the modern stress field (EPRI/DOE/NRC, 2012, and included references). This includes regions of Mesozoic extension but also those of older extensional episodes such as the Iapetan Rift Margin (IRM).

2.1 Historical Seismicity

The facility is located in the Midcontinent region of the U.S. away from active plate boundaries in a region that exhibits a low level of historical seismicity (Figure 1). There have been no known events of moment magnitude (**M**) 5.0 or greater within 100 km of the facility, while 10 events of **M** 5.0 or greater have occurred within 250 km of the facility, most associated with the New Madrid Seismic zone or the Wabash Valley seismic zone (Figure 1).

New Madrid Seismic Zone

The most significant earthquakes to have occurred in the CEUS are the 1811-1812 **M** 7 to 8 New Madrid earthquake sequence (Figure 1). The New Madrid earthquake sequence occurred over the winter of 1811-1812 in southeastern Missouri/northeastern Arkansas. This sequence, which was felt as far away as the East Coast, consisted of three principal events on 16 December 1811, 23 January 1812, and 7 February 1812. Because the epicentral region was sparsely populated at the time of the events, little structural damage occurred, and the maximum Modified Mercalli intensity (MMI) is IX as reinterpreted by Hough et al. (2000). The facility probably underwent strong ground shaking of MMI VII to VIII in the 16 December 1811 mainshock (Hough et al., 2000). The New Madrid Seismic Zone is currently the most seismically active area in the CEUS (Figure 1).

The faults of the New Madrid fault system are defined primarily based on concentrations of seismicity as geomorphic expression of faulting is poor; only the Reelfoot reverse fault is well expressed as a definitively tectonic feature. Several different geologic faults have been postulated as the source of the events but there remains considerable uncertainty in defining the causative faults. The southern and northern sections of the fault system are northeast-striking features that are probably ancient faults related to rifting that have been reactivated in the modern stress regime as primarily right-lateral strike-slip faults. Focal mechanisms from these areas are consistent with predominantly dextral motion. The Reelfoot reverse fault strikes northwest and dips southwest; earthquakes associated with it have a variety of focal mechanisms. The fault has been described as a cross-structure in a compressional left step between right-lateral strike-slip faults.

Wabash Valley Seismic Zone

The Wabash Valley seismic zone is a region of southwestern Indiana and southeastern Illinois that contains the Wabash Valley fault system (WVFS). Numerous Holocene paleoliquefaction features have been mapped along river valleys within the Wabash Valley Seismic Zone and other regions of southern Indiana and Illinois and have been interpreted as having been caused by paleoearthquakes (e.g., Obermeier et al., 1993). However, the faults of the WVFS have been mapped as pre-Quaternary, and no fault has been identified as the causative structure for the liquefaction nor been explicitly correlated with historic or paleoseismicity.

The Wabash Valley has historically been seismically active with several earthquakes of **M** 4.5 and larger (Figure 1). An event on 27 September 1891 occurred near Mt. Vernon, Illinois, which caused chimney damage in the epicentral area (Stover and Coffman, 1993). The size of the earthquake was estimated to be a **M** 4.9 and the event was felt widely in several states. On 31 October 1895, an earthquake of estimated **M** 6.0 struck the northern end of the New Madrid Seismic Zone (Figure 1). This is the largest earthquake to have occurred in the central Mississippi Valley since 1811-1812 (Stover and Coffman, 1993). The event caused extensive damage in the town of Charleston, Missouri. Sand blows due to liquefaction were also reported in the epicentral area (Stover and Coffman, 1993). On 9 November 1968, a **M** 5.3 earthquake struck southern Illinois and neighboring states with a maximum reported MM VII. Damage consisted of damaged chimneys, broken windows, cracked or fallen plaster, cracked foundations, and scattered instances of collapsed parapets (Stover and Coffman, 1993).

Another notable earthquake was the 18 April 2008 **M** 5.4 Southern Illinois earthquake northwest of the facility (Figure 1).

3. Seismic Hazard Analysis Methodology

The design earthquake ground motions for the facility were developed using a deterministic seismic hazard analysis. The approach to develop the design acceleration response spectra consisted of the following steps:

- Identification of the potential seismic sources that could produce ground motions of engineering significance at the site and estimation of the maximum considered earthquake that could reasonably be expected from these sources.
- Characterization of the seismic sources, including fault-to-site distances.
- Select appropriate ground motion models to estimate ground motions as a function of earthquake magnitude, distance, and site condition;
- Development of the range of ground motions (median, 84th percentile) that are likely to occur at the site due to the maximum considered earthquake for each seismic source.
- Enveloping the ground motions from each seismic source to develop the controlling maximum earthquake with the potential for generating the strongest ground motions at the site.

3.1 Site Geologic Conditions

A geophysical investigation was performed at the facility using multichannel analysis of surface-waves (MASW). The MASW method involves the profiling of shear wave velocities (V_s) through analysis of the dispersion of surface waves. MASW Line-1000 was centered at geotechnical boring TOE-1 and MASW Line-3000 was positioned along the toe of the landfill approximately 91 m (300 feet) north of TOE-1 (AECOM Geophysical Services Group, 2021). The V_s profile for MASW Line-1000 and Line-3000, both at the toe of the landfill is shown on Figure 3. Based on borehole logs of the TOE-1 borehole, below a depth of 11.7 m (38.5 feet) the geology generally consists of fresh to slightly weathered shale. Above this depth the geology material consists of slit, clayey sand and gravels. The seismic hazard analysis was performed for the shale geologic material. The average time-average shear wave velocity in the upper 30 m (V_{S30}) of the shale for the two profiles is 855 m/sec (2,805 ft/sec) and was used in the hazard analysis.

3.2 Ground Motion Prediction Models

Crustal ground motion prediction models for tectonically active regions like the western U.S. are empirical in nature and derived from strong motion data from such areas as California, Taiwan, Japan, and Italy. In contrast, few useable strong motion records exist for earthquakes in the Central and Eastern North America (CENA). Thus, ground motion models (GMMs) for the CENA have been developed, in large part, using seismological-based numerical models. Recent efforts have been made to update the ground motion models for the CENA. One such project is the Next Generation Attenuation for Central and Eastern North America project (NGA-East), a large multidisciplinary project coordinated by the Pacific Earthquake Engineering Research (PEER) Center.

The NGA-East project (Goulet et al., 2018) objective was to provide the best estimate of the distribution (median and standard deviation) horizontal ground motions for the peak ground acceleration (PGA) and 5%-damped pseudo-acceleration response spectra (PSA) for oscillator periods ranging from 0.01 to 10 sec on “hard-rock sites located up to 1500 km from future

earthquakes in CENA with moment magnitudes in the 4.0–8.2 range, and to provide the epistemic uncertainty associated with this estimate.

The NGA-East project considered 30 median GMMs and selected 19 of the GMMs, or "seed" models, for further investigation. These seed models were used to generate a continuous distribution of GMMs for each ground motion intensity measure. A set of 10,000 GMMs were sampled from the continuous GMMs distribution. The 10,000 "sampled ground motion models" were "grouped" into 17 cells in a process using Sammon's maps. The 17 resulting GMMs are the final NGA-East ground motion models. These 17 GMMs were then assigned weights for logic tree and seismic hazard applications.

The NGA-East ground motion models are for hard rock (V_{S30} ~ 3,000 m/sec), and thus need to be adjusted to be consistent with the local site conditions. The hard rock ground motions were converted to a V_{S30} of 855 m/sec using the Stewart et al. (2017a, 2017b) and Hashash et al. (2017) site factors derived for the CEUS. The site factors are period dependent and utilize the hard rock PGA value. These site factors were recently modified by Abrahamson et al. (2020) to ensure consistency between the site factors and the site terms as developed for the ground motion models.

4. DSHA Results

Three sources, the Wabash Valley Seismic Zone, the New Madrid Seismic Zone and a background (random) earthquake (Figure 1) were identified for the facility. The magnitudes of the sources were based on Wang (2010) and are listed in Table 1, along with the distance from the facility. The distance for the background earthquake is somewhat arbitrary, but reasonable given the level of seismicity in the facility region outside of identified seismic zones (Figure 1). The DSHA calculations were made using the NGA-East ground-motion characterization tool developed by The B. John Garrick Institute for the Risk Sciences, UCLA Engineering, Natural Hazards Risk and Resiliency Research Center (https://www.risksciences.ucla.edu/nhr3/gmtools). The weighted average ergodic sigma model was used in calculating the 84th percentile (median plus one sigma). The median, median plus one sigma and median minus one sigma for a V_{S30} of 3,000 m/sec are provided in Table 2.

Figure 2 shows the 84th percentile 5%-damped acceleration response spectra for the three sources using the NGA-East ground motion models and adjusted to a V_{S30} of 855 m/sec, with the values given in Table 3. The Wabash Valley seismic zone gives the highest spectral accelerations for periods less than 0.1 sec, while the New Madrid seismic zone gives the highest spectral accelerations for periods greater than 0.1 sec.

Table 1. Controlling Source Parameters

Source	Magnitude	Distance (km)
New Madrid Seismic Zone	7.7	175
Wabash Valley Seismic Zone	6.8	73
background (random) earthquake	4.1	20

Table 2. 5%-Damped Horizontal Spectra (V_{S30} = 3,000 m/sec)

	New Madrid Seismic Zone			Wabash Valley Seismic Zone			Background Earthquake		
	Median	Median -1 sigma	Median +1 sigma	Median	Median -1 sigma	Median +1 sigma	Median	Median -1 sigma	Median +1 sigma
Period (sec)	**SA (g)**	**SA (g)**	**SA (g)**	**SA (g)**	**SA (g)**	**SA (g)**	**SA (g)**	**SA (g)**	**SA (g)**
0.010 (PGA)	0.0925	0.0515	0.166	0.103	0.0572	0.185	0.0276	0.0129	0.0591
0.020	0.128	0.0713	0.230	0.144	0.0804	0.259	0.0416	0.0194	0.0891
0.030	0.146	0.0807	0.263	0.164	0.0909	0.296	0.0476	0.0222	0.102
0.040	0.157	0.0868	0.285	0.177	0.0975	0.321	0.0511	0.0237	0.110
0.050	0.172	0.0932	0.318	0.195	0.1058	0.361	0.0535	0.0245	0.117
0.075	0.177	0.0946	0.332	0.202	0.1077	0.379	0.0521	0.0236	0.115
0.100	0.185	0.0990	0.346	0.190	0.1016	0.355	0.0405	0.0184	0.0892
0.120	0.179	0.0976	0.329	0.177	0.0966	0.326	0.0322	0.0149	0.0699
0.150	0.167	0.0920	0.305	0.153	0.0840	0.278	0.0214	0.0100	0.0457
0.200	0.148	0.0808	0.270	0.129	0.0704	0.236	0.0148	0.00693	0.0315
0.250	0.138	0.0751	0.254	0.113	0.0615	0.208	0.0105	0.00492	0.0222
0.300	0.125	0.0674	0.231	0.101	0.0544	0.186	0.00806	0.00381	0.0171
0.400	0.107	0.0575	0.201	0.0826	0.0442	0.154	0.00489	0.00233	0.0103
0.500	0.0929	0.0495	0.174	0.0697	0.0371	0.131	0.00323	0.00155	0.00673
0.750	0.0743	0.0396	0.140	0.0513	0.0273	0.0963	0.00140	0.000682	0.00286
1.000	0.0737	0.0393	0.138	0.0507	0.0270	0.0953	0.00136	0.000663	0.00278
1.500	0.0593	0.0318	0.111	0.0382	0.0205	0.0712	0.000722	0.000358	0.00146
2.000	0.0448	0.0244	0.0822	0.0248	0.0135	0.0455	0.000286	0.000145	0.000563
3.000	0.0362	0.0200	0.0657	0.0177	0.00974	0.0320	0.000154	0.0000795	0.000297
4.000	0.0232	0.0131	0.0411	0.00946	0.00534	0.0168	0.0000591	0.0000312	0.000112
5.000	0.0162	0.00927	0.0283	0.00594	0.00340	0.0104	0.0000330	0.0000176	0.0000617
10.000	0.0141	0.00808	0.0245	0.00489	0.00281	0.00851	0.0000249	0.0000134	0.0000465

Table 3. 5%-Damped 84th Percentile Horizontal Spectra (V_{S30} = 855 m/sec)

	New Madrid Seismic Zone	Wabash Valley Seismic Zone	Background Earthquake
Period (sec)	**SA (g)**	**SA (g)**	**SA (g)**
0.010 (PGA)	0.130	0.144	0.0461
0.020	0.129	0.145	0.0499
0.030	0.165	0.185	0.0635
0.040	0.209	0.237	0.0766
0.050	0.256	0.291	0.0885
0.075	0.388	0.398	0.100
0.100	0.505	0.500	0.107
0.120	0.570	0.544	0.104
0.150	0.491	0.448	0.0737
0.200	0.370	0.322	0.0431
0.250	0.324	0.265	0.0283
0.300	0.285	0.230	0.0210
0.400	0.241	0.185	0.0123
0.500	0.208	0.156	0.00802
0.750	0.162	0.111	0.00324
1.000	0.129	0.0831	0.00170
1.500	0.0943	0.0522	0.000645
2.000	0.0749	0.0365	0.000339
3.000	0.0464	0.0189	0.000126
4.000	0.0318	0.0117	0.0000693
5.000	0.0241	0.0080	0.0000405
10.000	0.0105	0.00250	0.00000765

5. Spectrally Matched Time Histories

Three sets of two-component horizontal time histories were spectrally matched to the target spectrum for use in a site-response analysis. The target spectrum is the envelope of the 84th percentile spectra for a V_{S30} = 855 m/sec as presented in Section 4 (Table 3).

Because the response spectrum of a time history has peaks and valleys that deviate from the design response spectrum (target spectrum), it is necessary to modify the motion to improve its response spectrum compatibility. The procedure proposed by Lilhanand and Tseng (1988), as modified by Al Atik and Abrahamson (2010) and contained in the computer code RSPmatch09, was used to develop the acceleration time histories through spectral matching to the target spectrum. This time-domain procedure has been shown to be superior to previous frequency-domain approaches because the adjustments to the time history are only done at the time at which the spectral response occurs resulting in only localized perturbations on both the time history and the spectra (Lilhanand and Tseng, 1988). This process preserves the non-stationary properties of the original time history and develops a time history with a realistic displacement waveform.

To match the target spectrum, seed time histories should be from events of similar magnitude and distance (for duration), tectonic environment and most importantly, spectral shape as the earthquake dominating the spectrum. As the New Madrid seismic zone spectrum is the controlling spectrum for most the target spectrum (periods greater than 0.1 sec), and for the periods most likely to impact the facility, seed motions were selected based on the New Madrid seismic zone event. Recordings from large magnitude events in stable continental regions are not available, therefore, one ground motion is from crustal earthquakes from active tectonic regions with **M** greater than 7.0, and two time histories are simulated ground motions from the PEER NGA-East project (PEER, 2015). These simulations were developed using the Graves and Pitarka (2015) method and are described further in Appendix 1B of PEER (2015).

Table 4 lists the seed time histories used in the spectral matching and their properties. Figure 4 compares the response spectra for the three two-component horizontal seed time histories scaled to PGA of the target spectrum. The acceleration time histories for these seeds are provided in Figures 5 to 7.

The spectral matches and resulting time histories are shown on Figures 8 to 19. Shown with the time histories is a Husid plot (bottom of figure) which illustrates the increase in energy (normalized Arias intensity) with time. Also, shown with the time histories for comparison are the seed time histories to demonstrate how the time history has changed in the matching process. Table 5 lists the properties of the time histories spectrally matched to the target spectrum.

Time history properties given in Tables 4 and 5 include 5-95% significant durations and Arias Intensity. Arias Intensity is a ground motion parameter defined by Arias (1970) as the integral of the square of acceleration over the duration of a time history record, as follows:

$$I_a = \frac{\pi}{2g}\int_0^{\infty} a(t)^2 dt$$

where I_a is Arias Intensity, a(t) is acceleration, and g is the acceleration of gravity. Studies have shown that I_a correlates well with the damage potential of earthquakes (Travasarou et al., 2003). The target Arias Intensity for the horizontal time histories was computed using the referenced empirical model of Farhadi and Pezeshk. (2020). This model is based on data from the NGA-East ground motion database and is referenced to the Campbell and Bozorgnia (2014) ground motion prediction model. The median and ± one standard deviation are listed in Table 6. The spectrally matched horizontal time histories generally fall within these ranges (Table 6).

Duration of a strong ground motion is related to the time required for release of accumulated strain energy by rupture along the fault and generally increases with magnitude of the earthquake. Trifunac and Brady (1975) defined significant duration as the time interval between the points at which 5% and 95% of the total energy (I_a) has been recorded. The target duration for the time histories was calculated using the empirical model of Kempton and Stewart (2006). This model is based on data from the NGA-West database and is a function of magnitude, distance and V_{S30}. There is no known model for duration for stable continental regions. The median and ± one standard deviation are listed in Table 6. The spectrally matched horizontal time histories generally fall within these ranges (Table 6).

Table 4. Seed Time History Properties

PEER RSN	Year	Earthquake Name	Station Name	M	ClstD (km)	V_{S30} (m/s)	Comp	PGA (g)	PGV (cm/sec)	PGD (cm)	I_a (m/sec)	Dur (sec) 5-95%
1151	1999	Kocaeli, Turkey	Balikesir	7.5	180	468	090	0.018	6.80	7.37	0.01	37.3
							180	0.018	6.07	6.83	0.01	51.6
-	-	NGA-East	103R STA-002	7.5	150	760	E	0.10	9.65	13.08	0.22	16.2
							N	0.10	10.02	9.06	0.16	19.2
-	-	NGA-East	104R STA-004	8.0	200	760	E	0.17	13.39	13.43	0.89	31.5
							N	0.14	12.19	20.70	0.49	30.9

Table 5. Spectrally Matched Time History Properties

PEER RSN	Year	Earthquake Name	Station Name	M	ClstD (km)	V_{S30} (m/s)	Comp	PGA (g)	PGV (cm/sec)	PGD (cm)	I_a (m/sec)	Dur (sec) 5-95%
1151	1999	Kocaeli, Turkey	Balikesir	7.5	180	468	090	0.15	14.0	14.3	0.46	57.8
							180	0.15	13.0	10.9	0.46	58.4
-	-	NGA-East	103R STA-002	7.5	150	760	E	0.14	25.1	37.1	0.90	30.5
							N	0.14	33.7	27.3	0.77	31.9
-	-	NGA-East	104R STA-004	8.0	200	760	E	0.15	13.2	6.5	0.70	30.9
							N	0.14	13.1	11.8	0.59	29.9

PEER RSN: Pacific Earthquake Engineering Research Center, Record Sequence Number
M: Moment Magnitude
ClstD: Closest Distance to fault rupture
Comp: time history component
I_a = Arias Intensity Dur = 5-95% Significant Duration

Table 6. Summary of Arias Intensity and Duration

	Spectrally Matched Time Histories			Empirical Model	
	I_a (m/sec)	Dur (sec) 5-95%		I_a (m/sec)	Dur (sec) 5-95%
Minimum	0.46	29.9	-1 Standard Deviation	0.12	29.4
Average	0.65	39.9	Median	0.53	45.6
Maximum	0.90	58.4	+1 Standard Deviation	2.42	70.9

6. Site Response Analysis

To estimate ground surface response spectra, site response analysis was performed using the developed time histories, discussed above. This section presents the methodology, dynamic material properties, and results of the site response analysis.

6.1 Methodology

Dynamic site response analyses were performed to estimate the ground surface response spectra under the design earthquake event at the crest and toe of the landfill. The one-dimensional site response analysis was performed using the program DEEPSOIL version 7 (Hashash et al. 2020). Both equivalent-linear and nonlinear site response analyses can be performed with the program DEEPSOIL.

The program performs a nonlinear, time-domain analysis of soil dynamic response, using a pressure dependent hyperbolic model based on the Matasovic/Konder/Zelasko (MKZ) model (Matasovic, 1993). Additions to the MKZ model include a parameter allowing the shape of the backbone curve to be adjusted and a parameter to introduce stress-dependence to the backbone curve. A stress-dependent small-strain damping is used as part of the integration scheme to capture viscous damping observed at small strains. Hysteretic behavior is modeled using a non-Masing approach (Phillips and Hashash, 2009) which allows the model to be fit to laboratory modulus reduction curves and damping curves independently. The program allows nonlinear model parameters to be developed by fitting to modulus reduction and damping curves provided by the user (i.e. the typical inputs to an equivalent-linear site response analysis).

6.2 Dynamic Material Properties

Dynamic material properties were developed based on the results on the borings laboratory testing and geophysical testing performed as part of this project. AECOM performed the multichannel analysis of surface waves (MASW) method to profile shear wave velocity at three locations, two at the toe of the landfill and one at the crest (AECOM Geophysical Services Group, 2021). The idealized shear wave velocity profiles and the MASW results for the crest and toe of the landfill are presented in Figures 20 and 21, respectively. Due to the nature of the

mine spoil materials, a stress-based shear modulus number, K_{2max} (Seed and Idriss 1970), was fitted to the time weighted average of the MASW results for the mine spoils. The POZ-O-TEC is a lime-fly ash mixture with grain sizes from a silty sand to a sandy silt. Due to the silty nature of the POZ-O-TEC, the Seed and Idriss (1970) G/G_{max} and damping curves selected to approximate the modulus degradation and damping. The mine spoils were generated from shale bedrock and are primarily clayey with a Plasticity Index (PI) of around 13. For the mine spoils, G/G_{max} and damping curves developed by Vucetic and Dobry (1991) for clay with a PI of 15 were selected to approximate the modulus degradation and damping of the mine spoils. The profile and selected dynamic material properties are shown in Table 7. The modulus reduction and damping curves are presented in Figure 22.

Table 7. Profiles and Dynamic Material Properties

Material	Unit Weight (pcf)	Shear Wave Velocity/ K_{2max}	G/Gmax & Damping Curve	Crest Profile Thickness (ft)	Toe Profile Thickness (ft)
POZ-O-TEC	90	1275 f/sec	Seed and Idriss, Upper Bound (1970)	166	NA
Mine Spoils	110	K_{2max} = 45 or 60	Vucetic and Dobry, PI =15 (1991)	29	38.5
Bedrock Half space	160	2805 ft/sec	-	-	-

6.3 Analysis Results

The calculated response spectra at the crest, the base of the landfill below the crest, and toe for the design earthquake are presented in Figures 23 through 28. The maximum spectra for both the crest, the base of the landfill below the crest, and toe profiles along with the bedrock spectra from the DSHA is presented in Figure 29. The PGA of the bedrock, the crest, the base of the landfill below the crest, and toe are 0.14 g, 0.27 g, 0.31 g, and 0.34 g, respectively. In general, both profiles amplified the motion with the toe profile amplifying the PGA slightly more than the crest. The crest profile lengthened the spectra more than the toe profile. Output from the DEEPSOIL program is presented in Appendix A.

7. Limitations

This Report was prepared for accordance with the scope of work between AECOM and Big Rivers Electric Corporation. The information, data, recommendations, and conclusions contained in this Report represent AECOM's professional judgement considering these Limitations and industry standards for the preparation of similar reports.

This report was prepared for the specific purposes described in the Report and the scope of work. The referenced subsurface geotechnical conditions are based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time.

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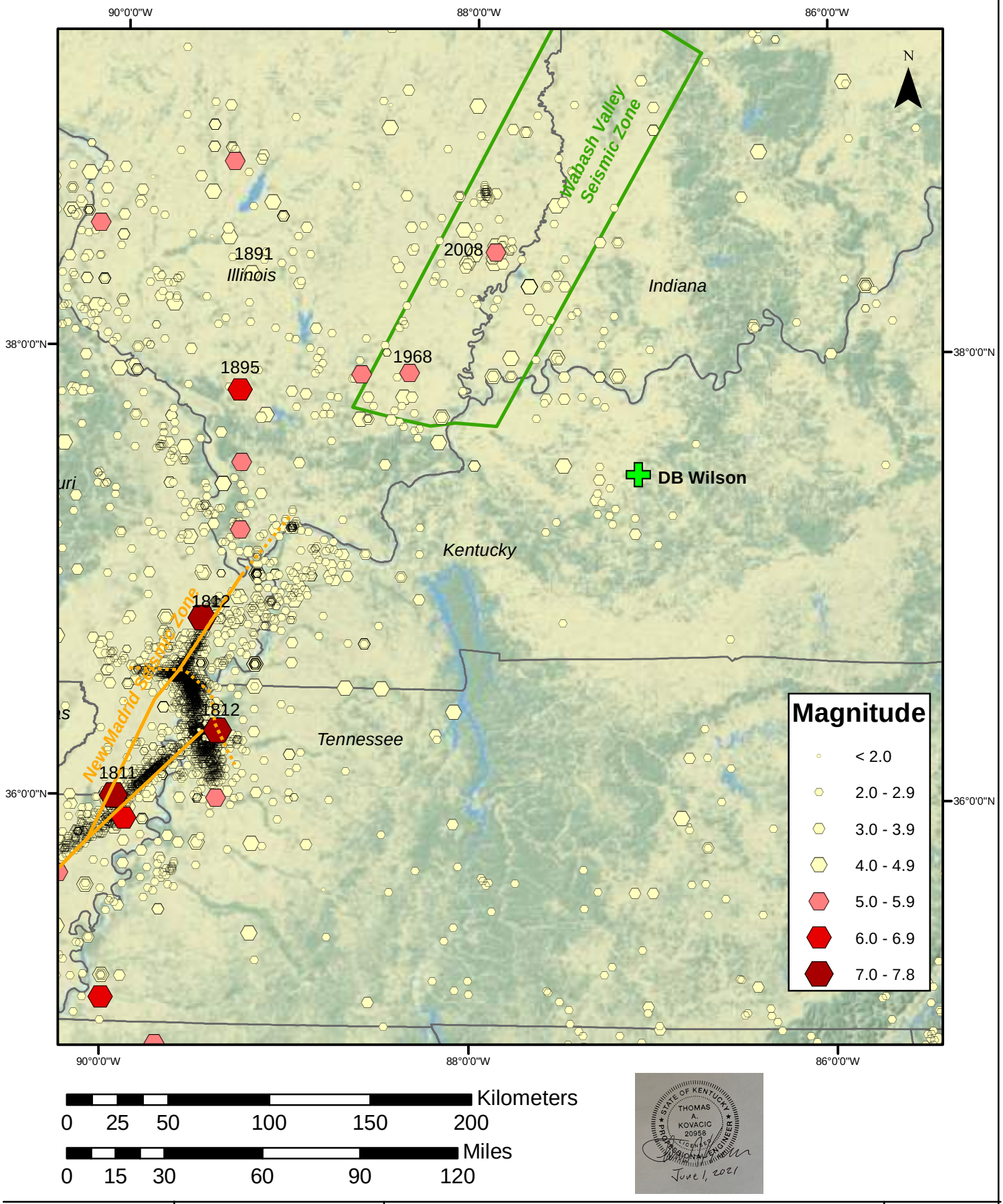
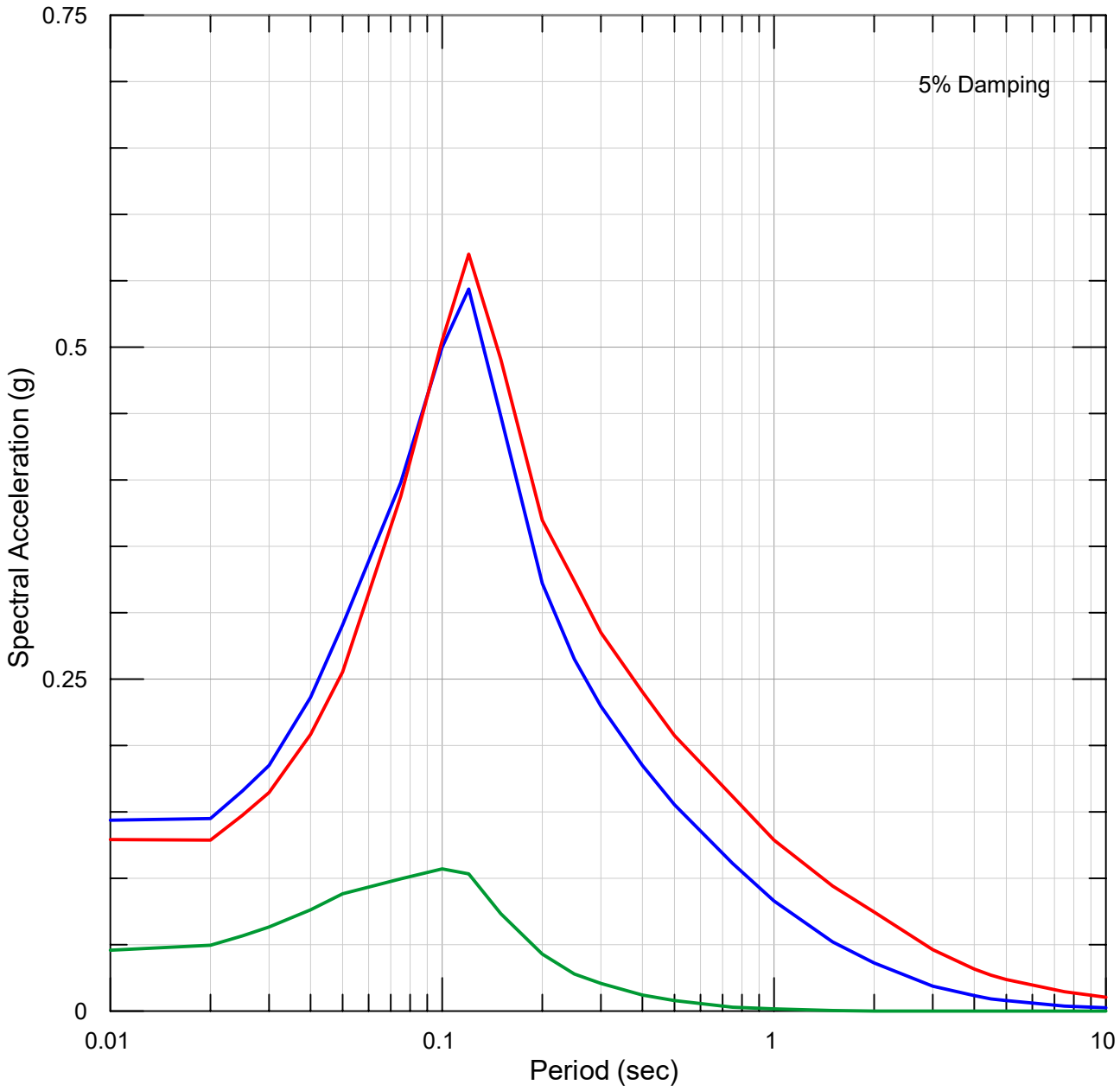
Figures



AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	SEISMIC SOURCE ZONES AND REGIONAL SEISMICITY	Figure 1

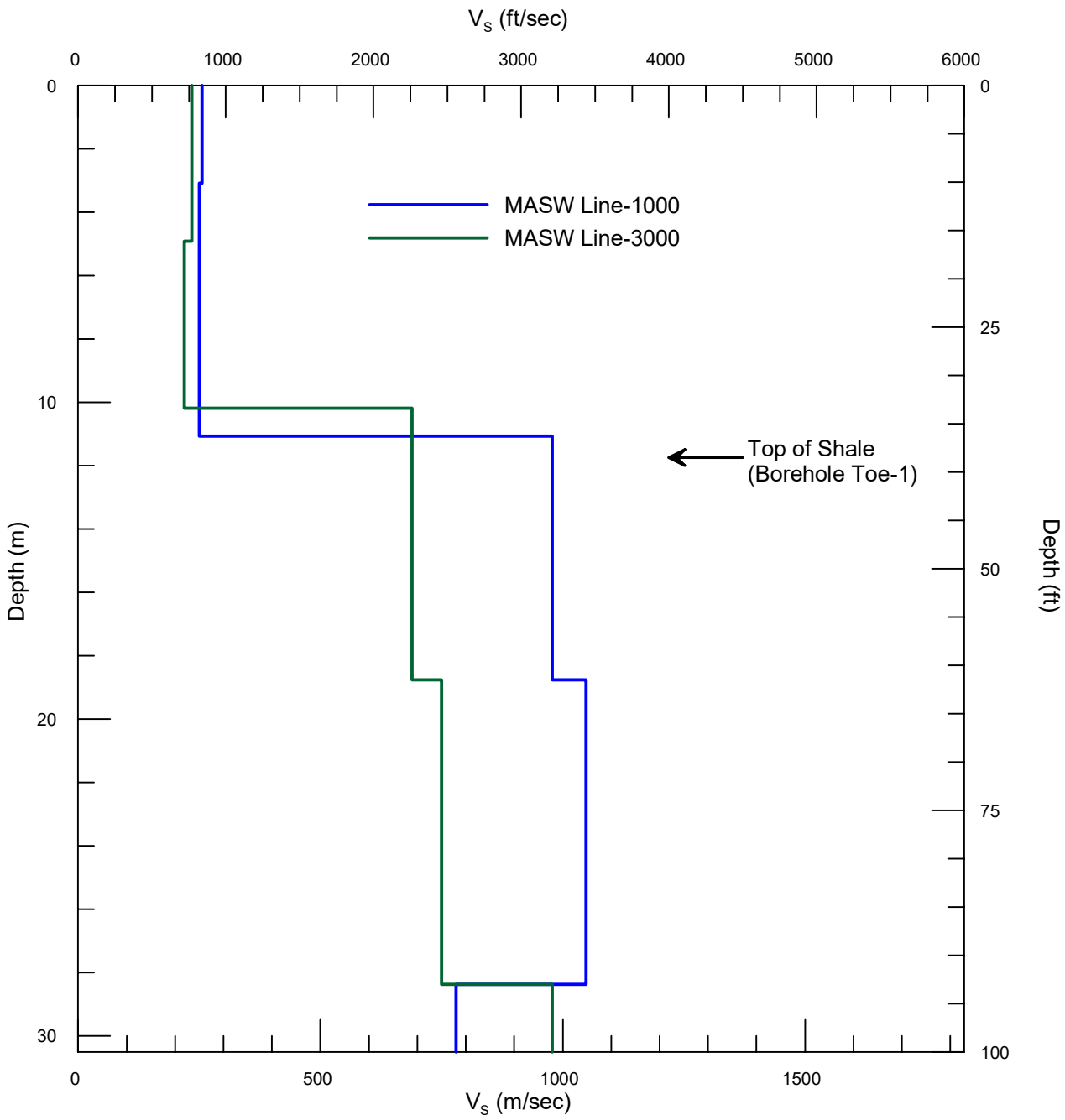


84th Percentile

- Wabash Valley Seismic Zone **M** 6.8, 73 km
- New Madrid Seismic Zone **M** 7.7, 175 km
- Background earthquake **M** 4.1, 20 km

Site Condition
V_{S30} = 855 m/sec

AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	84TH PERCENTILE HORIZONTAL DETERMINISTIC SEISMIC HAZARD SPECTRA	Figure 2



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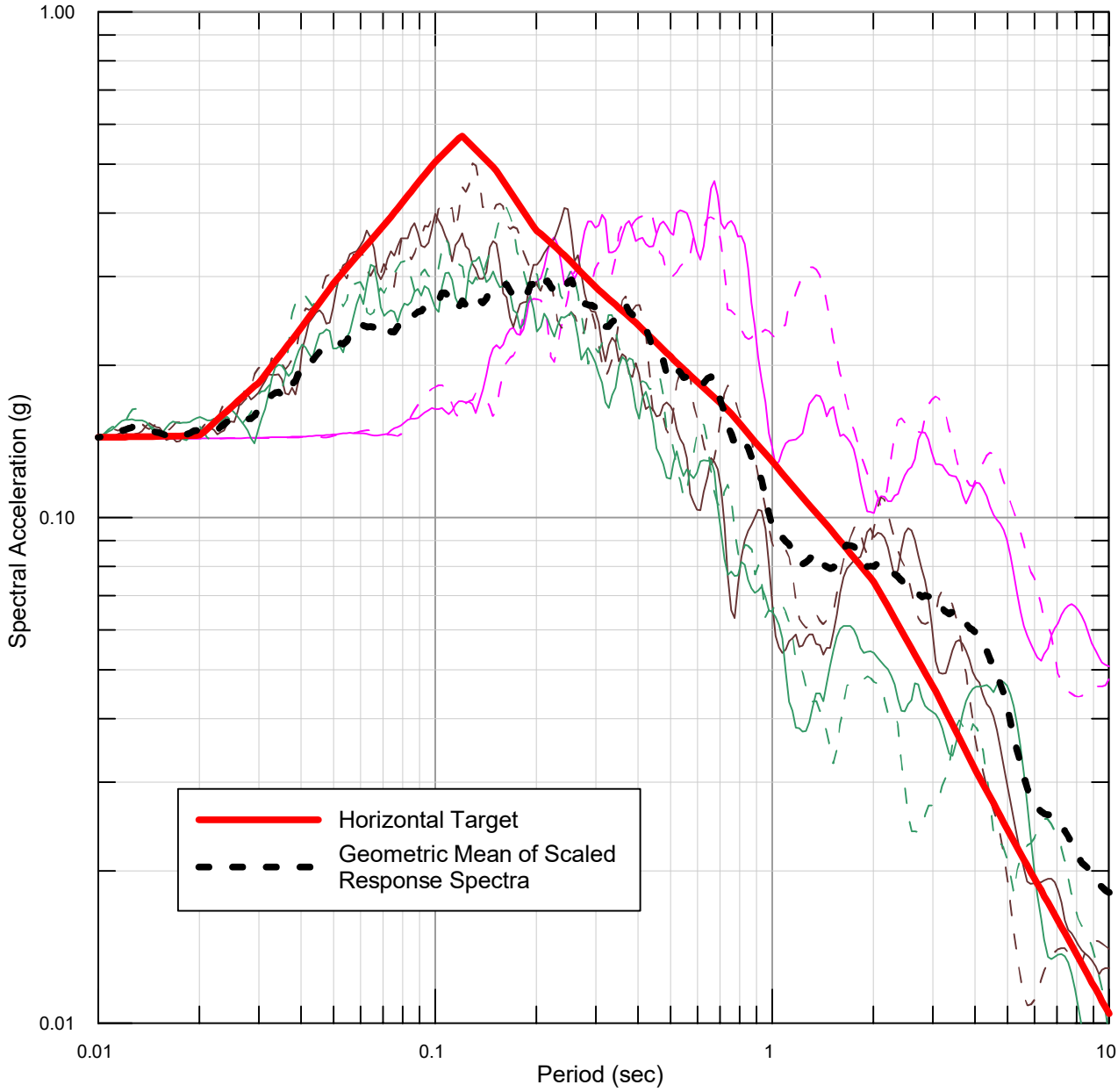
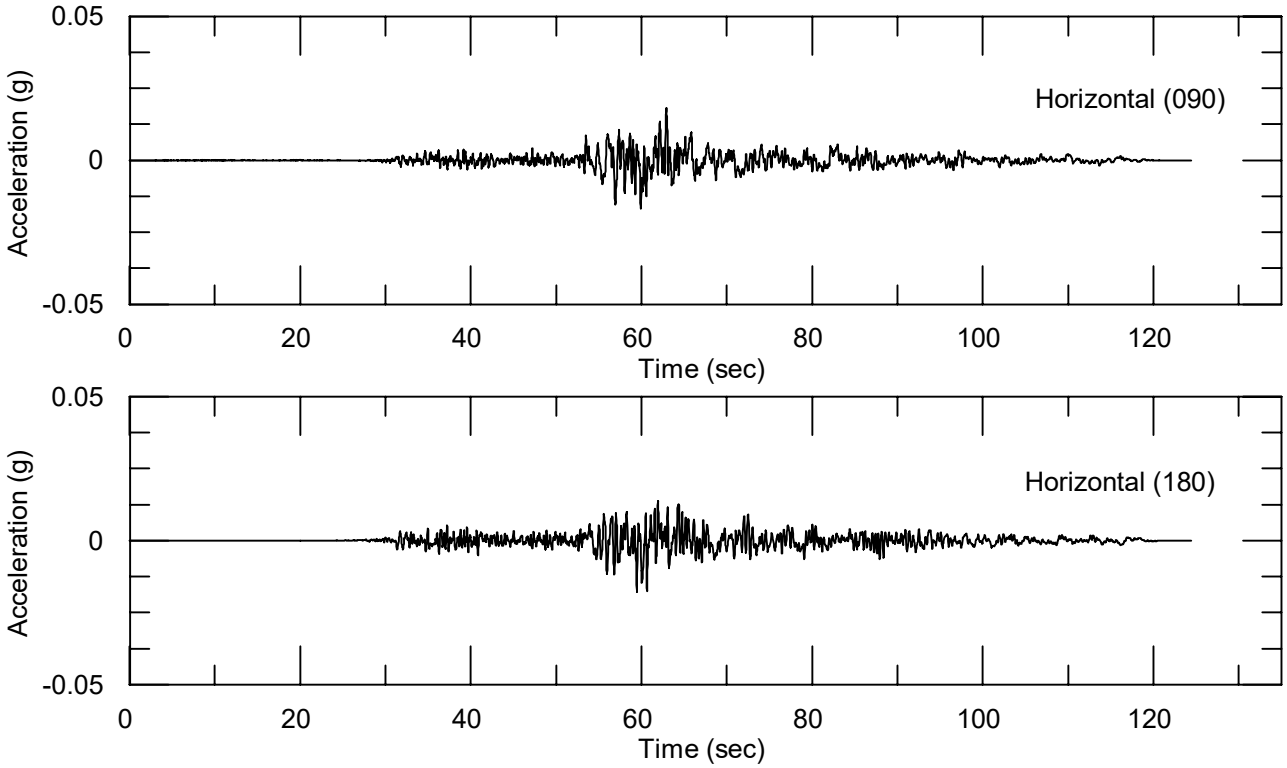


AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	COMPARISON OF HORIZONTAL TARGET RESPONSE SPECTRUM AND SCALED RESPONSE SPECTRA OF SELECTED SEED TIME HISTORIES	Figure 4



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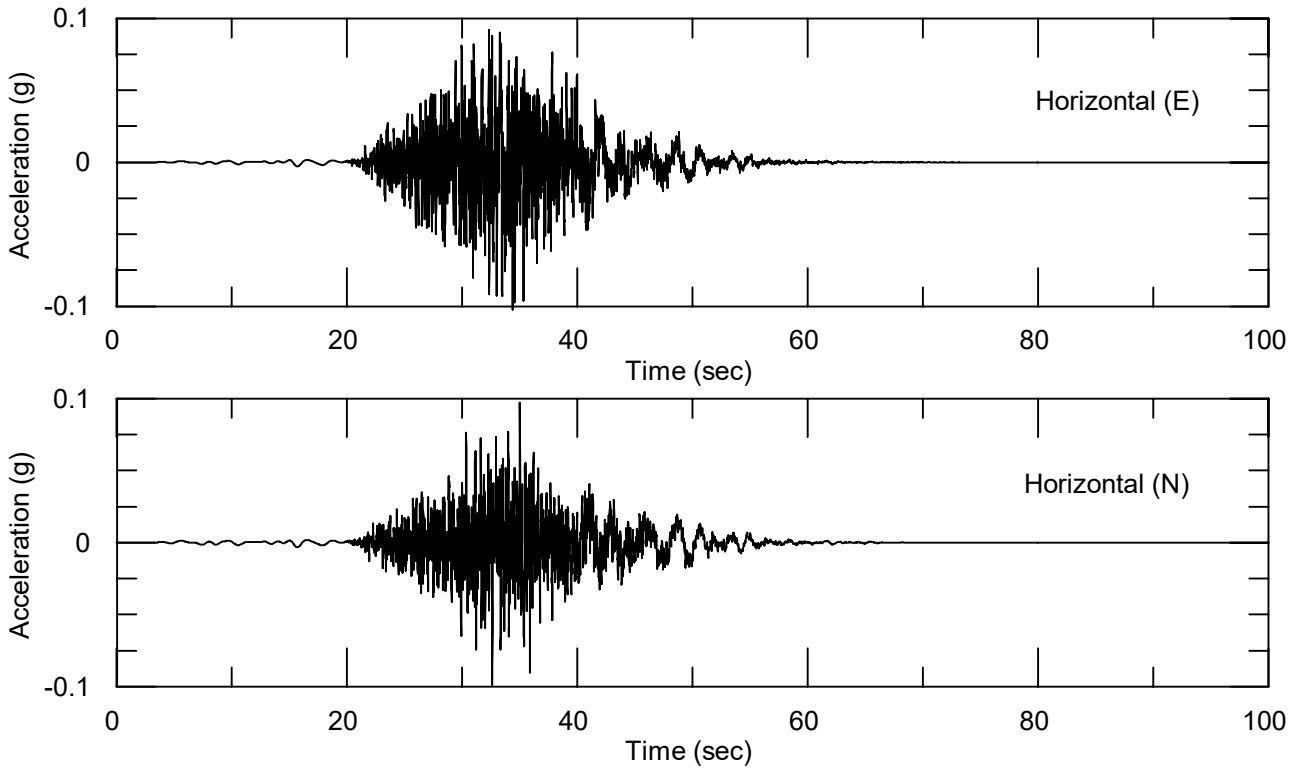

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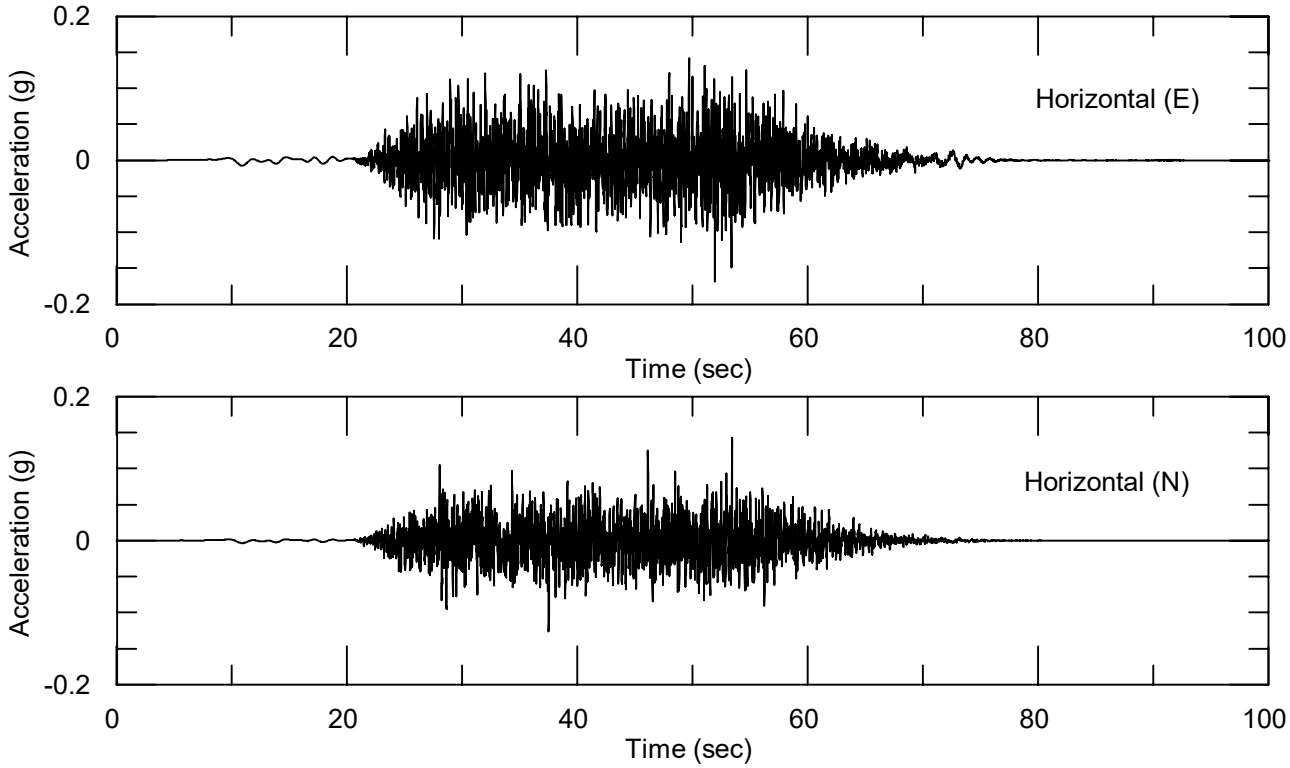

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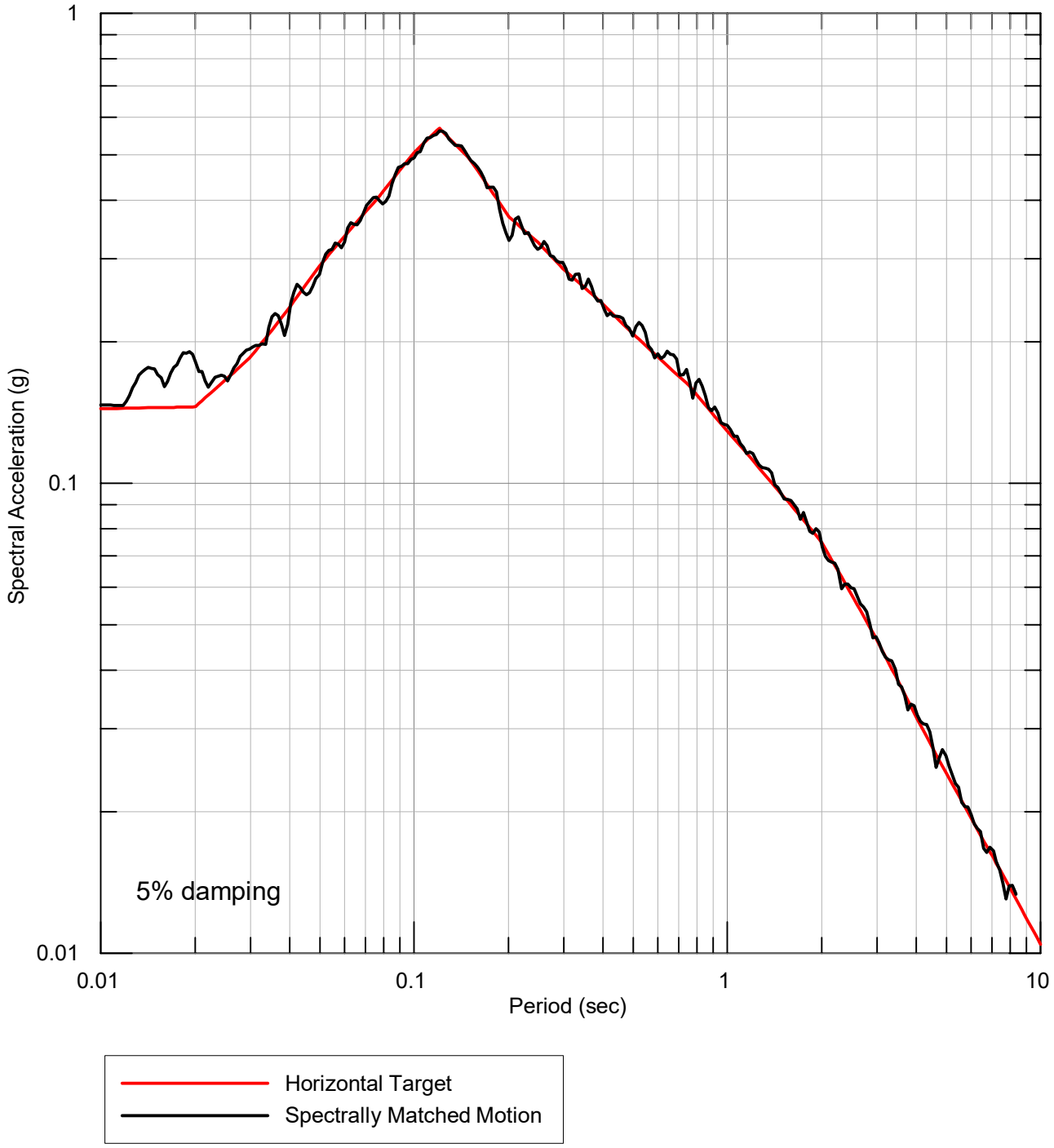
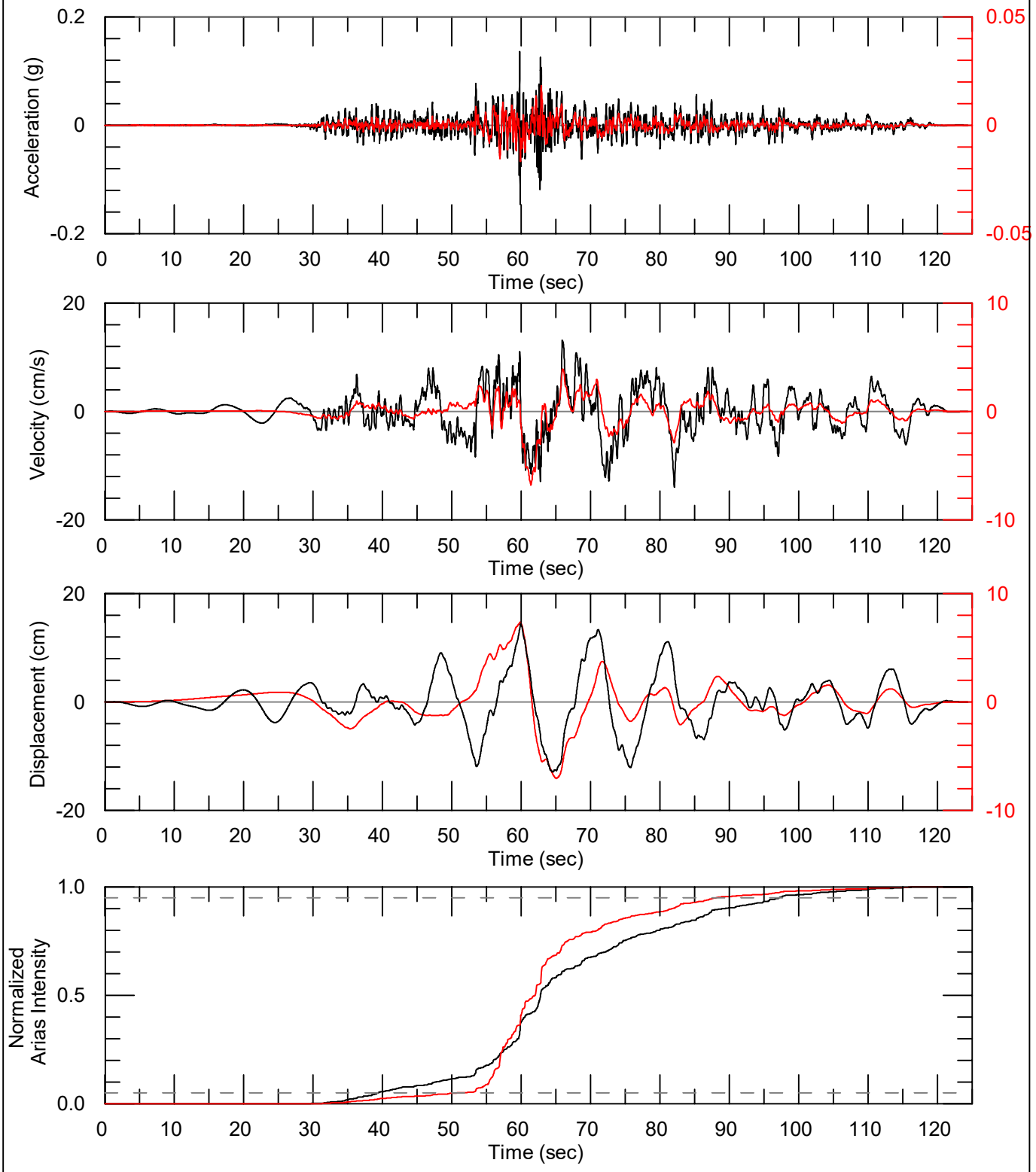


SEED: PEER RSN1151

AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	RESPONSE SPECTRUM FOR TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET 1999 KOCAELI - BALIKESIR (090) SEED	Figure 8



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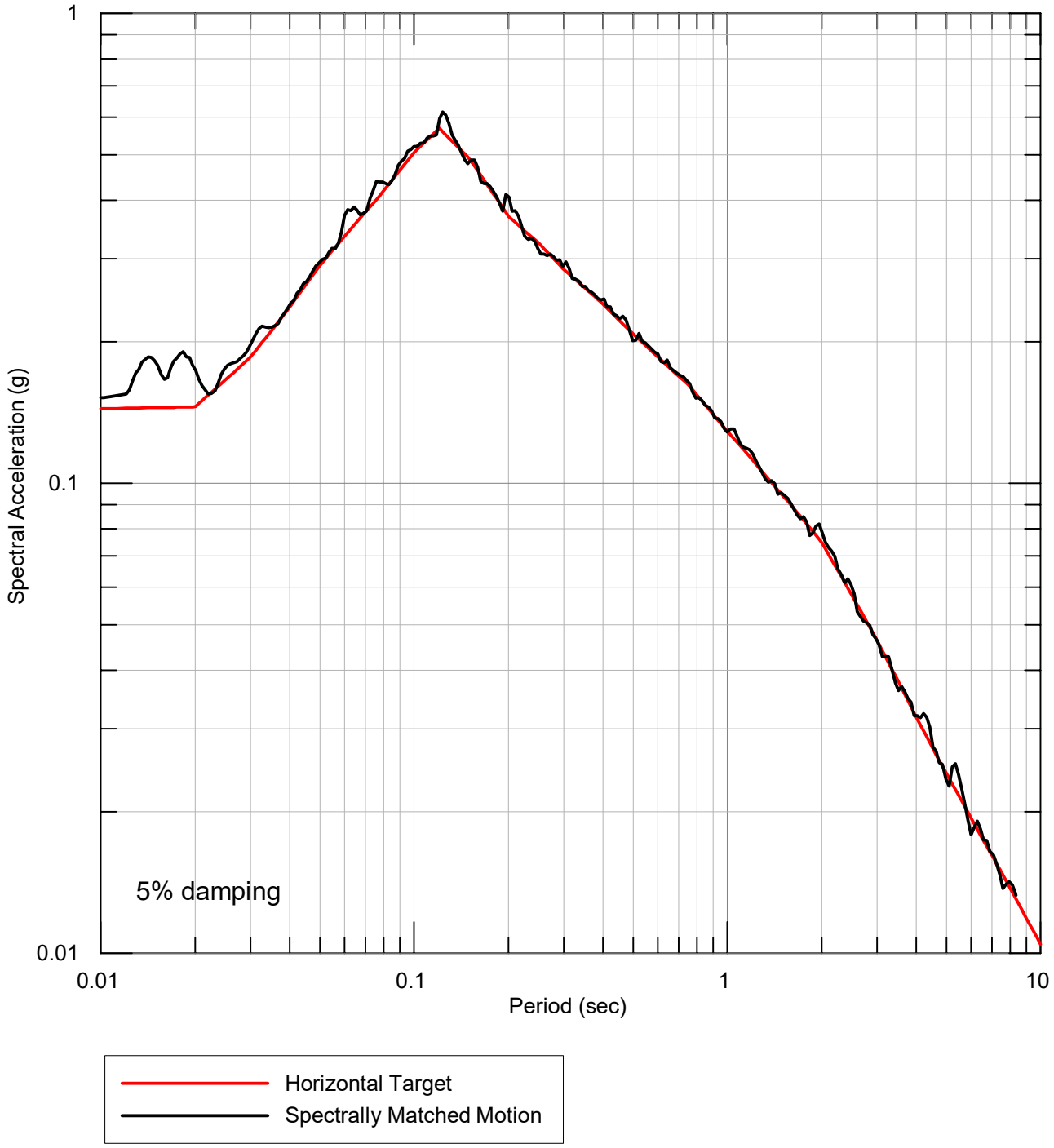
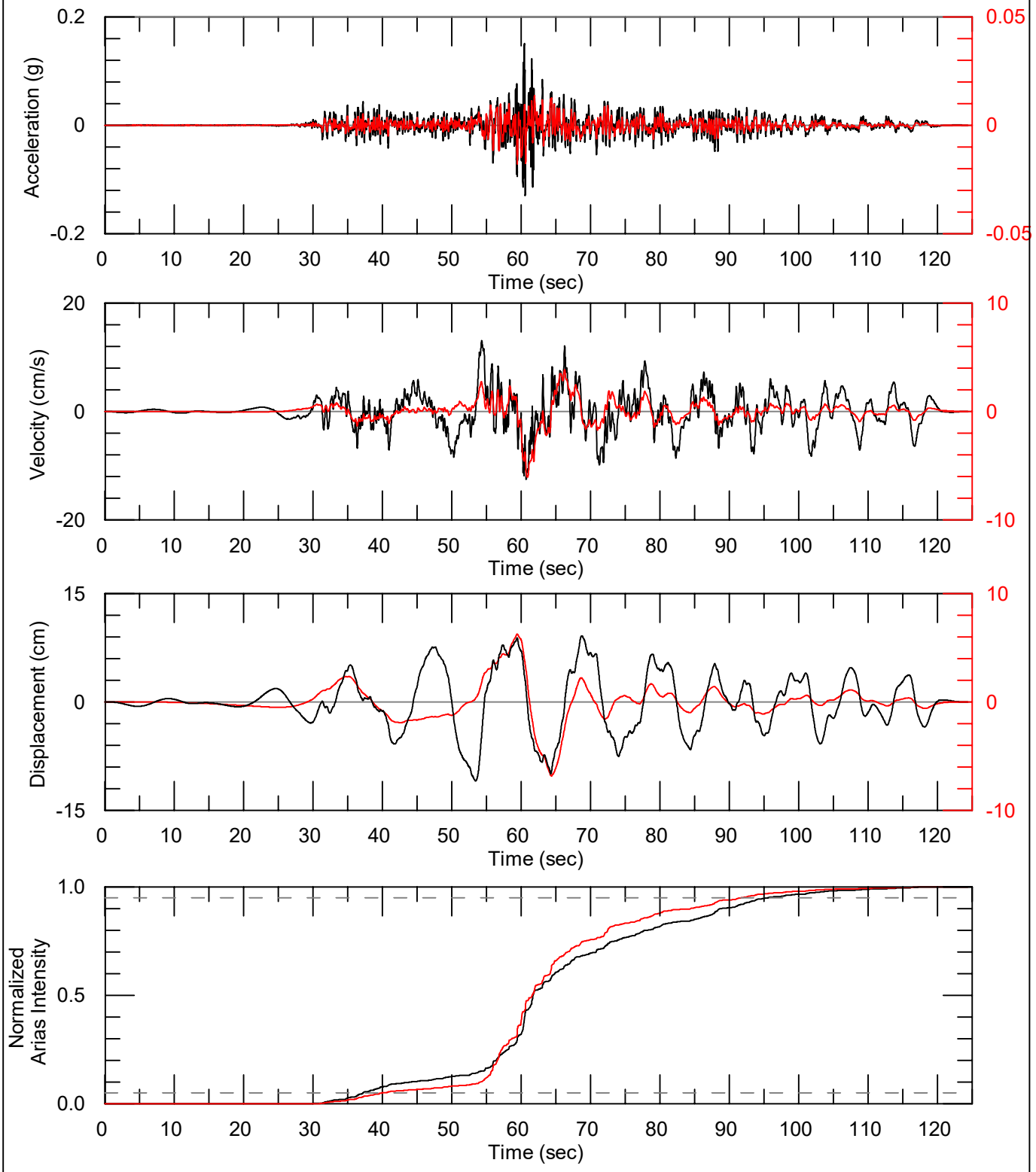


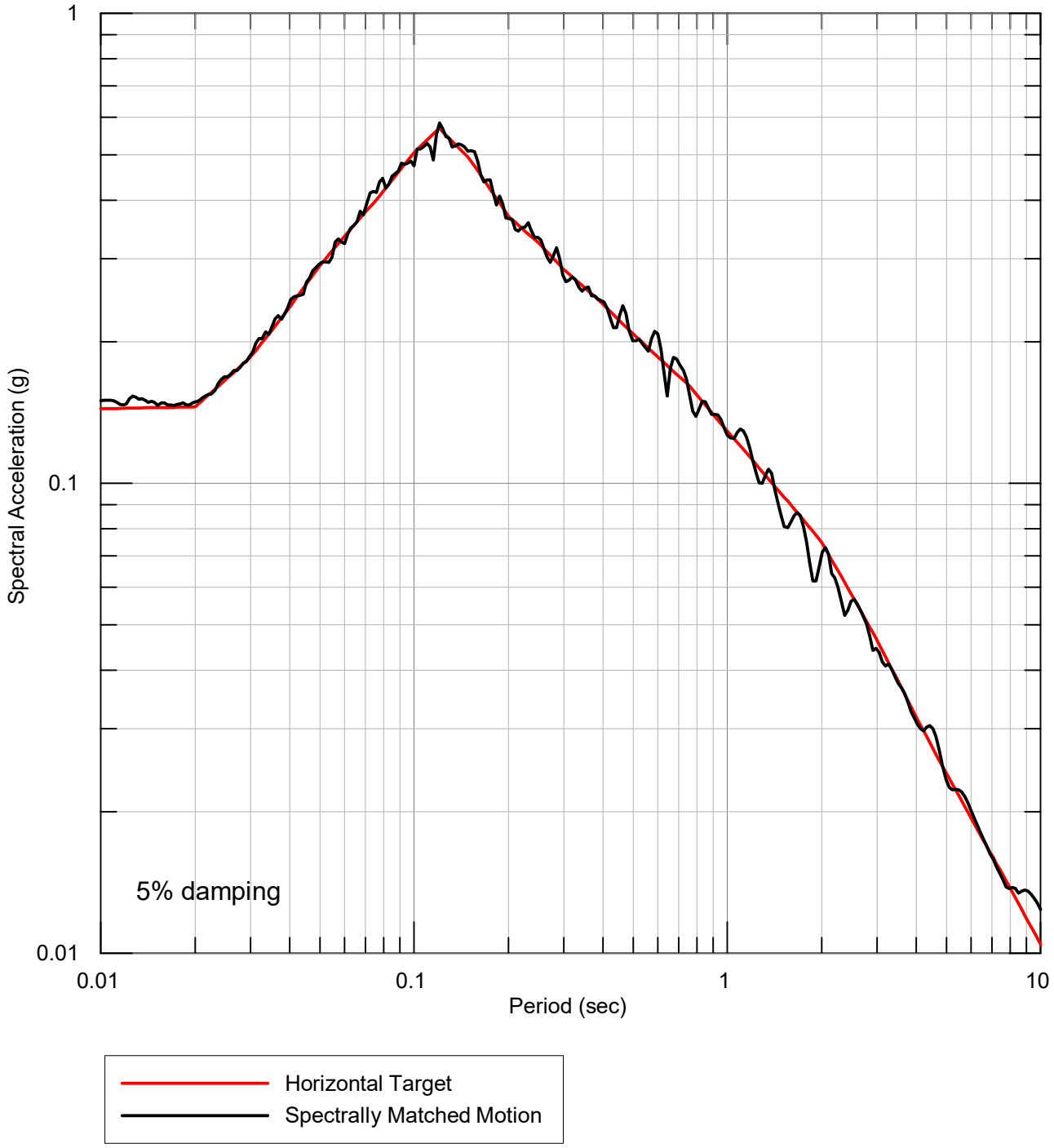
SEED: PEER RSN1151

AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	RESPONSE SPECTRUM FOR TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET, 1999 KOCAELI - BALIKESIR (180) SEED	Figure 10

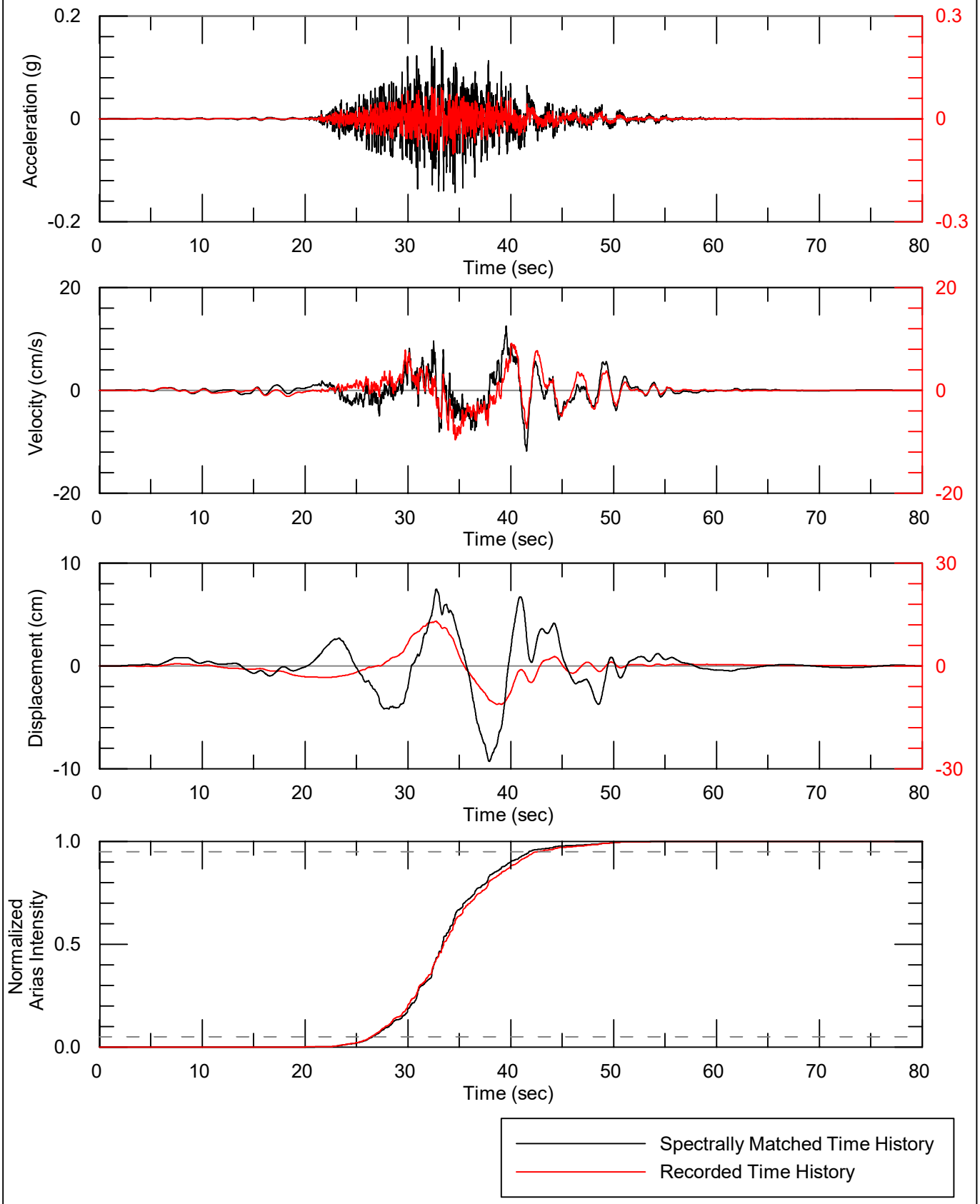


SEED: PEER RSN1151

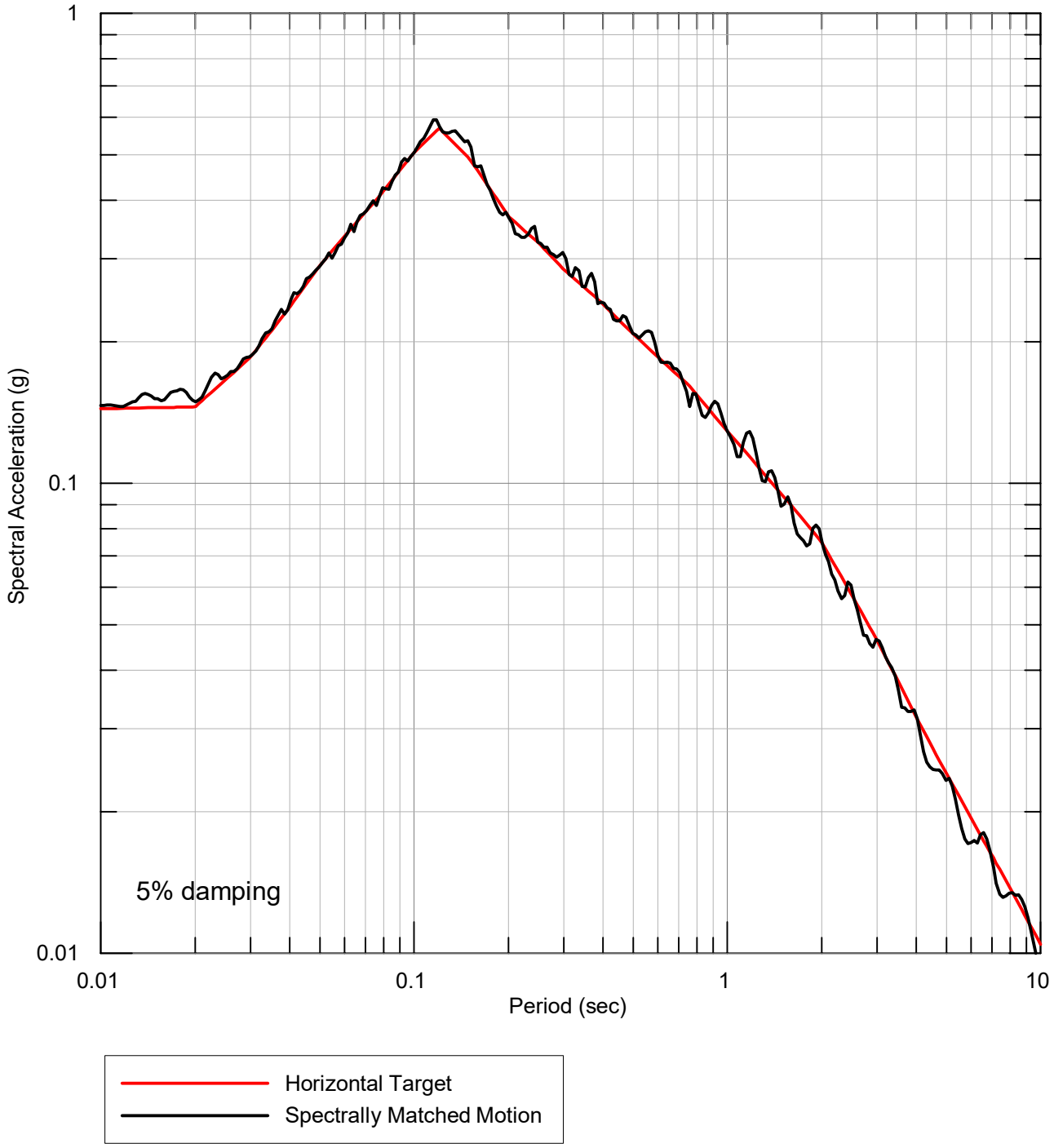
AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET, 1999 KOCAELI - BALIKESIR (180) SEED	Figure 11



AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	RESPONSE SPECTRUM FOR TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET NGA-EAST - 103R STA-002 (E) SEED	Figure 12



AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET, NGA-EAST - 103R STA-002 (E) SEED	Figure 13



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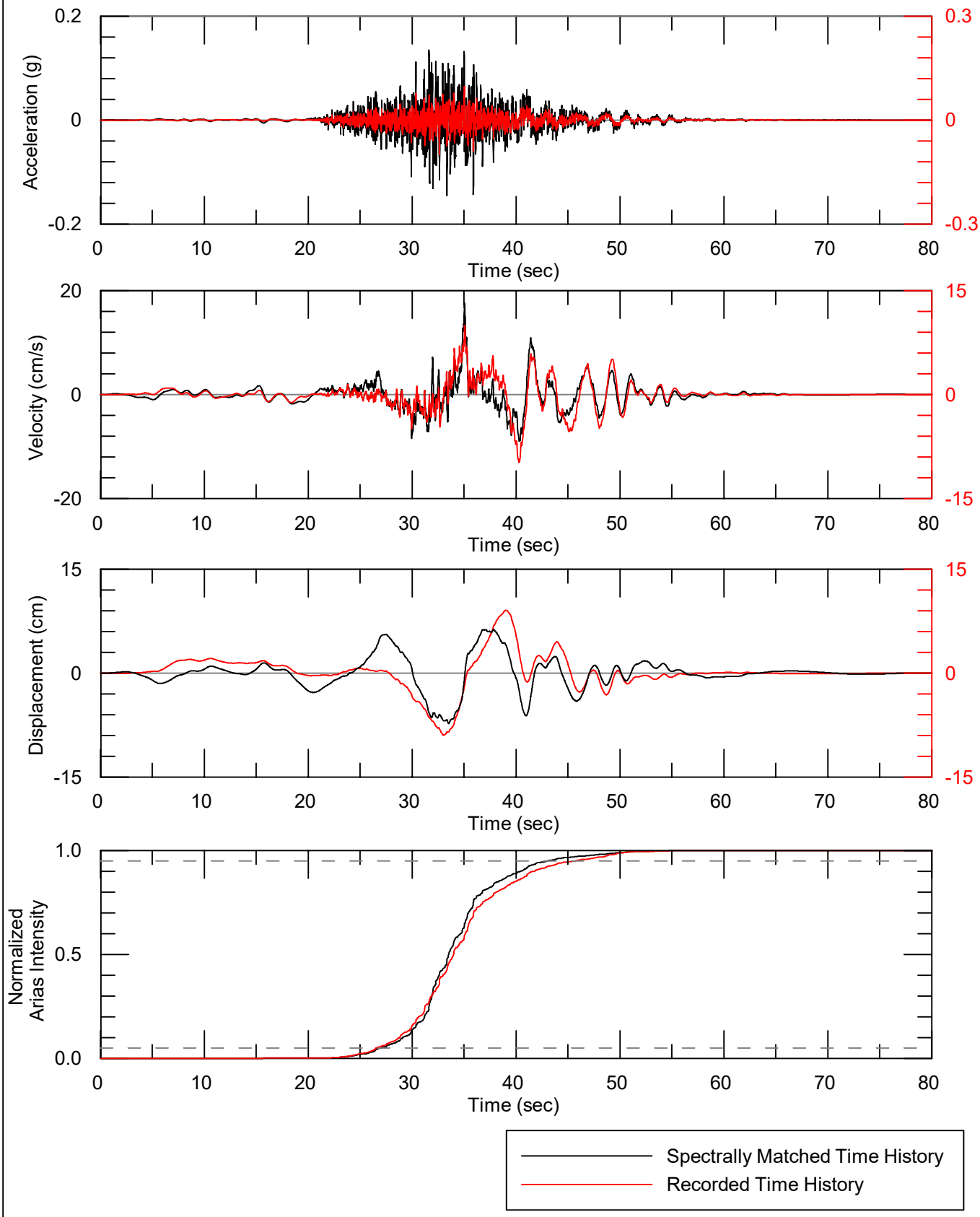
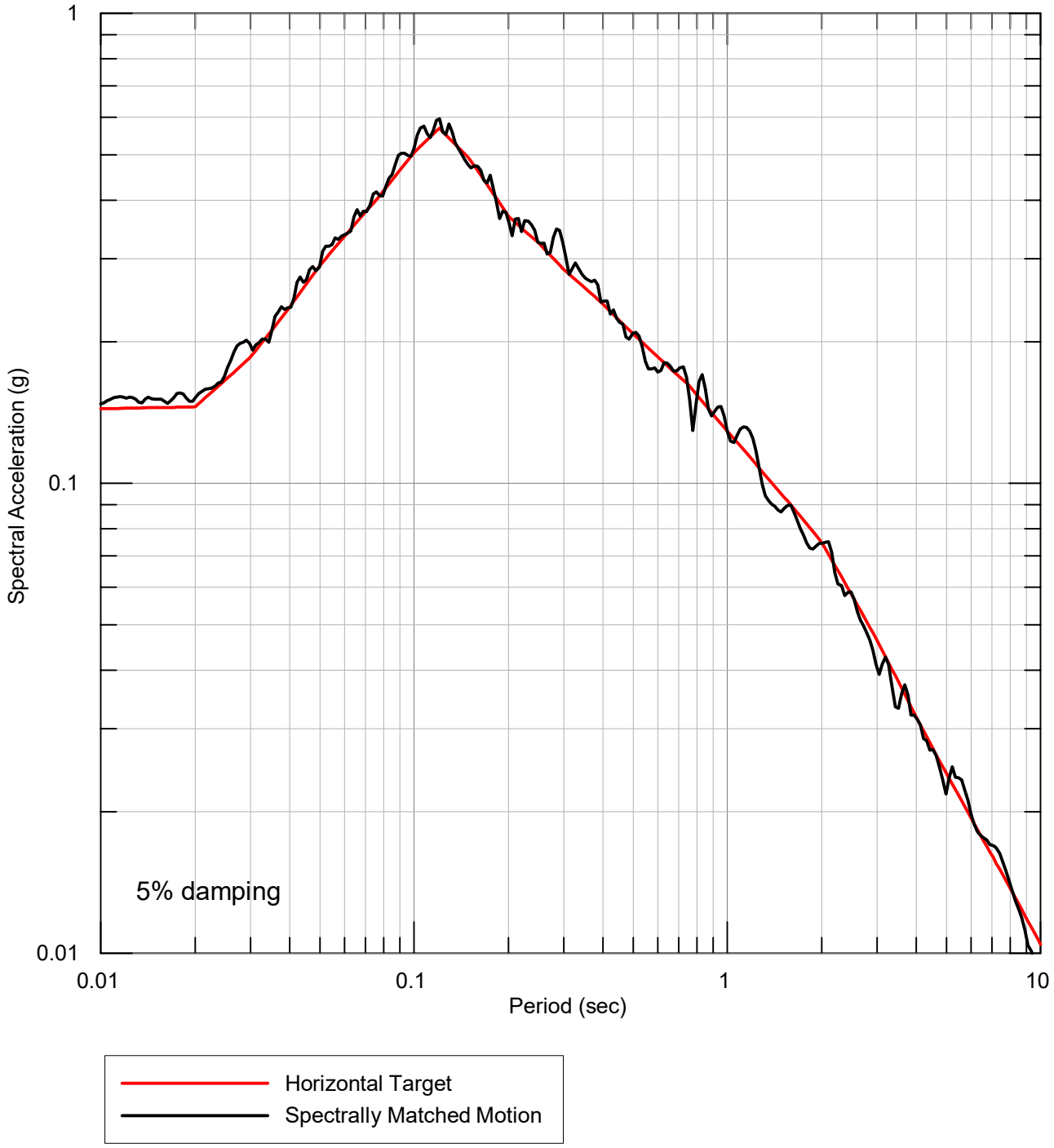


AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET, NGA-EAST - 103R STA-002 (N) SEED	Figure 15



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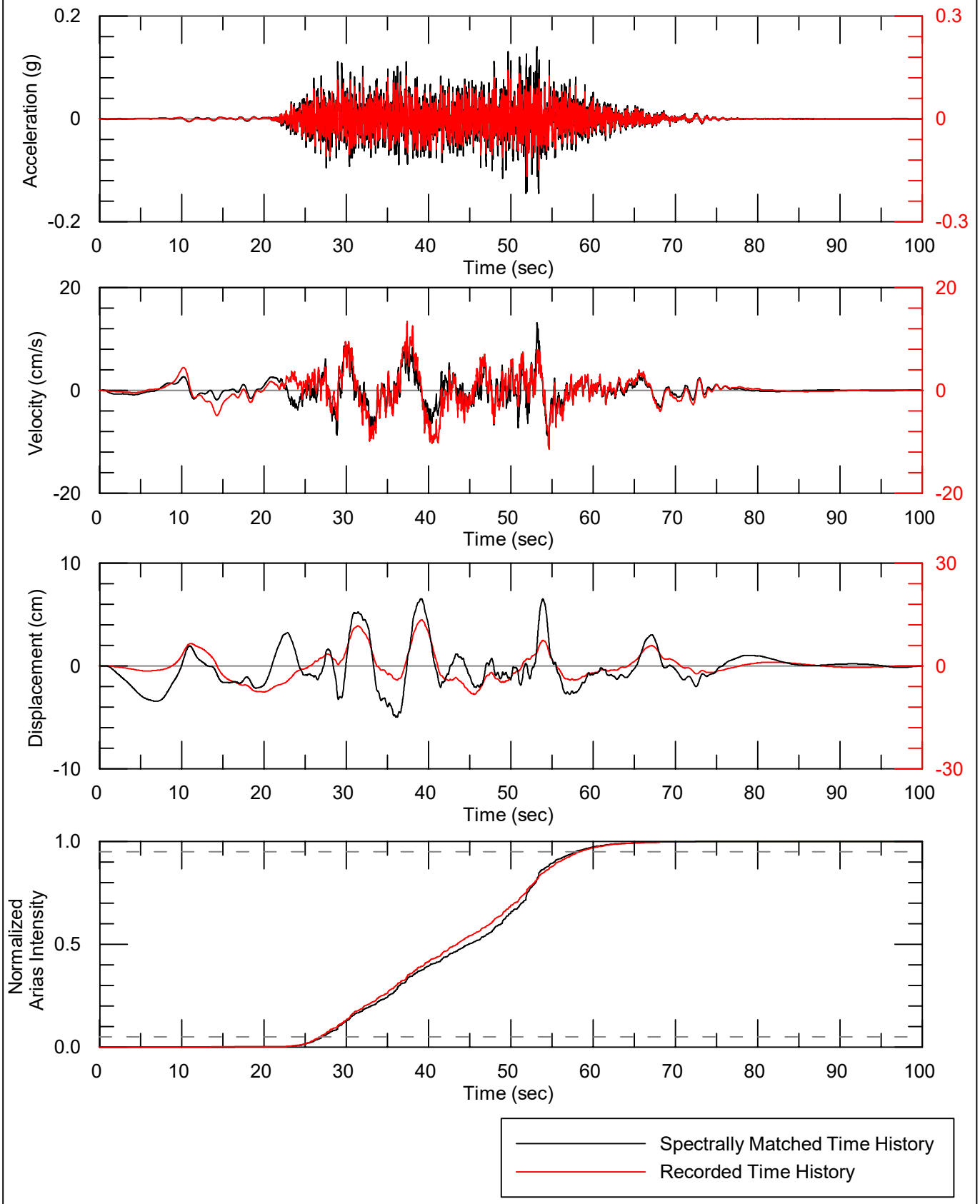
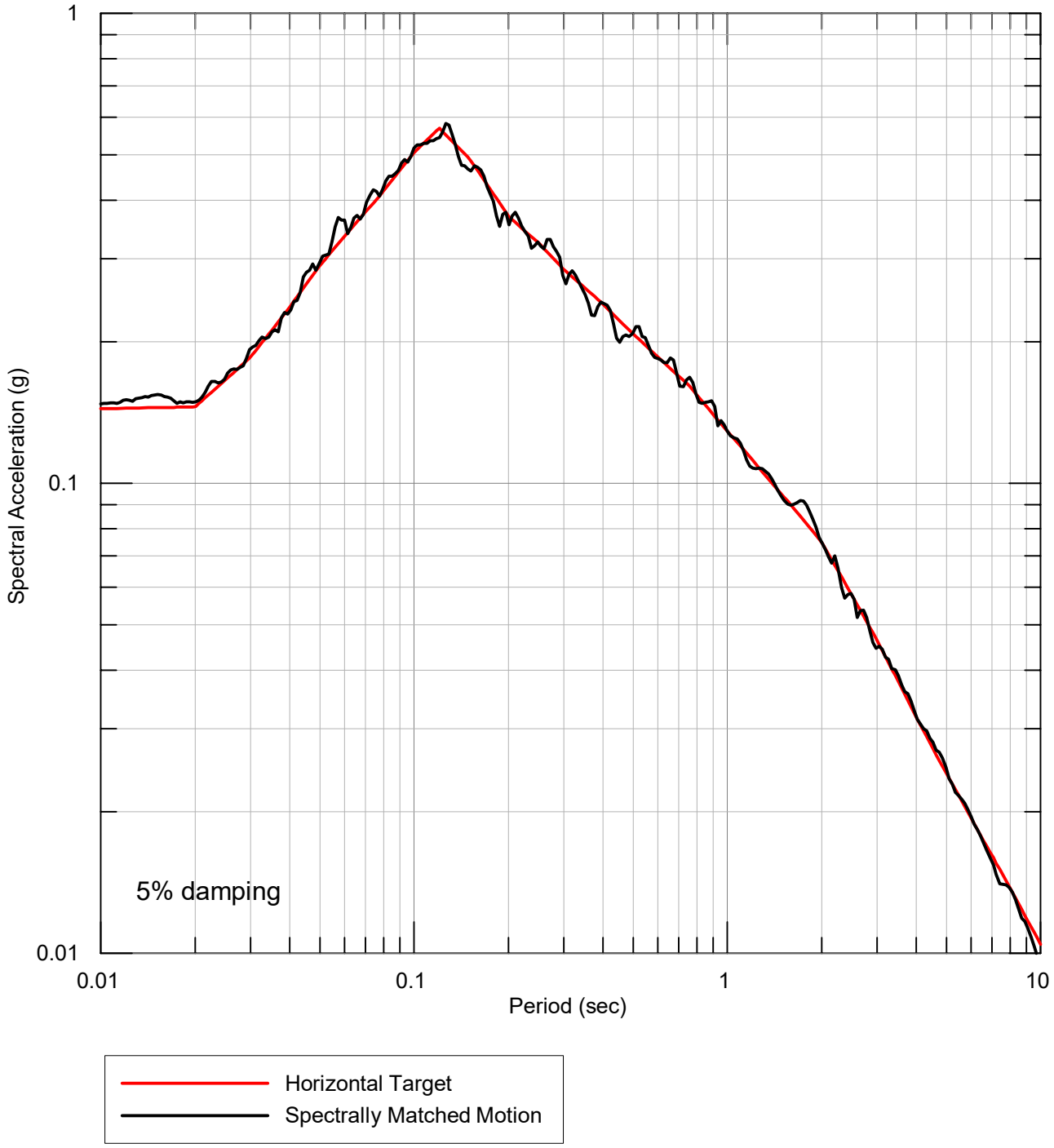
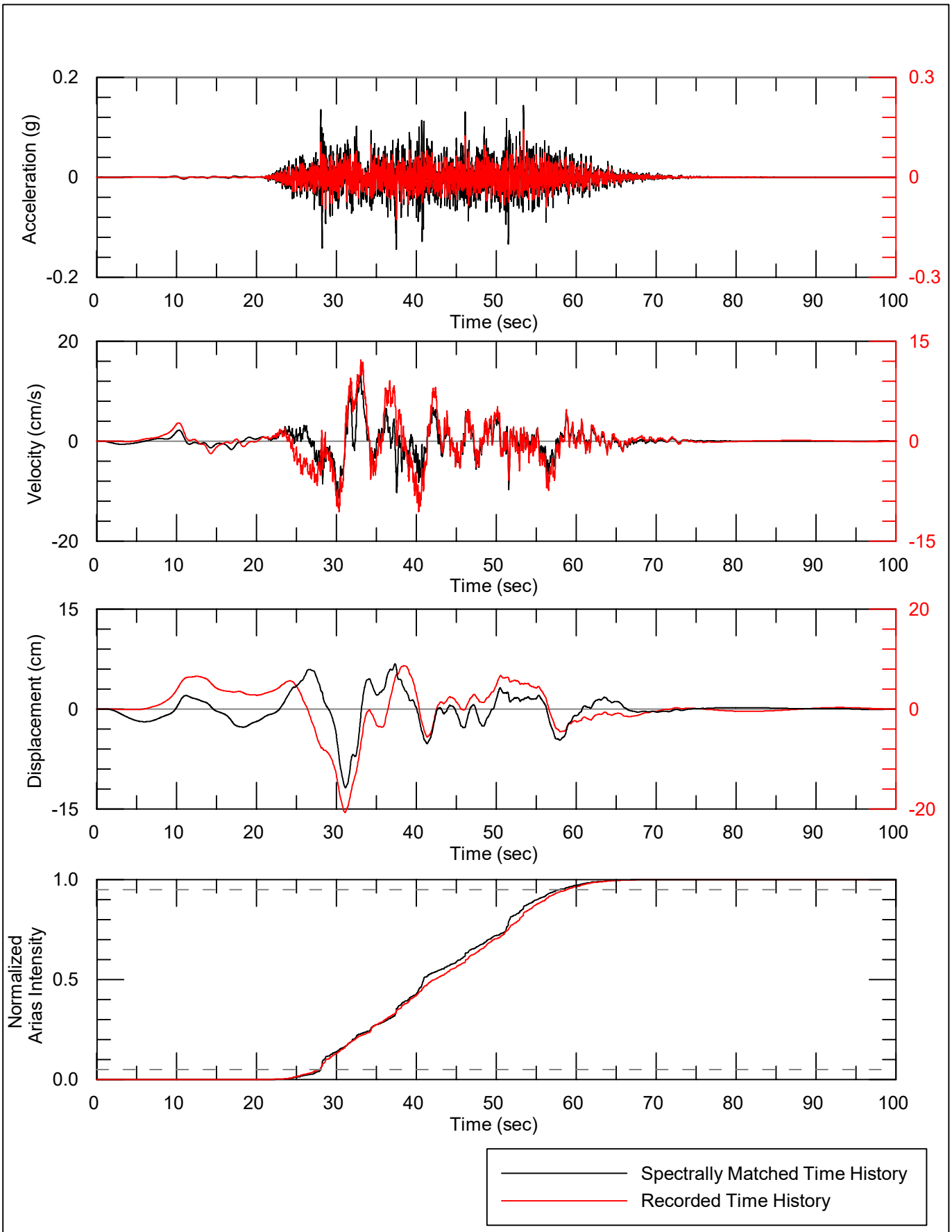


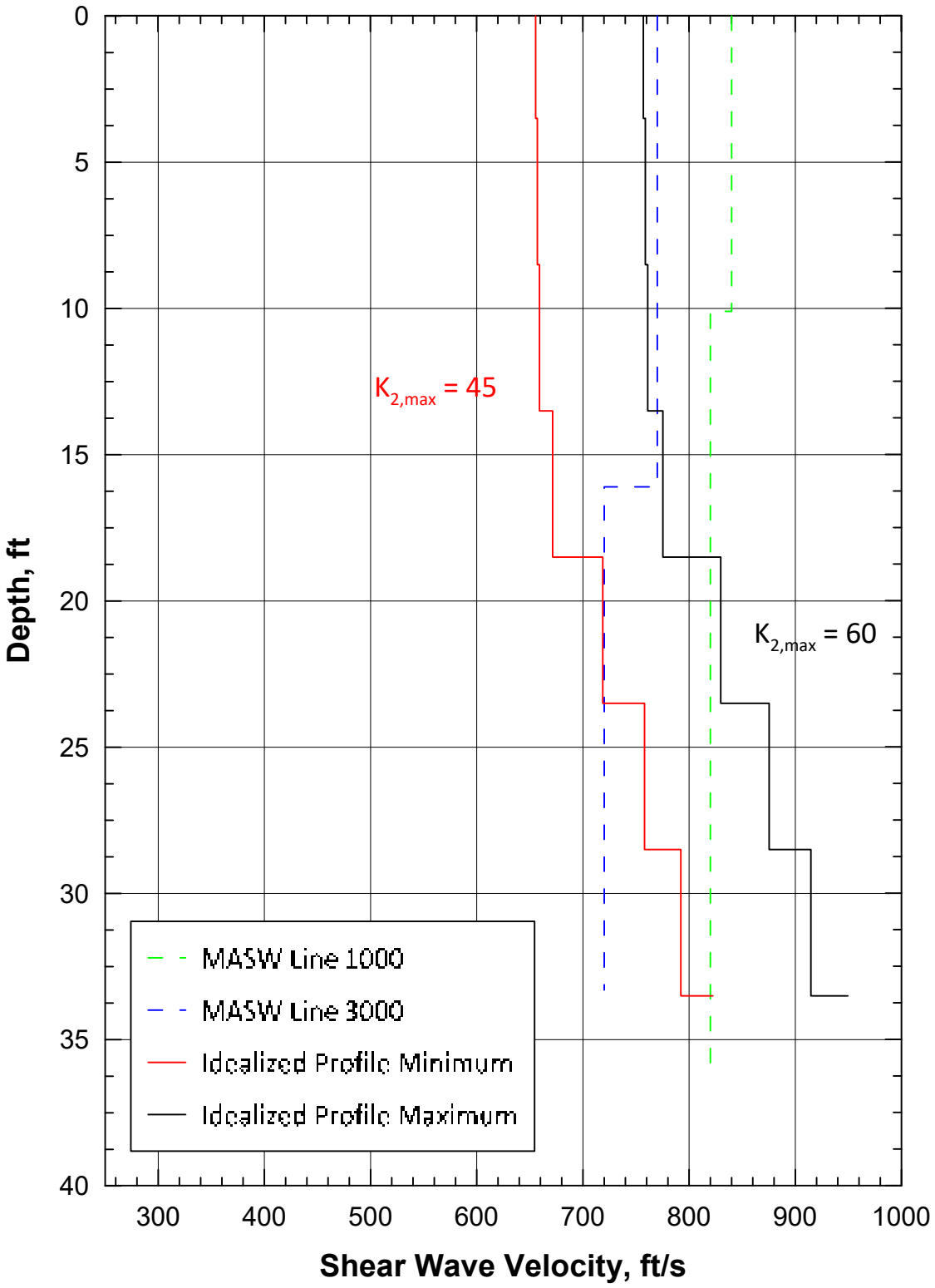
AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET, NGA-EAST - 104R STA-004 (E) SEED	Figure 17



AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	RESPONSE SPECTRUM FOR TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET NGA-EAST - 104R STA-004 (N) SEED	Figure 18

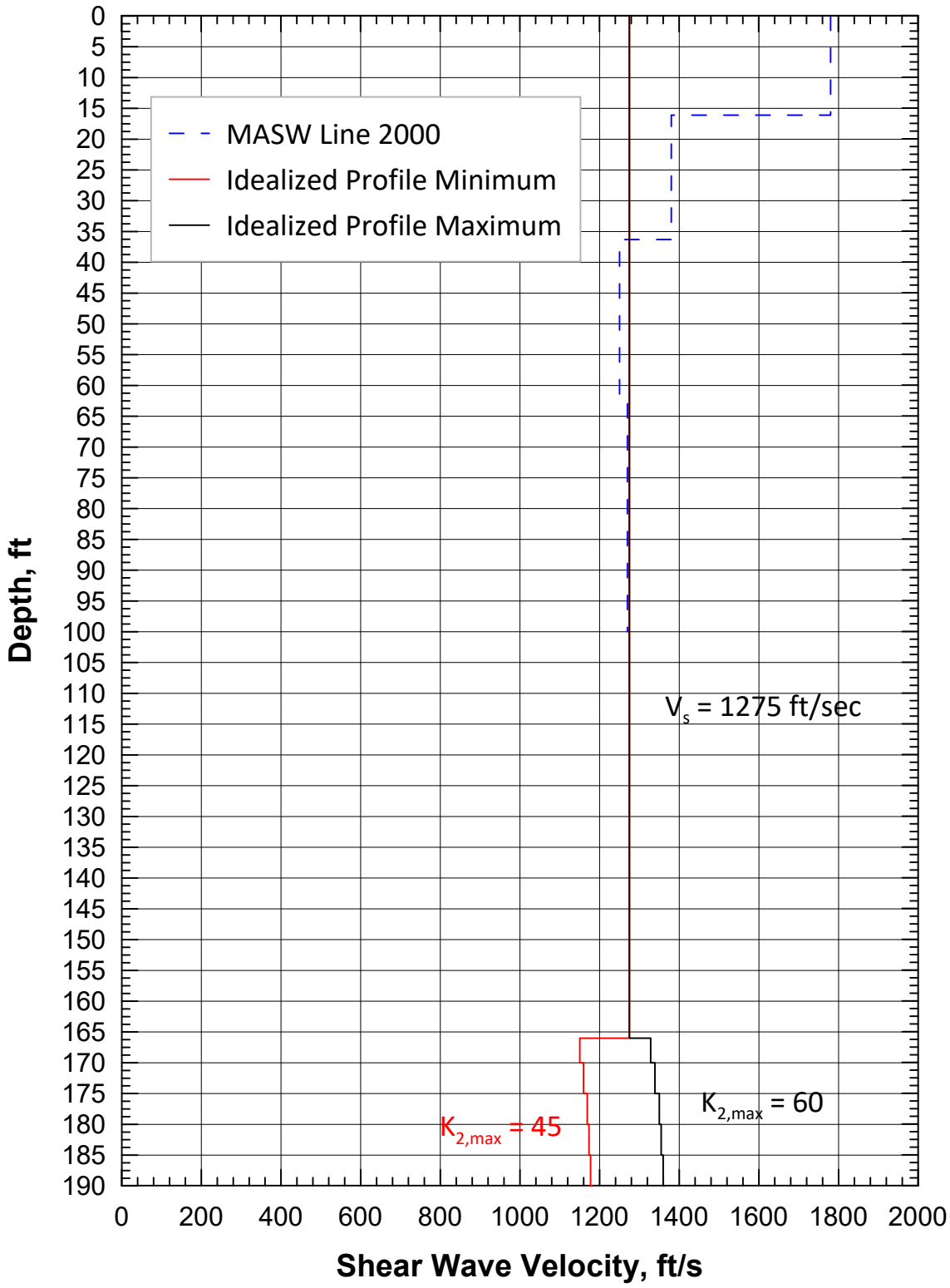


AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	TIME HISTORY SPECTRALLY MATCHED TO HORIZONTAL 84TH PERCENTILE TARGET, NGA-EAST - 104R STA-004 (N) SEED	Figure 19



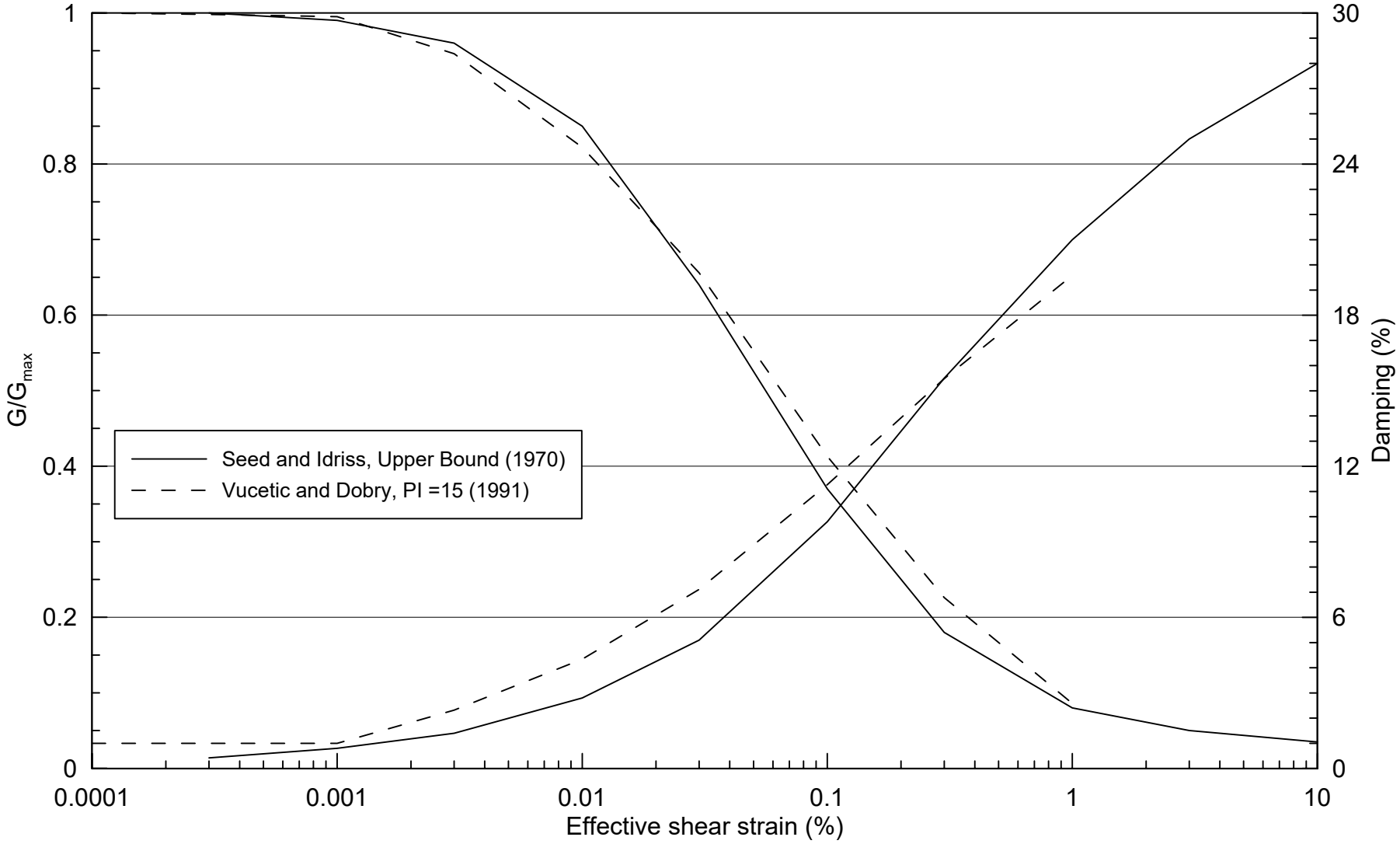
AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	**MASW and Idealized Profile Shear Wave Velocity at the Toe**	Figure 20

C:\Users\mike.onnen\AECOM Directory\DB Willson - General\Deepsoil\Toe Profile.grf



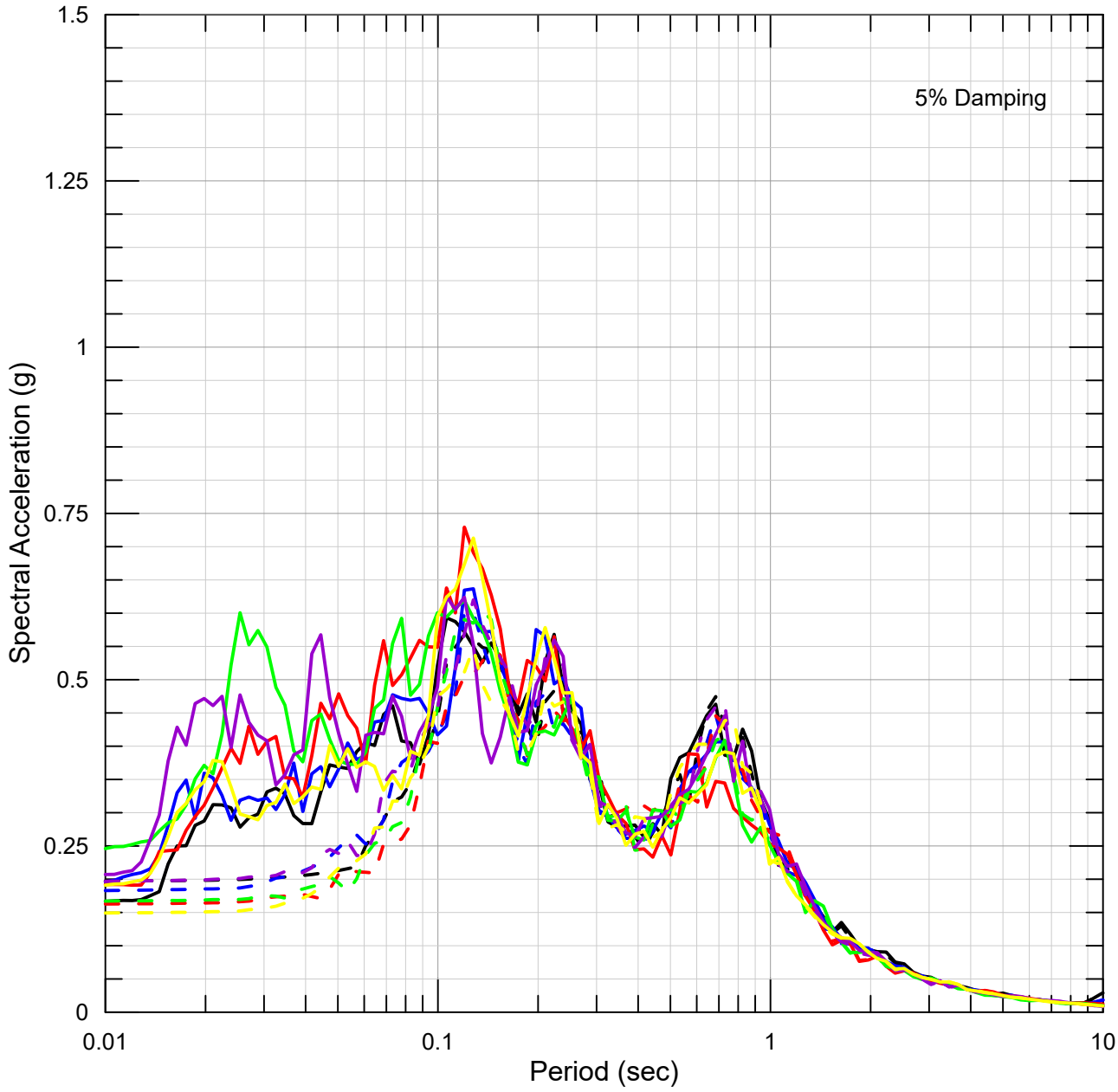
AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	**MASW Data and Idealized Profile Shear Wave Velocity at the Crest**	Figure 21

C:\Users\mike.onnen\AECOM Directory\DB Willson - General\Deepsoil\Crest Profile.grf



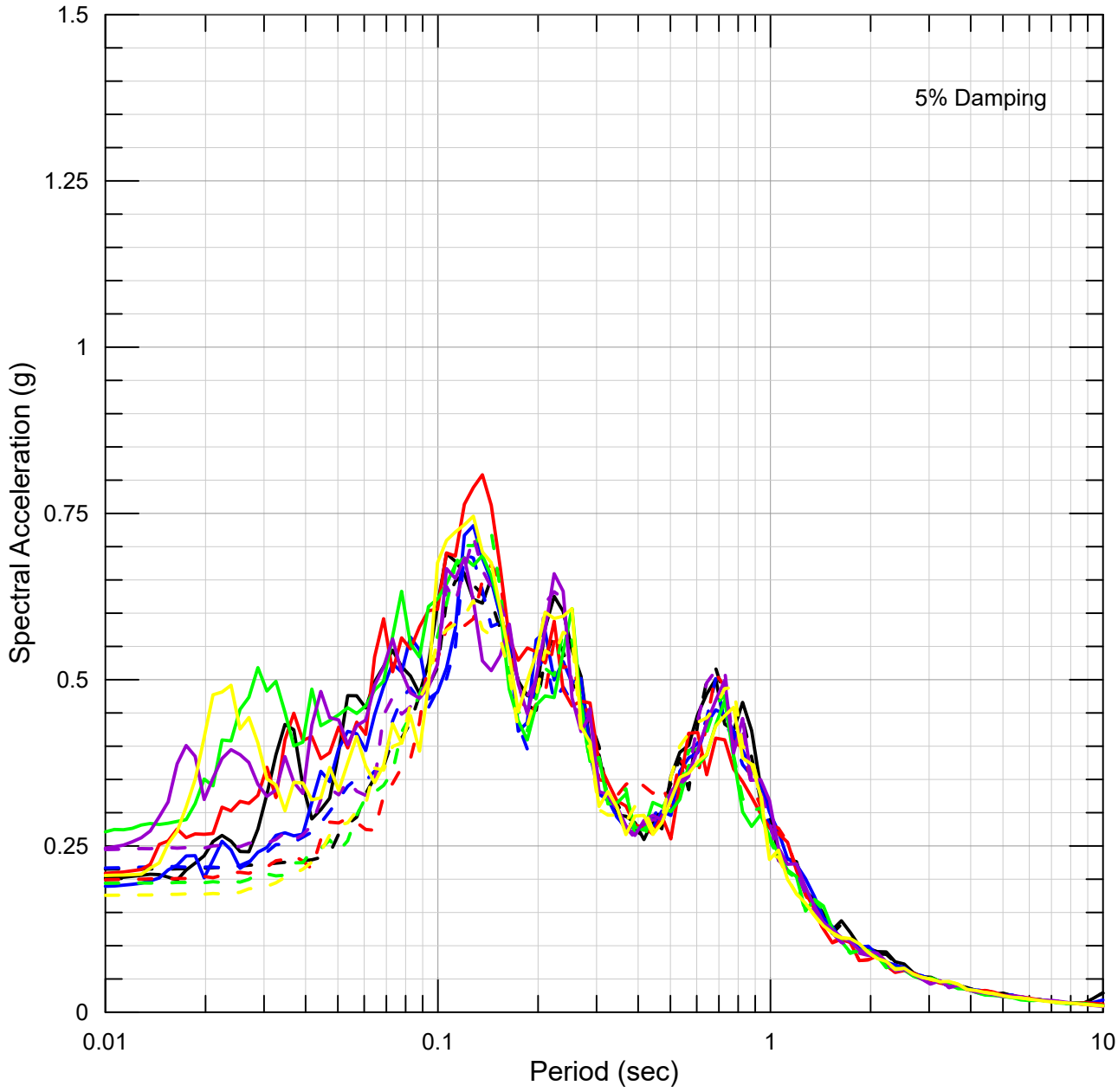
Project No. 60631499	DB Wilson DSHA Kentucky	Modulus Reduction and Damping Curves	Figure 22
AECOM			

C:\Users\mike.onnen\AECOM Directory\DB Willson - General\Deepsoil\GGmax Plot.gpj



Notes:
1. Dashed line (EL suffix) denotes equivalent linear analysis; Solid line denotes non-linear analysis

AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	Response Spectra at the Landfill Crest Ground Surface Upper Bound V_s	Figure 23



Notes:
1. Dashed line (EL suffix) denotes equivalent linear analysis; Solid line denotes non-linear analysis

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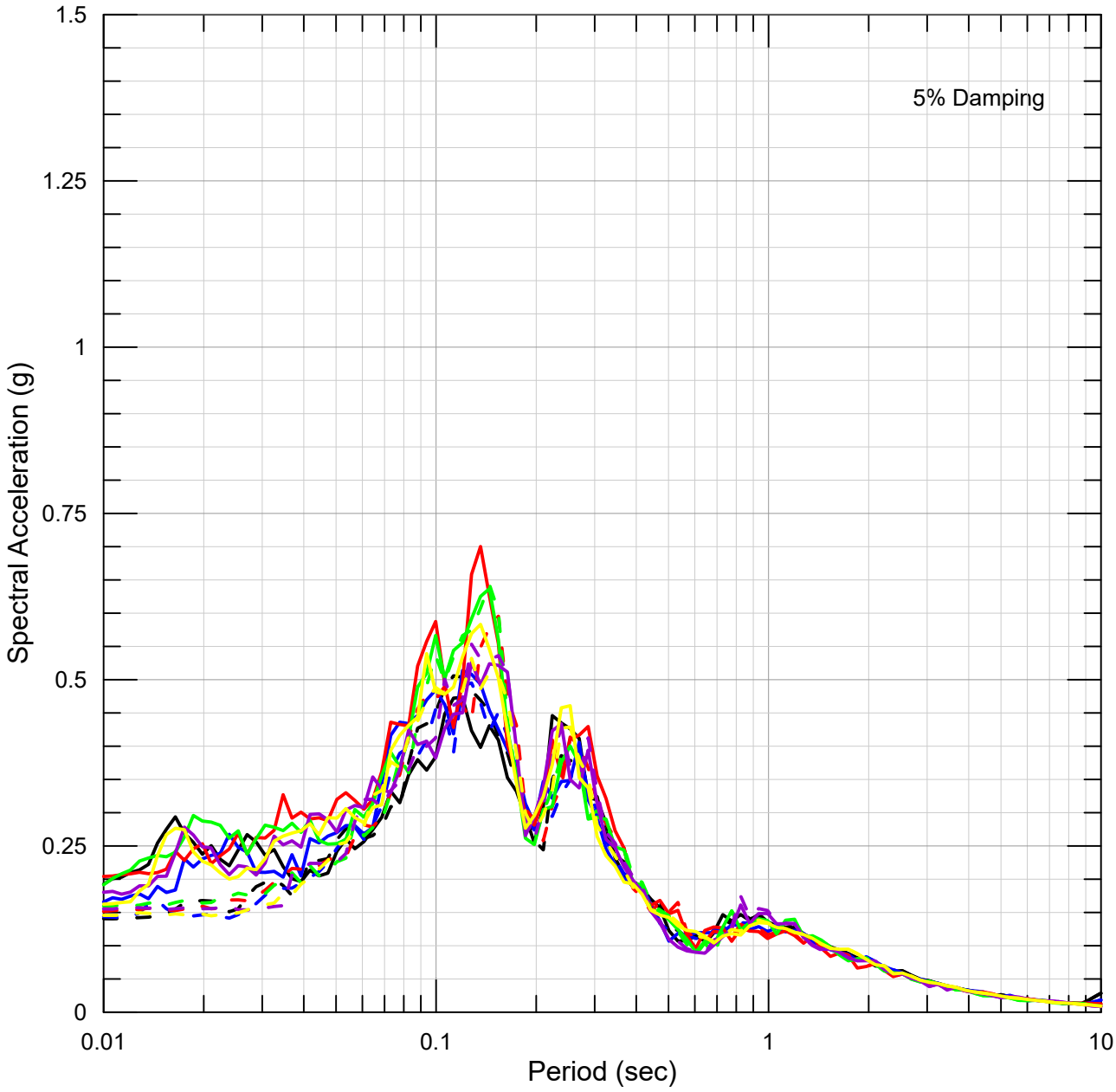
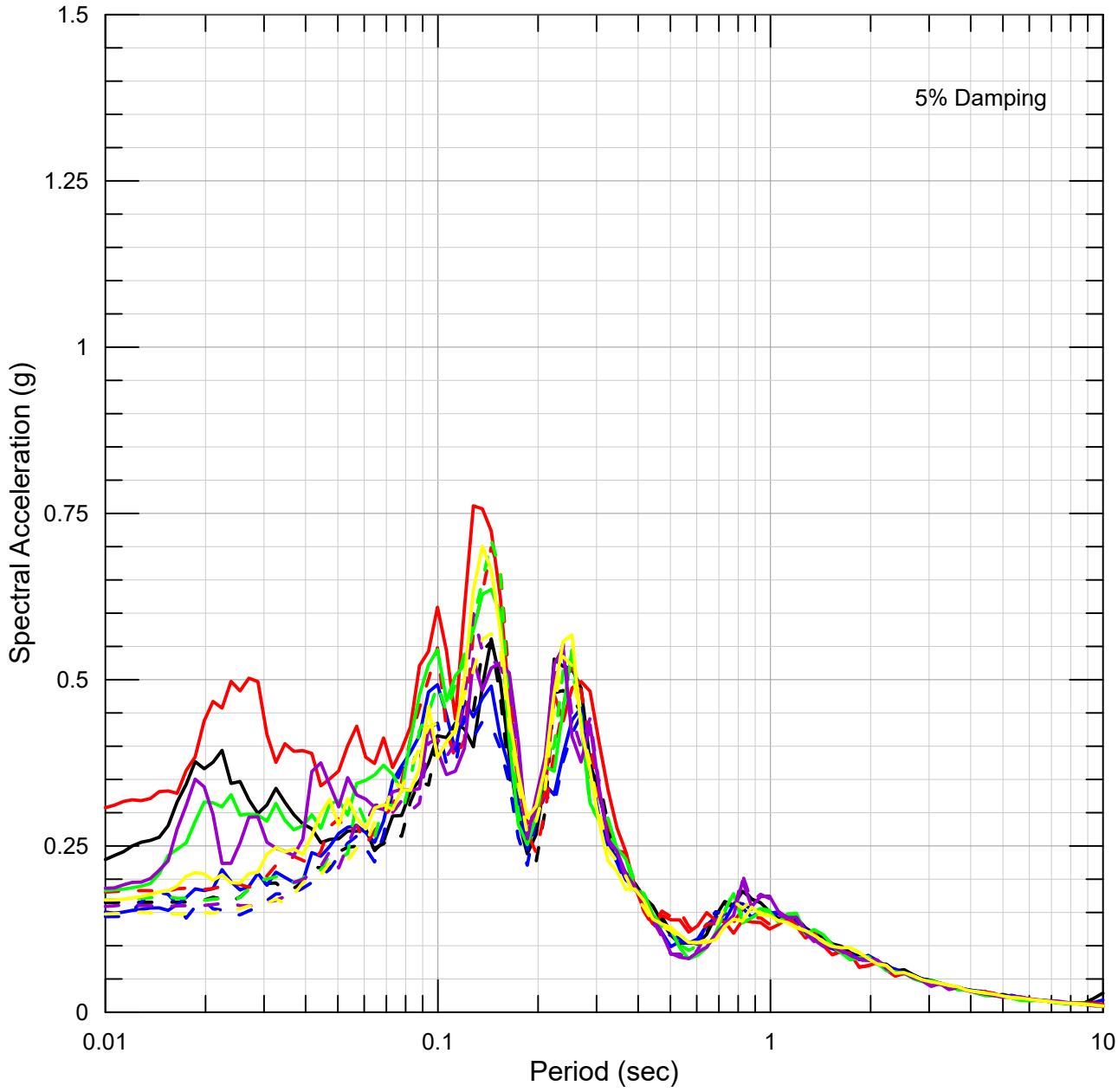


Notes:
1. Dashed line (EL suffix) denotes equivalent linear analysis; Solid line denotes non-linear analysis

AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	Response Spectra at the Base of the Landfill Below Crest Upper Bound V_s	Figure 25



Notes:
1. Dashed line (EL suffix) denotes equivalent linear analysis; Solid line denotes non-linear analysis

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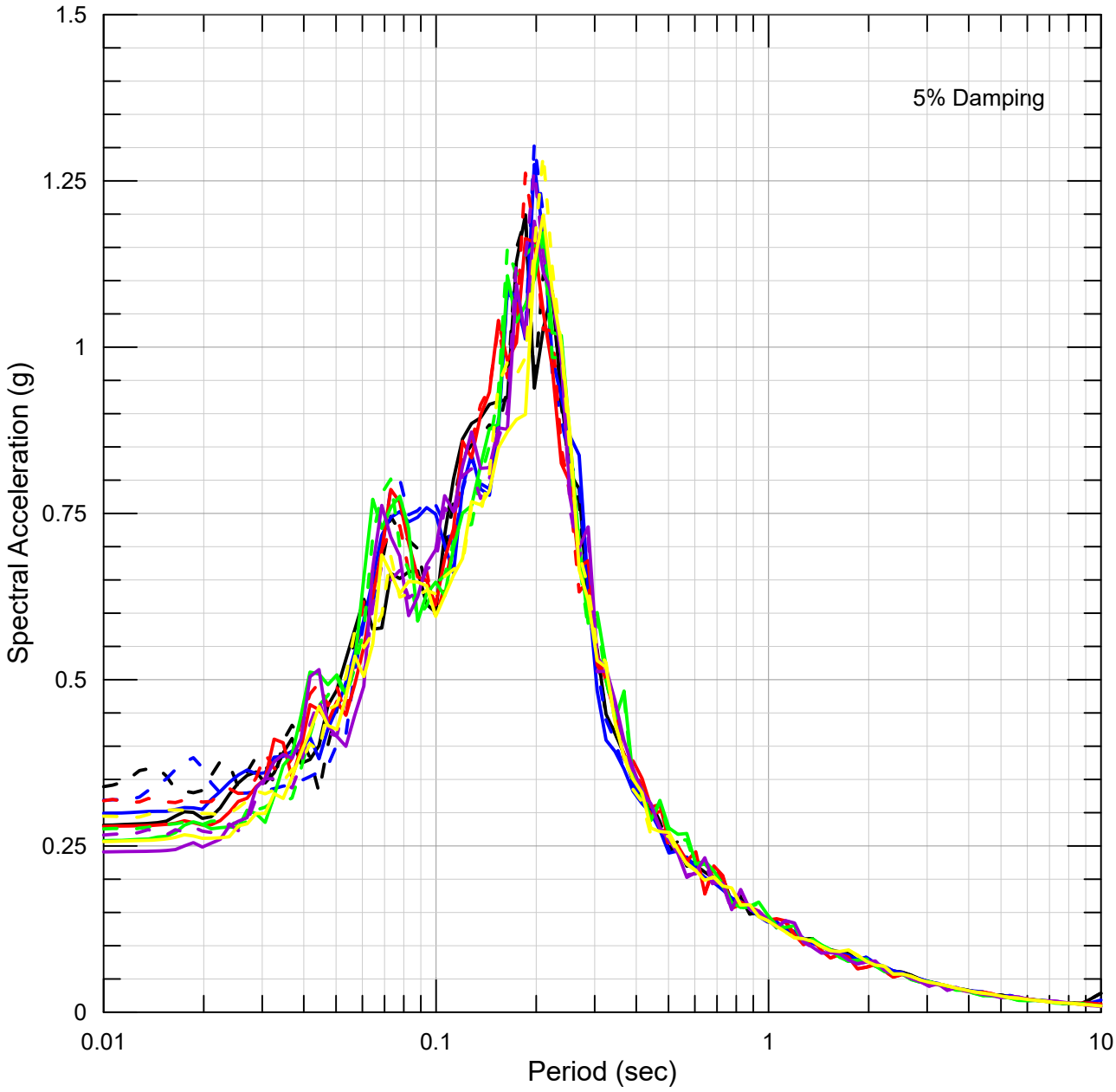
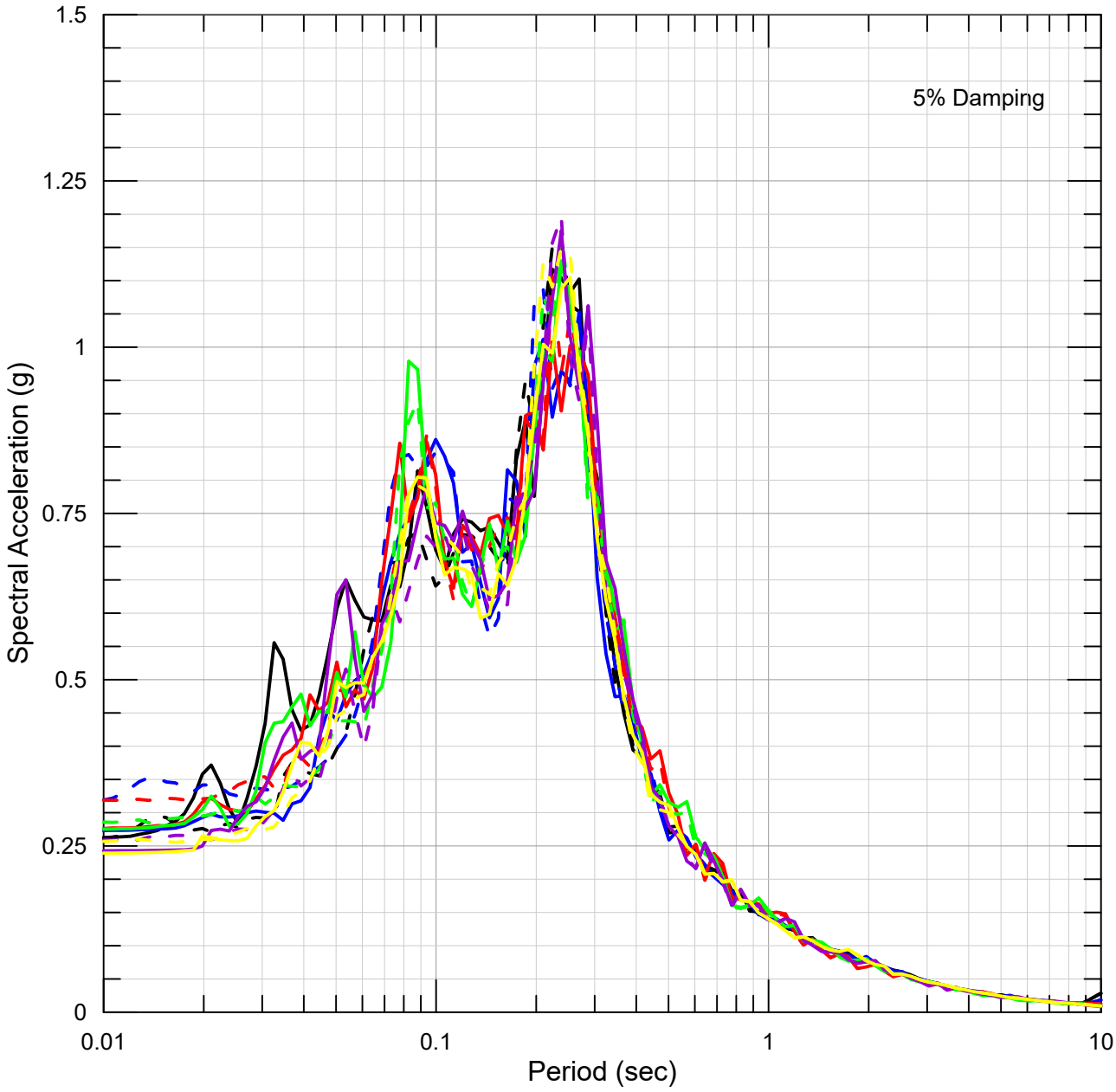


Notes:
1. Dashed line (EL suffix) denotes equivalent linear analysis; Solid line denotes non-linear analysis

AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	Response Spectra at the Landfill Toe Ground Surface Upper Bound V_s	Figure 27



Notes:
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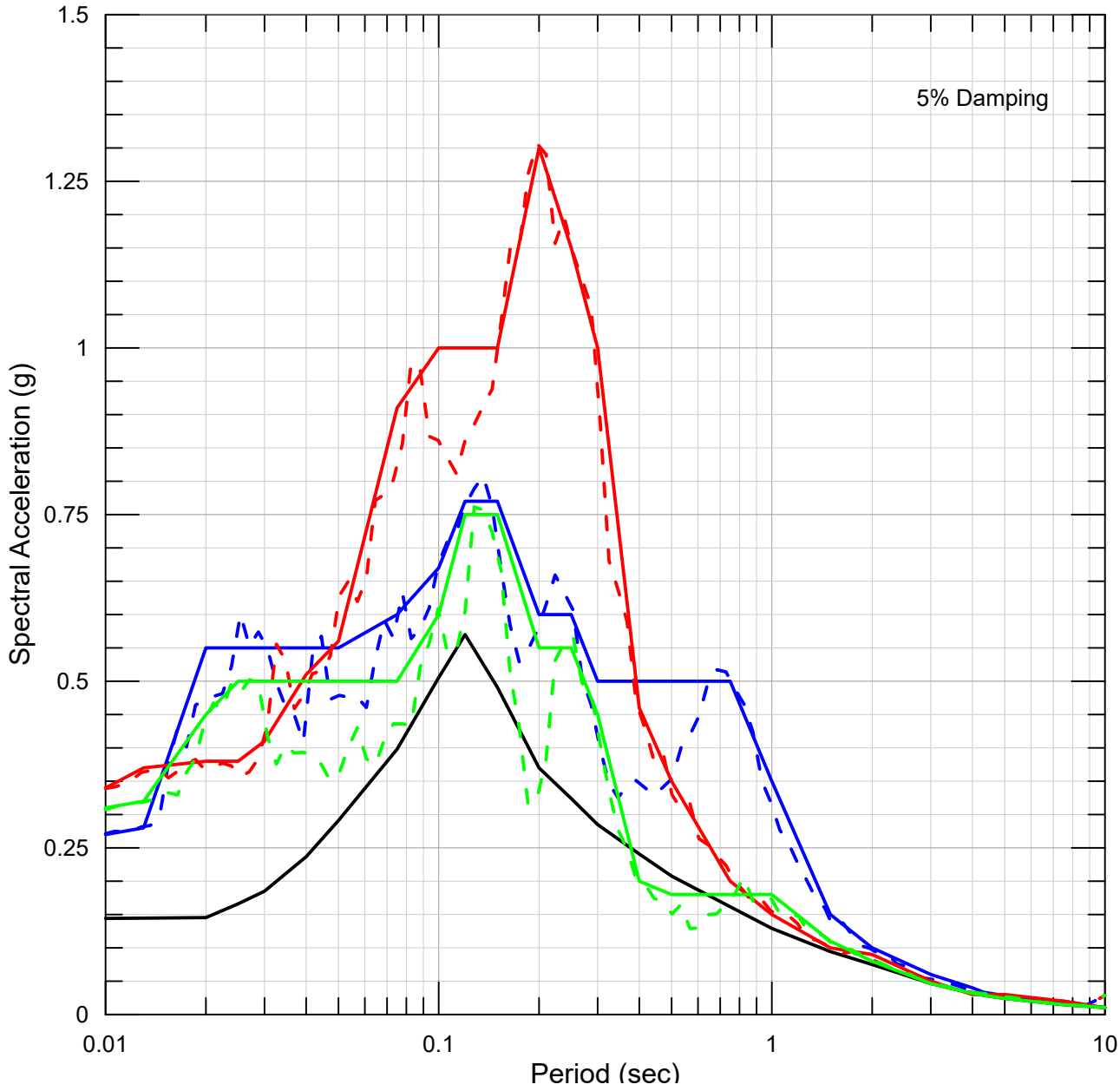

Bedrock Spectra
Crest Maximum Spectra
Crest Recommended Spectra
Toe Maximum Spectra
Toe Recommended Spectra
Base of Landfill Below Crest Maximum Spectra
Base of Landfill Below Crest Recommended Spectra

AECOM	Project No. 60631499 DB Wilson DSHA Kentucky	Recommended Spectra	Figure 29

Appendix A
DEEPSOIL Files

DEEPSOIL Input – Crest Profile Upper Bound Shear Wave Velocity

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DEEPSOIL Input – Crest Profile lower Bound Shear Wave Velocity

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[MODEL]:[MKZ] [REFERENCE_STRAIN]:[0.000938000000000001] [REFERENCE_STRESS]:[0.18] [BETA]:[1.56] [S]:[0.945] [B]:[0] [D]:[0]
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[OUTPUT]:[FALSE]
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[ACCELERATION_HISTORY]:[EXTERNAL] [DEEPSOILACCELINPUT.TXT]
[UNITS]:[ENGLISH]
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[LAYER_NAMES]:[7][POZ-O-TEC?7]
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DEEPSOIL Input – Toe Profile Upper Bound Shear Wave Velocity

[FILE_VERSION]:[1]
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[SHEAR_TYPE]:[VELOCITY]
[MAX_ITERATIONS]:[5]
[ERROR_TOL]:[1E-05]
[STEP_CONTROL]:[FLEXIBLE] [MAX_STRAIN_INC]:[0] [INTERPOLATION]:[LINEAR]
[VISCOUS_DAMPING]:[FREQ_IND]
[DAMPING_UPDATE]:[FALSE]
[NUM_LAYERS]:[8]
[WATER_TABLE]:[4]
[LAYER]:[1]
    [THICKNESS]:[3.5] [WEIGHT]:[110] [SHEAR]:[756.8287702] [SS_DAMP]:[0.0093296657357302]
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    [MRDF]:[UIUC] [P1]:[0.874] [P2]:[0.4] [P3]:[1.4]
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    [THICKNESS]:[5] [WEIGHT]:[110] [SHEAR]:[758.7836736] [SS_DAMP]:[0.0093296657357302]
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[UNITS]:[ENGLISH]
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    [LAYER_NAMES]:[3][Mine?Spoils?3]
    [LAYER_NAMES]:[4][Mine?Spoils?4]
    [LAYER_NAMES]:[5][Mine?Spoils?5]

[LAYER_NAMES]:[6][Mine?Spoils?6]
[LAYER_NAMES]:[7][Mine?Spoils?7]
[LAYER_NAMES]:[8][Mine?Spoils?8]

DEEPSOIL Input – Toe Profile Lower Bound Shear Wave Velocity

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[SHEAR_TYPE]:[VELOCITY]
[MAX_ITERATIONS]:[5]
[ERROR_TOL]:[1E-05]
[STEP_CONTROL]:[FLEXIBLE] [MAX_STRAIN_INC]:[0] [INTERPOLATION]:[LINEAR]
[VISCOUS_DAMPING]:[FREQ_IND]
[DAMPING_UPDATE]:[FALSE]
[NUM_LAYERS]:[8]
[WATER_TABLE]:[4]
[LAYER]:[1]
    [THICKNESS]:[3.5] [WEIGHT]:[110] [SHEAR]:[655.4329414] [SS_DAMP]:[0.0093296657357302]
    [MODEL]:[MKZ] [REFERENCE_STRAIN]:[0.001038] [REFERENCE_STRESS]:[0.18] [BETA]:[1.455] [S]:[0.84] [B]:[0] [D]:[0]
    [MRDF]:[UIUC] [P1]:[0.874] [P2]:[0.4] [P3]:[1.4]
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    [MODEL]:[MKZ] [REFERENCE_STRAIN]:[0.001038] [REFERENCE_STRESS]:[0.18] [BETA]:[1.455] [S]:[0.84] [B]:[0] [D]:[0]
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    [MRDF]:[UIUC] [P1]:[0.874] [P2]:[0.4] [P3]:[1.4]
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    [MRDF]:[UIUC] [P1]:[0.874] [P2]:[0.4] [P3]:[1.4]
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    [MRDF]:[UIUC] [P1]:[0.874] [P2]:[0.4] [P3]:[1.4]
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[UNITS]:[ENGLISH]
[LAYER_NAMES]:[8]

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[LAYER_NAMES]:[5][Mine?Spoils?5]
[LAYER_NAMES]:[6][Mine?Spoils?6]
[LAYER_NAMES]:[7][Mine?Spoils?7]
[LAYER_NAMES]:[8][Mine?Spoils?8]

Sample DEEPSOIL Output Input Motion

Motion: Kocaeli, Turkey-Balikesir-090

Time (s)	Acceleration (g)
0	0.000016
0.005	0.000016
0.01	0.000018
0.015	0.000021
0.02	0.000024
0.025	0.000028
0.03	0.000032
0.035	0.000036
0.04	0.000039
0.045	0.00004
0.05	0.000041
0.055	0.000041
0.06	0.000041
0.065	0.000041
0.07	0.000041
0.075	0.000041
0.08	0.000041
0.085	0.000041
0.09	0.000041
0.095	0.000041
0.1	0.000041
0.105	0.000042
0.11	0.000042
0.115	0.000042
0.12	0.000042
0.125	0.000042
0.13	0.000042
0.135	0.000042
0.14	0.000042
0.145	0.000042
0.15	0.000042
0.155	0.000042
0.16	0.000043
0.165	0.000043
0.17	0.000043
0.175	0.000043
0.18	0.000043
0.185	0.000043
0.19	0.000043
0.195	0.000043
0.2	0.000044

Period (sec)	PSA (g)
0.01	0.147556
0.010641	0.147714
0.011324	0.150367
0.01205	0.162874
0.012822	0.183805
0.013644	0.200918
0.014519	0.199791
0.01545	0.190828
0.016441	0.196173
0.017495	0.205622
0.018617	0.213837
0.01981	0.211095
0.02108	0.185468
0.022432	0.175294
0.02387	0.184559
0.025401	0.177747
0.027029	0.184932
0.028762	0.193265
0.030607	0.199041
0.032569	0.203972
0.034657	0.228999
0.036879	0.224156
0.039244	0.219952
0.04176	0.258672
0.044438	0.261806
0.047287	0.264263
0.050319	0.294591
0.053545	0.313028
0.056979	0.324824
0.060632	0.345343
0.06452	0.358977
0.068656	0.375893
0.073058	0.407942
0.077743	0.396174
0.082728	0.409389
0.088032	0.467083
0.093676	0.475883
0.099683	0.494503
0.106074	0.520457
0.112875	0.547778
0.120112	0.561702

Frequency (Hz)	Fourier Amplitude (g-sec)
0.006103516	8.25E-06
0.012207031	3.8E-05
0.018310547	0.000176
0.024414063	8.51E-05
0.030517578	0.000119
0.036621094	0.000287
0.042724609	0.000311
0.048828125	0.00016
0.054931641	0.000362
0.061035156	0.000833
0.067138672	0.00531
0.073242188	0.016422
0.079345703	0.023544
0.085449219	0.047069
0.091552734	0.086114
0.09765625	0.099543
0.103759766	0.05596
0.109863281	0.03124
0.115966797	0.034973
0.122070313	0.032997
0.128173828	0.033461
0.134277344	0.019914
0.140380859	0.014254
0.146484375	0.011954
0.152587891	0.035409
0.158691406	0.019777
0.164794922	0.022507
0.170898438	0.052243
0.177001953	0.027436
0.183105469	0.023481
0.189208984	0.031436
0.1953125	0.016471
0.201416016	0.024971
0.207519531	0.059013
0.213623047	0.046997
0.219726563	0.014504
0.225830078	0.042895
0.231933594	0.027881
0.238037109	0.034387
0.244140625	0.059604
0.250244141	0.055149

Input Motion

Time (s)	Acceleration (g)
0.205	0.000044
0.21	0.000044
0.215	0.000044
0.22	0.000044
0.225	0.000044
0.23	0.000045
0.235	0.000045
0.24	0.000045
0.245	0.000045
0.25	0.000045
0.255	0.000046
0.26	0.000046
0.265	0.000046
0.27	0.000046
0.275	0.000046
0.28	0.000047
0.285	0.000047
0.29	0.000047
0.295	0.000047
0.3	0.000048
0.305	0.000048
0.31	0.000048
0.315	0.000048
0.32	0.000049
0.325	0.000049
0.33	0.000049
0.335	0.00005
0.34	0.00005
0.345	0.00005
0.35	0.00005
0.355	0.000051
0.36	0.000051
0.365	0.000051
0.37	0.000052
0.375	0.000052
0.38	0.000052
0.385	0.000053
0.39	0.000053
0.395	0.000054
0.4	0.000054
0.405	0.000054
0.41	0.000055

Period (sec)	PSA (g)
0.127814	0.54634
0.136009	0.523099
0.14473	0.511878
0.154009	0.479634
0.163884	0.455726
0.174392	0.423731
0.185573	0.398319
0.197472	0.337189
0.210134	0.361466
0.223607	0.341462
0.237944	0.326747
0.2532	0.316246
0.269435	0.306922
0.286711	0.294544
0.305094	0.285331
0.324656	0.273985
0.345472	0.248954
0.367623	0.261576
0.391194	0.242883
0.416277	0.22674
0.442967	0.225938
0.471369	0.220129
0.501593	0.205289
0.533754	0.215313
0.567977	0.190163
0.604394	0.187581
0.643146	0.190083
0.684384	0.184531
0.728265	0.172961
0.774959	0.151415
0.824648	0.162222
0.877523	0.138898
0.933788	0.140058
0.99366	0.13222
1.05737	0.126061
1.12517	0.118569
1.19731	0.116544
1.27408	0.107243
1.35577	0.10634
1.4427	0.097436
1.5352	0.091764
1.63364	0.089291

Frequency (Hz)	Fourier Amplitude (g-sec)
0.256347656	0.026184
0.262451172	0.035837
0.268554688	0.066542
0.274658203	0.061719
0.280761719	0.027136
0.286865234	0.025021
0.29296875	0.059375
0.299072266	0.04986
0.305175781	0.012509
0.311279297	0.005052
0.317382813	0.043768
0.323486328	0.057034
0.329589844	0.081099
0.335693359	0.105783
0.341796875	0.063533
0.347900391	0.042698
0.354003906	0.063291
0.360107422	0.05999
0.366210938	0.044284
0.372314453	0.023678
0.378417969	0.012346
0.384521484	0.037298
0.390625	0.048649
0.396728516	0.026701
0.402832031	0.065254
0.408935547	0.089638
0.415039063	0.06582
0.421142578	0.037406
0.427246094	0.061378
0.433349609	0.062088
0.439453125	0.019647
0.445556641	0.049003
0.451660156	0.037083
0.457763672	0.010731
0.463867188	0.026787
0.469970703	0.05741
0.476074219	0.052862
0.482177734	0.035976
0.48828125	0.038738
0.494384766	0.017977
0.500488281	0.035907
0.506591797	0.074685

Input Motion

Time (s)	Acceleration (g)
0.415	0.000055
0.42	0.000055
0.425	0.000056
0.43	0.000056
0.435	0.000057
0.44	0.000057
0.445	0.000057
0.45	0.000058
0.455	0.000058
0.46	0.000059
0.465	0.000059
0.47	0.00006
0.475	0.00006
0.48	0.00006
0.485	0.000061
0.49	0.000061
0.495	0.000062
0.5	0.000062
0.505	0.000063
0.51	0.000063
0.515	0.000063
0.52	0.000064
0.525	0.000064
0.53	0.000065
0.535	0.000065
0.54	0.000066
0.545	0.000066
0.55	0.000066
0.555	0.000067
0.56	0.000067
0.565	0.000067
0.57	0.000068
0.575	0.000068
0.58	0.000068
0.585	0.000069
0.59	0.000069
0.595	0.000069
0.6	0.000069
0.605	0.00007
0.61	0.00007
0.615	0.00007
0.62	0.00007

Period (sec)	PSA (g)
1.73838	0.086333
1.84984	0.077858
1.96845	0.077933
2.09466	0.068011
2.22897	0.066624
2.37188	0.060643
2.52396	0.059506
2.6858	0.054394
2.858	0.049495
3.04125	0.045796
3.23625	0.041953
3.44375	0.039515
3.66456	0.035406
3.89952	0.0337
4.14955	0.030945
4.41561	0.029441
4.69873	0.024476
5	0.025731
5.32059	0.022952
5.66173	0.020055
6.02475	0.019395
6.41104	0.017958
6.82211	0.016439
7.25952	0.01555
7.72499	0.013126
8.2203	0.013643
8.74737	0.013247
9.30823	0.01967
9.90505	0.027442
10	0.028279

Frequency (Hz)	Fourier Amplitude (g-sec)
0.512695313	0.079059
0.518798828	0.067953
0.524902344	0.044698
0.531005859	0.020171
0.537109375	0.033812
0.543212891	0.031251
0.549316406	0.017003
0.555419922	0.021656
0.561523438	0.025831
0.567626953	0.027016
0.573730469	0.03941
0.579833984	0.056801
0.5859375	0.072395
0.592041016	0.089589
0.598144531	0.088438
0.604248047	0.062723
0.610351563	0.062959
0.616455078	0.069991
0.622558594	0.061695
0.628662109	0.054893
0.634765625	0.055974
0.640869141	0.033483
0.646972656	0.016537
0.653076172	0.024483
0.659179688	0.0561
0.665283203	0.049726
0.671386719	0.028313
0.677490234	0.005404
0.68359375	0.054648
0.689697266	0.07448
0.695800781	0.058414
0.701904297	0.071257
0.708007813	0.073371
0.714111328	0.033281
0.720214844	0.048357
0.726318359	0.090458
0.732421875	0.10076
0.738525391	0.071658
0.744628906	0.029561
0.750732422	0.054713
0.756835938	0.065342
0.762939453	0.050809

Input Motion

Time (s)	Acceleration (g)
0.625	0.00007
0.63	0.000071
0.635	0.000071
0.64	0.000071
0.645	0.000071
0.65	0.000071
0.655	0.000071
0.66	0.000071
0.665	0.000071
0.67	0.000071
0.675	0.00007
0.68	0.00007
0.685	0.00007
0.69	0.00007
0.695	0.000069
0.7	0.000069
0.705	0.000069
0.71	0.000068
0.715	0.000068
0.72	0.000067
0.725	0.000067
0.73	0.000066
0.735	0.000066
0.74	0.000065
0.745	0.000064
0.75	0.000064
0.755	0.000063
0.76	0.000062
0.765	0.000061
0.77	0.00006
0.775	0.000059
0.78	0.000058
0.785	0.000057
0.79	0.000055
0.795	0.000054
0.8	0.000052
0.805	0.000051
0.81	0.00005
0.815	0.000048
0.82	0.000047
0.825	0.000045
0.83	0.000043

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
0.769042969	0.053974
0.775146484	0.057873
0.78125	0.047117
0.787353516	0.04218
0.793457031	0.054981
0.799560547	0.066094
0.805664063	0.084785
0.811767578	0.101881
0.817871094	0.092549
0.823974609	0.072567
0.830078125	0.075811
0.836181641	0.08196
0.842285156	0.043436
0.848388672	0.05075
0.854492188	0.093778
0.860595703	0.084799
0.866699219	0.062803
0.872802734	0.070939
0.87890625	0.03877
0.885009766	0.037641
0.891113281	0.049892
0.897216797	0.035515
0.903320313	0.047321
0.909423828	0.069017
0.915527344	0.031335
0.921630859	0.055713
0.927734375	0.093024
0.933837891	0.046325
0.939941406	0.023297
0.946044922	0.054165
0.952148438	0.044813
0.958251953	0.025335
0.964355469	0.027814
0.970458984	0.065587
0.9765625	0.096653
0.982666016	0.08812
0.988769531	0.05986
0.994873047	0.046528
1.000976563	0.061707
1.007080078	0.054008
1.013183594	0.027698
1.019287109	0.019148

Input Motion

Time (s)	Acceleration (g)
0.835	0.000041
0.84	0.000039
0.845	0.000037
0.85	0.000036
0.855	0.000034
0.86	0.000032
0.865	0.00003
0.87	0.000028
0.875	0.000026
0.88	0.000023
0.885	0.000021
0.89	0.000019
0.895	0.000016
0.9	0.000014
0.905	0.000011
0.91	0.000009
0.915	0.000006
0.92	0.000004
0.925	0.000002
0.93	-0.000001
0.935	-0.000004
0.94	-0.000007
0.945	-0.00001
0.95	-0.000012
0.955	-0.000015
0.96	-0.000017
0.965	-0.00002
0.97	-0.000022
0.975	-0.000024
0.98	-0.000026
0.985	-0.000029
0.99	-0.000032
0.995	-0.000037
1	-0.000042
1.005	-0.000046
1.01	-0.000051
1.015	-0.000054
1.02	-0.000057
1.025	-0.000059
1.03	-0.00006
1.035	-0.000061
1.04	-0.000062

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
1.025390625	0.019339
1.031494141	0.048675
1.037597656	0.052848
1.043701172	0.042162
1.049804688	0.017178
1.055908203	0.021806
1.062011719	0.017316
1.068115234	0.031437
1.07421875	0.029748
1.080322266	0.022784
1.086425781	0.066485
1.092529297	0.10714
1.098632813	0.118984
1.104736328	0.084131
1.110839844	0.07068
1.116943359	0.086058
1.123046875	0.07371
1.129150391	0.05093
1.135253906	0.091934
1.141357422	0.096494
1.147460938	0.041625
1.153564453	0.017196
1.159667969	0.025452
1.165771484	0.020309
1.171875	0.036884
1.177978516	0.056372
1.184082031	0.058863
1.190185547	0.038456
1.196289063	0.019136
1.202392578	0.027315
1.208496094	0.075559
1.214599609	0.083922
1.220703125	0.04771
1.226806641	0.046761
1.232910156	0.08431
1.239013672	0.109211
1.245117188	0.103333
1.251220703	0.027779
1.257324219	0.056729
1.263427734	0.11028
1.26953125	0.1533
1.275634766	0.113512

Input Motion

Time (s)	Acceleration (g)
1.045	-0.000065
1.05	-0.000069
1.055	-0.000073
1.06	-0.000078
1.065	-0.000083
1.07	-0.000087
1.075	-0.000088
1.08	-0.000089
1.085	-0.000089
1.09	-0.000091
1.095	-0.000093
1.1	-0.000097
1.105	-0.000102
1.11	-0.000107
1.115	-0.000109
1.12	-0.000108
1.125	-0.000103
1.13	-0.000098
1.135	-0.000096
1.14	-0.000098
1.145	-0.000105
1.15	-0.000118
1.155	-0.000131
1.16	-0.000143
1.165	-0.000151
1.17	-0.000154
1.175	-0.00015
1.18	-0.000143
1.185	-0.000135
1.19	-0.00013
1.195	-0.000129
1.2	-0.000133
1.205	-0.000139
1.21	-0.000144
1.215	-0.000146
1.22	-0.000145
1.225	-0.000145
1.23	-0.000143
1.235	-0.00014
1.24	-0.000138
1.245	-0.000138
1.25	-0.00014

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
1.281738281	0.07885
1.287841797	0.05602
1.293945313	0.029287
1.300048828	0.02584
1.306152344	0.044522
1.312255859	0.037397
1.318359375	0.026889
1.324462891	0.055303
1.330566406	0.045698
1.336669922	0.037694
1.342773438	0.033749
1.348876953	0.041639
1.354980469	0.101941
1.361083984	0.118633
1.3671875	0.086385
1.373291016	0.048373
1.379394531	0.019862
1.385498047	0.012176
1.391601563	0.032393
1.397705078	0.06018
1.403808594	0.085102
1.409912109	0.087903
1.416015625	0.107866
1.422119141	0.138848
1.428222656	0.110149
1.434326172	0.042307
1.440429688	0.02071
1.446533203	0.049979
1.452636719	0.087887
1.458740234	0.069713
1.46484375	0.042367
1.470947266	0.041513
1.477050781	0.040756
1.483154297	0.027961
1.489257813	0.002698
1.495361328	0.032048
1.501464844	0.031574
1.507568359	0.056304
1.513671875	0.071787
1.519775391	0.032629
1.525878906	0.044057
1.531982422	0.096469

Input Motion

Time (s)	Acceleration (g)
1.255	-0.000143
1.26	-0.000147
1.265	-0.000151
1.27	-0.000153
1.275	-0.000154
1.28	-0.000155
1.285	-0.000155
1.29	-0.000154
1.295	-0.000154
1.3	-0.000153
1.305	-0.000154
1.31	-0.000157
1.315	-0.000163
1.32	-0.000172
1.325	-0.000182
1.33	-0.000192
1.335	-0.000197
1.34	-0.000197
1.345	-0.000192
1.35	-0.000184
1.355	-0.000175
1.36	-0.00017
1.365	-0.000172
1.37	-0.000178
1.375	-0.000183
1.38	-0.000186
1.385	-0.000185
1.39	-0.00018
1.395	-0.000172
1.4	-0.000165
1.405	-0.000164
1.41	-0.000167
1.415	-0.000174
1.42	-0.000181
1.425	-0.000186
1.43	-0.000187
1.435	-0.000185
1.44	-0.000181
1.445	-0.00018
1.45	-0.000182
1.455	-0.000185
1.46	-0.00019

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
1.538085938	0.087814
1.544189453	0.019071
1.550292969	0.039665
1.556396484	0.032098
1.5625	0.017602
1.568603516	0.038443
1.574707031	0.052042
1.580810547	0.058127
1.586914063	0.069194
1.593017578	0.120811
1.599121094	0.137874
1.605224609	0.095962
1.611328125	0.071741
1.617431641	0.097933
1.623535156	0.108236
1.629638672	0.080094
1.635742188	0.064492
1.641845703	0.07222
1.647949219	0.092329
1.654052734	0.113756
1.66015625	0.094022
1.666259766	0.026179
1.672363281	0.089516
1.678466797	0.109607
1.684570313	0.088891
1.690673828	0.083
1.696777344	0.03814
1.702880859	0.035886
1.708984375	0.074604
1.715087891	0.066764
1.721191406	0.044242
1.727294922	0.016135
1.733398438	0.038611
1.739501953	0.060471
1.745605469	0.047521
1.751708984	0.023122
1.7578125	0.02079
1.763916016	0.00469
1.770019531	0.021444
1.776123047	0.030162
1.782226563	0.019241
1.788330078	0.012687

Input Motion

Time (s)	Acceleration (g)
1.465	-0.000197
1.47	-0.000202
1.475	-0.000203
1.48	-0.000202
1.485	-0.000202
1.49	-0.0002
1.495	-0.000196
1.5	-0.00019
1.505	-0.000183
1.51	-0.000177
1.515	-0.000176
1.52	-0.00018
1.525	-0.00019
1.53	-0.000202
1.535	-0.000211
1.54	-0.000215
1.545	-0.000214
1.55	-0.000209
1.555	-0.000201
1.56	-0.000194
1.565	-0.000192
1.57	-0.000193
1.575	-0.000195
1.58	-0.000199
1.585	-0.000207
1.59	-0.000212
1.595	-0.000213
1.6	-0.000209
1.605	-0.000201
1.61	-0.000191
1.615	-0.000183
1.62	-0.000177
1.625	-0.000175
1.63	-0.000174
1.635	-0.000173
1.64	-0.000169
1.645	-0.000165
1.65	-0.000162
1.655	-0.000163
1.66	-0.000168
1.665	-0.000182
1.67	-0.000197

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
1.794433594	0.032992
1.800537109	0.081522
1.806640625	0.079246
1.812744141	0.016243
1.818847656	0.05035
1.824951172	0.059282
1.831054688	0.041339
1.837158203	0.066502
1.843261719	0.087099
1.849365234	0.081178
1.85546875	0.069365
1.861572266	0.042555
1.867675781	0.010356
1.873779297	0.039106
1.879882813	0.050365
1.885986328	0.025796
1.892089844	0.036922
1.898193359	0.031396
1.904296875	0.086313
1.910400391	0.136133
1.916503906	0.119002
1.922607422	0.058181
1.928710938	0.033631
1.934814453	0.040335
1.940917969	0.047538
1.947021484	0.039336
1.953125	0.021344
1.959228516	0.025188
1.965332031	0.019725
1.971435547	0.004497
1.977539063	0.031358
1.983642578	0.064202
1.989746094	0.106098
1.995849609	0.113874
2.001953125	0.07591
2.008056641	0.056971
2.014160156	0.056636
2.020263672	0.045944
2.026367188	0.036192
2.032470703	0.047345
2.038574219	0.040205
2.044677734	0.00899

Input Motion

Time (s)	Acceleration (g)
1.675	-0.000209
1.68	-0.000214
1.685	-0.000213
1.69	-0.000205
1.695	-0.000194
1.7	-0.000188
1.705	-0.000196
1.71	-0.000212
1.715	-0.000226
1.72	-0.000236
1.725	-0.000239
1.73	-0.000231
1.735	-0.000211
1.74	-0.000186
1.745	-0.000166
1.75	-0.00015
1.755	-0.000141
1.76	-0.000141
1.765	-0.000151
1.77	-0.000166
1.775	-0.000185
1.78	-0.000204
1.785	-0.000223
1.79	-0.000236
1.795	-0.00024
1.8	-0.000235
1.805	-0.000224
1.81	-0.000208
1.815	-0.000192
1.82	-0.000178
1.825	-0.000168
1.83	-0.000163
1.835	-0.000163
1.84	-0.00017
1.845	-0.000185
1.85	-0.000203
1.855	-0.000216
1.86	-0.000224
1.865	-0.000228
1.87	-0.000225
1.875	-0.000215
1.88	-0.000202

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
2.05078125	0.018018
2.056884766	0.035155
2.062988281	0.063258
2.069091797	0.099954
2.075195313	0.104225
2.081298828	0.055334
2.087402344	0.035396
2.093505859	0.060395
2.099609375	0.056893
2.105712891	0.046903
2.111816406	0.015045
2.117919922	0.040856
2.124023438	0.062864
2.130126953	0.054114
2.136230469	0.0682
2.142333984	0.081379
2.1484375	0.062651
2.154541016	0.037995
2.160644531	0.036994
2.166748047	0.029696
2.172851563	0.015271
2.178955078	0.027346
2.185058594	0.03003
2.191162109	0.041091
2.197265625	0.049322
2.203369141	0.039496
2.209472656	0.044586
2.215576172	0.047925
2.221679688	0.056475
2.227783203	0.028646
2.233886719	0.058807
2.239990234	0.092779
2.24609375	0.081696
2.252197266	0.067164
2.258300781	0.06452
2.264404297	0.06836
2.270507813	0.063913
2.276611328	0.057497
2.282714844	0.065052
2.288818359	0.051285
2.294921875	0.07088
2.301025391	0.092058

Time (s)	Acceleration (g)
1.885	-0.000191
1.89	-0.000185
1.895	-0.000186
1.9	-0.000194
1.905	-0.00021
1.91	-0.000231
1.915	-0.000252
1.92	-0.000268
1.925	-0.000279
1.93	-0.000276
1.935	-0.000254
1.94	-0.000222
1.945	-0.000194
1.95	-0.000174
1.955	-0.000162
1.96	-0.000164
1.965	-0.000179
1.97	-0.000196
1.975	-0.000205
1.98	-0.000209
1.985	-0.000213
1.99	-0.000215
1.995	-0.000215
2	-0.000217
2.005	-0.000221
2.01	-0.000229
2.015	-0.000238
2.02	-0.000249
2.025	-0.00026
2.03	-0.000267
2.035	-0.000263
2.04	-0.000251
2.045	-0.000239
2.05	-0.000224
2.055	-0.000208
2.06	-0.000196
2.065	-0.000192
2.07	-0.000197
2.075	-0.000209
2.08	-0.000223
2.085	-0.000234
2.09	-0.000237

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
2.307128906	0.080037
2.313232422	0.071001
2.319335938	0.088224
2.325439453	0.108486
2.331542969	0.102618
2.337646484	0.084594
2.34375	0.07434
2.349853516	0.070666
2.355957031	0.059483
2.362060547	0.065112
2.368164063	0.078856
2.374267578	0.054762
2.380371094	0.036025
2.386474609	0.027806
2.392578125	0.048848
2.398681641	0.038317
2.404785156	0.043861
2.410888672	0.048029
2.416992188	0.00878
2.423095703	0.04064
2.429199219	0.047868
2.435302734	0.051123
2.44140625	0.043597
2.447509766	0.02921
2.453613281	0.063744
2.459716797	0.048309
2.465820313	0.006075
2.471923828	0.016214
2.478027344	0.04804
2.484130859	0.069162
2.490234375	0.04545
2.496337891	0.032287
2.502441406	0.050247
2.508544922	0.045318
2.514648438	0.046096
2.520751953	0.041359
2.526855469	0.022131
2.532958984	0.033527
2.5390625	0.085882
2.545166016	0.119716
2.551269531	0.099998
2.557373047	0.046525

Input Motion

Time (s)	Acceleration (g)
2.095	-0.000226
2.1	-0.000213
2.105	-0.00021
2.11	-0.000214
2.115	-0.000223
2.12	-0.000235
2.125	-0.000245
2.13	-0.00025
2.135	-0.000245
2.14	-0.000236
2.145	-0.000231
2.15	-0.000227
2.155	-0.000218
2.16	-0.000212
2.165	-0.000214
2.17	-0.000223
2.175	-0.000236
2.18	-0.000257
2.185	-0.00029
2.19	-0.000321
2.195	-0.000336
2.2	-0.000337
2.205	-0.000325
2.21	-0.000302
2.215	-0.000275
2.22	-0.000251
2.225	-0.000237
2.23	-0.00023
2.235	-0.000224
2.24	-0.000216
2.245	-0.000204
2.25	-0.000187
2.255	-0.000164
2.26	-0.000149
2.265	-0.00015
2.27	-0.000169
2.275	-0.000201
2.28	-0.000234
2.285	-0.000257
2.29	-0.000262
2.295	-0.000243
2.3	-0.000217

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
2.563476563	0.020372
2.569580078	0.022138
2.575683594	0.011065
2.581787109	0.009762
2.587890625	0.035439
2.593994141	0.050322
2.600097656	0.037367
2.606201172	0.01004
2.612304688	0.011015
2.618408203	0.021928
2.624511719	0.037886
2.630615234	0.045941
2.63671875	0.031019
2.642822266	0.023452
2.648925781	0.035181
2.655029297	0.019513
2.661132813	0.015126
2.667236328	0.030358
2.673339844	0.024308
2.679443359	0.033812
2.685546875	0.020433
2.691650391	0.029897
2.697753906	0.042689
2.703857422	0.031618
2.709960938	0.011445
2.716064453	0.022782
2.722167969	0.074115
2.728271484	0.112867
2.734375	0.100507
2.740478516	0.064432
2.746582031	0.05922
2.752685547	0.038868
2.758789063	0.007419
2.764892578	0.038345
2.770996094	0.067997
2.777099609	0.075286
2.783203125	0.040539
2.789306641	0.017768
2.795410156	0.044068
2.801513672	0.041698
2.807617188	0.038534
2.813720703	0.029322

Time (s)	Acceleration (g)
2.305	-0.000203
2.31	-0.000199
2.315	-0.000197
2.32	-0.000202
2.325	-0.000212
2.33	-0.000223
2.335	-0.000226
2.34	-0.000229
2.345	-0.000237
2.35	-0.000242
2.355	-0.000239
2.36	-0.000233
2.365	-0.00023
2.37	-0.000232
2.375	-0.000239
2.38	-0.000248
2.385	-0.000259
2.39	-0.000262
2.395	-0.000249
2.4	-0.00023
2.405	-0.000212
2.41	-0.000204
2.415	-0.000207
2.42	-0.000222
2.425	-0.000245
2.43	-0.000259
2.435	-0.000245
2.44	-0.000213
2.445	-0.000175
2.45	-0.000137
2.455	-0.000105
2.46	-0.000089
2.465	-0.000096
2.47	-0.000118
2.475	-0.000143
2.48	-0.00017
2.485	-0.000197
2.49	-0.000217
2.495	-0.000225
2.5	-0.000227
2.505	-0.000232
2.51	-0.000231

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
2.819824219	0.039313
2.825927734	0.048503
2.83203125	0.039231
2.838134766	0.011001
2.844238281	0.025103
2.850341797	0.050508
2.856445313	0.060097
2.862548828	0.057447
2.868652344	0.048603
2.874755859	0.052167
2.880859375	0.074826
2.886962891	0.089969
2.893066406	0.080547
2.899169922	0.053295
2.905273438	0.034608
2.911376953	0.028909
2.917480469	0.026697
2.923583984	0.055923
2.9296875	0.082318
2.935791016	0.087312
2.941894531	0.068796
2.947998047	0.039483
2.954101563	0.0343
2.960205078	0.041644
2.966308594	0.037295
2.972412109	0.025867
2.978515625	0.012943
2.984619141	0.014489
2.990722656	0.033122
2.996826172	0.055029
3.002929688	0.063979
3.009033203	0.046624
3.015136719	0.018458
3.021240234	0.006198
3.02734375	0.033335
3.033447266	0.063984
3.039550781	0.071626
3.045654297	0.062608
3.051757813	0.058791
3.057861328	0.053851
3.063964844	0.032161
3.070068359	0.0352

Time (s)	Acceleration (g)
2.515	-0.000214
2.52	-0.000191
2.525	-0.000171
2.53	-0.000157
2.535	-0.000157
2.54	-0.000168
2.545	-0.000185
2.55	-0.000202
2.555	-0.000209
2.56	-0.000206
2.565	-0.000195
2.57	-0.000178
2.575	-0.000153
2.58	-0.000131
2.585	-0.000121
2.59	-0.000121
2.595	-0.000126
2.6	-0.000144
2.605	-0.000177
2.61	-0.000211
2.615	-0.000235
2.62	-0.000241
2.625	-0.000226
2.63	-0.000197
2.635	-0.000165
2.64	-0.000142
2.645	-0.000143
2.65	-0.000158
2.655	-0.000172
2.66	-0.00018
2.665	-0.000178
2.67	-0.00016
2.675	-0.000128
2.68	-0.000093
2.685	-0.00007
2.69	-0.00006
2.695	-0.000061
2.7	-0.000071
2.705	-0.00009
2.71	-0.000109
2.715	-0.000118
2.72	-0.000125

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
3.076171875	0.058717
3.082275391	0.05226
3.088378906	0.039825
3.094482422	0.044767
3.100585938	0.066828
3.106689453	0.05824
3.112792969	0.033017
3.118896484	0.044453
3.125	0.036898
3.131103516	0.020836
3.137207031	0.035908
3.143310547	0.023571
3.149414063	0.014005
3.155517578	0.018097
3.161621094	0.02568
3.167724609	0.048996
3.173828125	0.091434
3.179931641	0.113876
3.186035156	0.094433
3.192138672	0.090298
3.198242188	0.058428
3.204345703	0.008256
3.210449219	0.02848
3.216552734	0.025041
3.22265625	0.024793
3.228759766	0.022462
3.234863281	0.004651
3.240966797	0.021779
3.247070313	0.022436
3.253173828	0.013675
3.259277344	0.025774
3.265380859	0.04198
3.271484375	0.045158
3.277587891	0.039593
3.283691406	0.023378
3.289794922	0.018211
3.295898438	0.031298
3.302001953	0.035046
3.308105469	0.039553
3.314208984	0.041564
3.3203125	0.0341
3.326416016	0.047214

Time (s)	Acceleration (g)
2.725	-0.00014
2.73	-0.000156
2.735	-0.000166
2.74	-0.000173
2.745	-0.000178
2.75	-0.000178
2.755	-0.000174
2.76	-0.000171
2.765	-0.000176
2.77	-0.000187
2.775	-0.000198
2.78	-0.000208
2.785	-0.000214
2.79	-0.000208
2.795	-0.000181
2.8	-0.000146
2.805	-0.000116
2.81	-0.000092
2.815	-0.000071
2.82	-0.000066
2.825	-0.000086
2.83	-0.000128
2.835	-0.000186
2.84	-0.000256
2.845	-0.000332
2.85	-0.000388
2.855	-0.000403
2.86	-0.000378
2.865	-0.000323
2.87	-0.000253
2.875	-0.000188
2.88	-0.000142
2.885	-0.000126
2.89	-0.000136
2.895	-0.000161
2.9	-0.000197
2.905	-0.000241
2.91	-0.000273
2.915	-0.000279
2.92	-0.000264
2.925	-0.000236
2.93	-0.000199

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
3.332519531	0.093284
3.338623047	0.118704
3.344726563	0.102125
3.350830078	0.079462
3.356933594	0.052289
3.363037109	0.022162
3.369140625	0.016077
3.375244141	0.021734
3.381347656	0.029809
3.387451172	0.028592
3.393554688	0.02497
3.399658203	0.033391
3.405761719	0.033051
3.411865234	0.022881
3.41796875	0.011382
3.424072266	0.023372
3.430175781	0.022949
3.436279297	0.007088
3.442382813	0.01237
3.448486328	0.01016
3.454589844	0.011532
3.460693359	0.025113
3.466796875	0.054989
3.472900391	0.075151
3.479003906	0.073853
3.485107422	0.048021
3.491210938	0.013237
3.497314453	0.009796
3.503417969	0.012351
3.509521484	0.011922
3.515625	0.0196
3.521728516	0.031917
3.527832031	0.02936
3.533935547	0.019769
3.540039063	0.022196
3.546142578	0.020673
3.552246094	0.019149
3.558349609	0.021837
3.564453125	0.03654
3.570556641	0.053426
3.576660156	0.054248
3.582763672	0.039135

Input Motion

Time (s)	Acceleration (g)
2.935	-0.000165
2.94	-0.00014
2.945	-0.000133
2.95	-0.000137
2.955	-0.000143
2.96	-0.000152
2.965	-0.000165
2.97	-0.000174
2.975	-0.00017
2.98	-0.000163
2.985	-0.000159
2.99	-0.000166
2.995	-0.000188
3	-0.000217
3.005	-0.000241
3.01	-0.000247
3.015	-0.000223
3.02	-0.000178
3.025	-0.000132
3.03	-0.000087
3.035	-0.000046
3.04	-0.000025
3.045	-0.00003
3.05	-0.000044
3.055	-0.000051
3.06	-0.000044
3.065	-0.000017
3.07	0.000013
3.075	0.000027
3.08	0.000022
3.085	-0.00001
3.09	-0.000047
3.095	-0.000066
3.1	-0.000074
3.105	-0.000081
3.11	-0.000086
3.115	-0.000096
3.12	-0.000113
3.125	-0.000137
3.13	-0.000163
3.135	-0.000185
3.14	-0.000193

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
3.588867188	0.018118
3.594970703	0.011618
3.601074219	0.023912
3.607177734	0.037678
3.61328125	0.047537
3.619384766	0.050416
3.625488281	0.046531
3.631591797	0.034847
3.637695313	0.021737
3.643798828	0.020047
3.649902344	0.028493
3.656005859	0.034928
3.662109375	0.026722
3.668212891	0.021113
3.674316406	0.02825
3.680419922	0.026758
3.686523438	0.022012
3.692626953	0.020084
3.698730469	0.021432
3.704833984	0.033391
3.7109375	0.046187
3.717041016	0.044418
3.723144531	0.025807
3.729248047	0.010483
3.735351563	0.010039
3.741455078	0.013543
3.747558594	0.00469
3.753662109	0.015852
3.759765625	0.022703
3.765869141	0.014592
3.771972656	0.01393
3.778076172	0.025141
3.784179688	0.030768
3.790283203	0.033324
3.796386719	0.045026
3.802490234	0.052119
3.80859375	0.049744
3.814697266	0.046349
3.820800781	0.048198
3.826904297	0.051331
3.833007813	0.053789
3.839111328	0.059167

Time (s)	Acceleration (g)
3.145	-0.000183
3.15	-0.000155
3.155	-0.000114
3.16	-0.000071
3.165	-0.000035
3.17	-0.00001
3.175	0.000002
3.18	0.000001
3.185	-0.000007
3.19	-0.000022
3.195	-0.000043
3.2	-0.000061
3.205	-0.000075
3.21	-0.000078
3.215	-0.000068
3.22	-0.000056
3.225	-0.000054
3.23	-0.000063
3.235	-0.000087
3.24	-0.000114
3.245	-0.000128
3.25	-0.000132
3.255	-0.000123
3.26	-0.000108
3.265	-0.000094
3.27	-0.000078
3.275	-0.000055
3.28	-0.000029
3.285	-0.000005
3.29	0.000014
3.295	0.000026
3.3	0.000028
3.305	0.000023
3.31	0.000008
3.315	-0.000013
3.32	-0.000035
3.325	-0.000052
3.33	-0.000055
3.335	-0.00004
3.34	-0.000018
3.345	0.000001
3.35	0.000009

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
3.845214844	0.060118
3.851318359	0.046869
3.857421875	0.035843
3.863525391	0.04787
3.869628906	0.057457
3.875732422	0.056084
3.881835938	0.046742
3.887939453	0.031837
3.894042969	0.01652
3.900146484	0.008356
3.90625	0.005571
3.912353516	0.006655
3.918457031	0.010903
3.924560547	0.022013
3.930664063	0.023425
3.936767578	0.011764
3.942871094	0.000343
3.948974609	0.010481
3.955078125	0.024933
3.961181641	0.032253
3.967285156	0.02937
3.973388672	0.025397
3.979492188	0.019322
3.985595703	0.011723
3.991699219	0.016713
3.997802734	0.028144
4.00390625	0.028269
4.010009766	0.025324
4.016113281	0.021247
4.022216797	0.019887
4.028320313	0.021293
4.034423828	0.014855
4.040527344	0.030183
4.046630859	0.029847
4.052734375	0.010146
4.058837891	0.021004
4.064941406	0.045912
4.071044922	0.052882
4.077148438	0.040188
4.083251953	0.015471
4.089355469	0.013224
4.095458984	0.024756

Time (s)	Acceleration (g)
3.355	0
3.36	-0.000018
3.365	-0.000036
3.37	-0.000043
3.375	-0.00003
3.38	-0.000006
3.385	0.000017
3.39	0.000027
3.395	0.000017
3.4	-0.000011
3.405	-0.000051
3.41	-0.000086
3.415	-0.000103
3.42	-0.0001
3.425	-0.000082
3.43	-0.000057
3.435	-0.00004
3.44	-0.000033
3.445	-0.000035
3.45	-0.000049
3.455	-0.000073
3.46	-0.000093
3.465	-0.000098
3.47	-0.000083
3.475	-0.000046
3.48	0.000002
3.485	0.000045
3.49	0.000077
3.495	0.000093
3.5	0.000087
3.505	0.000061
3.51	0.00002
3.515	-0.000032
3.52	-0.00008
3.525	-0.000115
3.53	-0.000129
3.535	-0.00012
3.54	-0.000094
3.545	-0.000057
3.55	-0.000016
3.555	0.000022
3.56	0.000054

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
4.1015625	0.03386
4.107666016	0.043879
4.113769531	0.060557
4.119873047	0.069366
4.125976563	0.058575
4.132080078	0.039703
4.138183594	0.020388
4.144287109	0.013798
4.150390625	0.019832
4.156494141	0.020916
4.162597656	0.016406
4.168701172	0.015934
4.174804688	0.019341
4.180908203	0.012046
4.187011719	0.005696
4.193115234	0.010136
4.19921875	0.018862
4.205322266	0.032325
4.211425781	0.043325
4.217529297	0.045267
4.223632813	0.037279
4.229736328	0.033742
4.235839844	0.050922
4.241943359	0.064719
4.248046875	0.060593
4.254150391	0.047642
4.260253906	0.035155
4.266357422	0.027784
4.272460938	0.030887
4.278564453	0.040603
4.284667969	0.046317
4.290771484	0.04847
4.296875	0.054084
4.302978516	0.054231
4.309082031	0.046521
4.315185547	0.044444
4.321289063	0.052318
4.327392578	0.055431
4.333496094	0.047207
4.339599609	0.03962
4.345703125	0.043676
4.351806641	0.047272

Time (s)	Acceleration (g)
3.565	0.00008
3.57	0.000091
3.575	0.000076
3.58	0.000047
3.585	0.000014
3.59	-0.000019
3.595	-0.000049
3.6	-0.000065
3.605	-0.000063
3.61	-0.000044
3.615	-0.00001
3.62	0.000023
3.625	0.000041
3.63	0.000048
3.635	0.000047
3.64	0.000047
3.645	0.000056
3.65	0.000062
3.655	0.000053
3.66	0.000023
3.665	-0.000031
3.67	-0.000087
3.675	-0.000124
3.68	-0.000133
3.685	-0.000106
3.69	-0.000061
3.695	-0.00002
3.7	0.000011
3.705	0.000028
3.71	0.00003
3.715	0.000024
3.72	0.000018
3.725	0.00002
3.73	0.000033
3.735	0.000056
3.74	0.000083
3.745	0.000109
3.75	0.000121
3.755	0.000109
3.76	0.000087
3.765	0.000069
3.77	0.00006

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
4.357910156	0.044395
4.364013672	0.035792
4.370117188	0.022215
4.376220703	0.017183
4.382324219	0.026392
4.388427734	0.031429
4.39453125	0.035282
4.400634766	0.037609
4.406738281	0.033423
4.412841797	0.030068
4.418945313	0.035139
4.425048828	0.043007
4.431152344	0.044587
4.437255859	0.04487
4.443359375	0.053764
4.449462891	0.055071
4.455566406	0.043087
4.461669922	0.04156
4.467773438	0.043789
4.473876953	0.042897
4.479980469	0.046164
4.486083984	0.044546
4.4921875	0.038365
4.498291016	0.024761
4.504394531	0.009183
4.510498047	0.008766
4.516601563	0.020127
4.522705078	0.013444
4.528808594	0.016951
4.534912109	0.025465
4.541015625	0.01619
4.547119141	0.005106
4.553222656	0.012232
4.559326172	0.025157
4.565429688	0.026531
4.571533203	0.012031
4.577636719	0.02254
4.583740234	0.039402
4.58984375	0.021578
4.595947266	0.023928
4.602050781	0.046226
4.608154297	0.039223

Time (s)	Acceleration (g)
3.775	0.000067
3.78	0.000083
3.785	0.000102
3.79	0.000114
3.795	0.000109
3.8	0.000103
3.805	0.00011
3.81	0.000133
3.815	0.00017
3.82	0.000205
3.825	0.00022
3.83	0.000207
3.835	0.000164
3.84	0.000106
3.845	0.000052
3.85	0.000013
3.855	-0.000003
3.86	0.000001
3.865	0.00002
3.87	0.000032
3.875	0.000017
3.88	-0.000012
3.885	-0.000036
3.89	-0.000045
3.895	-0.000031
3.9	0.000011
3.905	0.000076
3.91	0.000141
3.915	0.000179
3.92	0.000178
3.925	0.000138
3.93	0.000066
3.935	-0.000024
3.94	-0.000095
3.945	-0.000118
3.95	-0.000098
3.955	-0.000052
3.96	0.000004
3.965	0.000052
3.97	0.000072
3.975	0.000054
3.98	0.000019

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
4.614257813	0.025999
4.620361328	0.021245
4.626464844	0.025657
4.632568359	0.037285
4.638671875	0.053051
4.644775391	0.058497
4.650878906	0.053801
4.656982422	0.056238
4.663085938	0.060439
4.669189453	0.051222
4.675292969	0.04265
4.681396484	0.045357
4.6875	0.048094
4.693603516	0.051946
4.699707031	0.049608
4.705810547	0.039534
4.711914063	0.037687
4.718017578	0.042947
4.724121094	0.042218
4.730224609	0.042259
4.736328125	0.041585
4.742431641	0.03493
4.748535156	0.0336
4.754638672	0.036652
4.760742188	0.030586
4.766845703	0.014658
4.772949219	0.01152
4.779052734	0.021885
4.78515625	0.025341
4.791259766	0.023325
4.797363281	0.018163
4.803466797	0.016508
4.809570313	0.019579
4.815673828	0.021713
4.821777344	0.024368
4.827880859	0.031819
4.833984375	0.033025
4.840087891	0.016507
4.846191406	0.010366
4.852294922	0.00669
4.858398438	0.010975
4.864501953	0.021503

Input Motion

Time (s)	Acceleration (g)
3.985	-0.000009
3.99	-0.000012
3.995	0.000018
4	0.000079
4.005	0.000162
4.01	0.000237
4.015	0.000276
4.02	0.000287
4.025	0.000283
4.03	0.000265
4.035	0.00024
4.04	0.000208
4.045	0.000169
4.05	0.000122
4.055	0.000067
4.06	0.000028
4.065	0.000025
4.07	0.000059
4.075	0.000125
4.08	0.000204
4.085	0.000271
4.09	0.000311
4.095	0.000306
4.1	0.000265
4.105	0.000213
4.11	0.000143
4.115	0.000054
4.12	-0.000015
4.125	-0.000033
4.13	-0.000006
4.135	0.000054
4.14	0.000132
4.145	0.000205
4.15	0.000266
4.155	0.00031
4.16	0.000339
4.165	0.00036
4.17	0.000365
4.175	0.000344
4.18	0.000313
4.185	0.000289
4.19	0.000269

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
4.870605469	0.020385
4.876708984	0.021967
4.8828125	0.024641
4.888916016	0.013777
4.895019531	0.009208
4.901123047	0.025626
4.907226563	0.026439
4.913330078	0.01864
4.919433594	0.009482
4.925537109	0.004883
4.931640625	0.010772
4.937744141	0.02415
4.943847656	0.028789
4.949951172	0.015598
4.956054688	0.006406
4.962158203	0.019714
4.968261719	0.020964
4.974365234	0.014426
4.98046875	0.025369
4.986572266	0.037992
4.992675781	0.033777
4.998779297	0.023254
5.004882813	0.017632
5.010986328	0.007008
5.017089844	0.014441
5.023193359	0.027263
5.029296875	0.015645
5.035400391	0.002762
5.041503906	0.0045
5.047607422	0.004816
5.053710938	0.0147
5.059814453	0.024432
5.065917969	0.022044
5.072021484	0.015213
5.078125	0.018909
5.084228516	0.015046
5.090332031	0.011717
5.096435547	0.013629
5.102539063	0.008756
5.108642578	0.004942
5.114746094	0.00983
5.120849609	0.008992

Time (s)	Acceleration (g)
4.195	0.000254
4.2	0.000241
4.205	0.000227
4.21	0.000205
4.215	0.000172
4.22	0.000132
4.225	0.000097
4.23	0.000064
4.235	0.000029
4.24	0.000009
4.245	0.000023
4.25	0.000055
4.255	0.000088
4.26	0.000131
4.265	0.000185
4.27	0.000242
4.275	0.000292
4.28	0.000328
4.285	0.000346
4.29	0.000344
4.295	0.000319
4.3	0.000292
4.305	0.000284
4.31	0.000285
4.315	0.000279
4.32	0.000272
4.325	0.000265
4.33	0.000247
4.335	0.000205
4.34	0.000153
4.345	0.000108
4.35	0.000063
4.355	0.000007
4.36	-0.000024
4.365	-0.000003
4.37	0.000043
4.375	0.00009
4.38	0.000127
4.385	0.00014
4.39	0.00013
4.395	0.000099
4.4	0.000066

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
5.126953125	0.009971
5.133056641	0.01128
5.139160156	0.00481
5.145263672	0.012676
5.151367188	0.015595
5.157470703	0.008322
5.163574219	0.008035
5.169677734	0.021733
5.17578125	0.026403
5.181884766	0.018235
5.187988281	0.007364
5.194091797	0.010231
5.200195313	0.007753
5.206298828	0.001298
5.212402344	0.014275
5.218505859	0.02281
5.224609375	0.024915
5.230712891	0.033102
5.236816406	0.035142
5.242919922	0.023832
5.249023438	0.009789
5.255126953	0.00423
5.261230469	0.012042
5.267333984	0.01789
5.2734375	0.020409
5.279541016	0.018659
5.285644531	0.016751
5.291748047	0.013091
5.297851563	0.008556
5.303955078	0.013561
5.310058594	0.02929
5.316162109	0.035277
5.322265625	0.02885
5.328369141	0.032881
5.334472656	0.041319
5.340576172	0.034585
5.346679688	0.016791
5.352783203	0.006978
5.358886719	0.005458
5.364990234	0.0238
5.37109375	0.039912
5.377197266	0.046958

Input Motion

Time (s)	Acceleration (g)
4.405	0.000055
4.41	0.000054
4.415	0.000051
4.42	0.000066
4.425	0.000107
4.43	0.000179
4.435	0.00028
4.44	0.000373
4.445	0.000428
4.45	0.000424
4.455	0.000341
4.46	0.000224
4.465	0.000128
4.47	0.000056
4.475	0.000009
4.48	-0.000004
4.485	0.000014
4.49	0.000047
4.495	0.000079
4.5	0.000111
4.505	0.000153
4.51	0.000191
4.515	0.000207
4.52	0.000221
4.525	0.000251
4.53	0.000271
4.535	0.00026
4.54	0.000228
4.545	0.000184
4.55	0.000141
4.555	0.000114
4.56	0.000119
4.565	0.000171
4.57	0.000249
4.575	0.000325
4.58	0.000399
4.585	0.00047
4.59	0.00052
4.595	0.00053
4.6	0.00051
4.605	0.000476
4.61	0.000412

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
5.383300781	0.045637
5.389404297	0.037756
5.395507813	0.038786
5.401611328	0.05918
5.407714844	0.07991
5.413818359	0.075522
5.419921875	0.053869
5.426025391	0.041416
5.432128906	0.033218
5.438232422	0.028942
5.444335938	0.033937
5.450439453	0.047557
5.456542969	0.059178
5.462646484	0.056891
5.46875	0.042505
5.474853516	0.029895
5.480957031	0.02751
5.487060547	0.028823
5.493164063	0.026247
5.499267578	0.021413
5.505371094	0.029366
5.511474609	0.03344
5.517578125	0.021578
5.523681641	0.010766
5.529785156	0.017082
5.535888672	0.013491
5.541992188	0.003885
5.548095703	0.006998
5.554199219	0.000923
5.560302734	0.00586
5.56640625	0.001022
5.572509766	0.015957
5.578613281	0.031681
5.584716797	0.038236
5.590820313	0.03367
5.596923828	0.022599
5.603027344	0.012393
5.609130859	0.005761
5.615234375	0.001195
5.621337891	0.002467
5.627441406	0.002798
5.633544922	0.001578

Input Motion

Time (s)	Acceleration (g)
4.615	0.000307
4.62	0.000196
4.625	0.000112
4.63	0.000057
4.635	0.000029
4.64	0.000038
4.645	0.000088
4.65	0.000156
4.655	0.000222
4.66	0.000274
4.665	0.000306
4.67	0.00031
4.675	0.000279
4.68	0.000235
4.685	0.000208
4.69	0.000185
4.695	0.000151
4.7	0.000134
4.705	0.000152
4.71	0.000191
4.715	0.000235
4.72	0.000271
4.725	0.000289
4.73	0.000276
4.735	0.000226
4.74	0.000177
4.745	0.000164
4.75	0.000181
4.755	0.000214
4.76	0.000252
4.765	0.000284
4.77	0.000297
4.775	0.000283
4.78	0.000267
4.785	0.000279
4.79	0.000297
4.795	0.000299
4.8	0.000294
4.805	0.000289
4.81	0.000274
4.815	0.000247
4.82	0.00021

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
5.639648438	0.002505
5.645751953	0.002532
5.651855469	0.008296
5.657958984	0.014343
5.6640625	0.012428
5.670166016	0.007779
5.676269531	0.015032
5.682373047	0.02292
5.688476563	0.029706
5.694580078	0.030536
5.700683594	0.022697
5.706787109	0.014269
5.712890625	0.024272
5.718994141	0.043841
5.725097656	0.055799
5.731201172	0.052418
5.737304688	0.036072
5.743408203	0.02061
5.749511719	0.01965
5.755615234	0.024726
5.76171875	0.032935
5.767822266	0.038828
5.773925781	0.040629
5.780029297	0.032886
5.786132813	0.022788
5.792236328	0.023956
5.798339844	0.030146
5.804443359	0.033886
5.810546875	0.039444
5.816650391	0.044924
5.822753906	0.039787
5.828857422	0.032478
5.834960938	0.03145
5.841064453	0.031816
5.847167969	0.035264
5.853271484	0.052703
5.859375	0.064361
5.865478516	0.056549
5.871582031	0.041351
5.877685547	0.034272
5.883789063	0.031707
5.889892578	0.02773

Input Motion

Time (s)	Acceleration (g)
4.825	0.000171
4.83	0.000134
4.835	0.000102
4.84	0.000104
4.845	0.000162
4.85	0.000252
4.855	0.000347
4.86	0.000428
4.865	0.000477
4.87	0.000488
4.875	0.000464
4.88	0.000426
4.885	0.000402
4.89	0.000381
4.895	0.000345
4.9	0.000311
4.905	0.000288
4.91	0.000265
4.915	0.000239
4.92	0.000212
4.925	0.000192
4.93	0.000181
4.935	0.000178
4.94	0.000196
4.945	0.000248
4.95	0.000302
4.955	0.000324
4.96	0.000327
4.965	0.000324
4.97	0.000312
4.975	0.000298
4.98	0.00028
4.985	0.000261
4.99	0.000244
4.995	0.000225
5	0.000231
5.005	0.000295
5.01	0.000366
5.015	0.000394
5.02	0.000402
5.025	0.000404
5.03	0.000399

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
5.895996094	0.024379
5.902099609	0.017827
5.908203125	0.008803
5.914306641	0.005729
5.920410156	0.009521
5.926513672	0.011281
5.932617188	0.007359
5.938720703	0.013135
5.944824219	0.021589
5.950927734	0.023101
5.95703125	0.014324
5.963134766	0.004529
5.969238281	0.005035
5.975341797	0.013187
5.981445313	0.018017
5.987548828	0.014228
5.993652344	0.009774
5.999755859	0.013003
6.005859375	0.018966
6.011962891	0.016013
6.018066406	0.016448
6.024169922	0.011868
6.030273438	0.002909
6.036376953	0.003198
6.042480469	0.011343
6.048583984	0.01922
6.0546875	0.017842
6.060791016	0.009635
6.066894531	0.007012
6.072998047	0.01099
6.079101563	0.017477
6.085205078	0.016284
6.091308594	0.008749
6.097412109	0.002588
6.103515625	0.015791
6.109619141	0.020368
6.115722656	0.013898
6.121826172	0.016899
6.127929688	0.022193
6.134033203	0.024205
6.140136719	0.021344
6.146240234	0.017772

Time (s)	Acceleration (g)
5.035	0.000394
5.04	0.000385
5.045	0.000367
5.05	0.000341
5.055	0.000305
5.06	0.000273
5.065	0.000258
5.07	0.000253
5.075	0.000245
5.08	0.000247
5.085	0.000264
5.09	0.000292
5.095	0.00032
5.1	0.000349
5.105	0.000381
5.11	0.000398
5.115	0.000381
5.12	0.000359
5.125	0.000358
5.13	0.00037
5.135	0.000388
5.14	0.000404
5.145	0.000406
5.15	0.000388
5.155	0.000345
5.16	0.000282
5.165	0.000214
5.17	0.000143
5.175	0.000069
5.18	0.000034
5.185	0.000067
5.19	0.000158
5.195	0.000284
5.2	0.000408
5.205	0.000494
5.21	0.00052
5.215	0.000475
5.22	0.000394
5.225	0.000321
5.23	0.000267
5.235	0.000237
5.24	0.000248

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
6.15234375	0.018452
6.158447266	0.023182
6.164550781	0.023479
6.170654297	0.019532
6.176757813	0.013043
6.182861328	0.008196
6.188964844	0.012334
6.195068359	0.01989
6.201171875	0.019068
6.207275391	0.013723
6.213378906	0.006441
6.219482422	0.007765
6.225585938	0.015234
6.231689453	0.016712
6.237792969	0.019151
6.243896484	0.016486
6.25	0.011149
6.256103516	0.0085
6.262207031	0.009749
6.268310547	0.012965
6.274414063	0.014869
6.280517578	0.012817
6.286621094	0.012725
6.292724609	0.011272
6.298828125	0.005507
6.304931641	0.001627
6.311035156	0.006071
6.317138672	0.007478
6.323242188	0.004499
6.329345703	0.002384
6.335449219	0.002669
6.341552734	0.007447
6.34765625	0.01303
6.353759766	0.014041
6.359863281	0.013017
6.365966797	0.017172
6.372070313	0.022563
6.378173828	0.02161
6.384277344	0.018352
6.390380859	0.016345
6.396484375	0.013299
6.402587891	0.013789

Time (s)	Acceleration (g)
5.245	0.000302
5.25	0.000379
5.255	0.000456
5.26	0.000513
5.265	0.000538
5.27	0.000523
5.275	0.000462
5.28	0.000389
5.285	0.000336
5.29	0.0003
5.295	0.000271
5.3	0.00025
5.305	0.000233
5.31	0.000209
5.315	0.000171
5.32	0.000136
5.325	0.000126
5.33	0.000127
5.335	0.000125
5.34	0.000132
5.345	0.000163
5.35	0.000195
5.355	0.000207
5.36	0.000215
5.365	0.000229
5.37	0.000244
5.375	0.000259
5.38	0.000267
5.385	0.000257
5.39	0.000237
5.395	0.000216
5.4	0.000195
5.405	0.000187
5.41	0.000187
5.415	0.000183
5.42	0.000196
5.425	0.000245
5.43	0.000286
5.435	0.000286
5.44	0.000248
5.445	0.000176
5.45	0.000101

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
6.408691406	0.017227
6.414794922	0.022905
6.420898438	0.022538
6.427001953	0.015358
6.433105469	0.014665
6.439208984	0.021533
6.4453125	0.025787
6.451416016	0.02305
6.457519531	0.018268
6.463623047	0.015425
6.469726563	0.012895
6.475830078	0.011358
6.481933594	0.013029
6.488037109	0.008586
6.494140625	0.004833
6.500244141	0.011242
6.506347656	0.017421
6.512451172	0.018276
6.518554688	0.015056
6.524658203	0.012999
6.530761719	0.009773
6.536865234	0.008713
6.54296875	0.010544
6.549072266	0.015402
6.555175781	0.018941
6.561279297	0.018149
6.567382813	0.013805
6.573486328	0.009155
6.579589844	0.00741
6.585693359	0.010942
6.591796875	0.015566
6.597900391	0.019088
6.604003906	0.022923
6.610107422	0.026614
6.616210938	0.025974
6.622314453	0.019621
6.628417969	0.011449
6.634521484	0.00871
6.640625	0.011741
6.646728516	0.01406
6.652832031	0.012793
6.658935547	0.010578

Time (s)	Acceleration (g)
5.455	0.000059
5.46	0.000054
5.465	0.000084
5.47	0.000132
5.475	0.000173
5.48	0.000198
5.485	0.000207
5.49	0.000199
5.495	0.000175
5.5	0.000172
5.505	0.000225
5.51	0.000306
5.515	0.000384
5.52	0.000445
5.525	0.000476
5.53	0.000468
5.535	0.000424
5.54	0.00037
5.545	0.000331
5.55	0.000321
5.555	0.000346
5.56	0.000394
5.565	0.000445
5.57	0.000466
5.575	0.000434
5.58	0.000354
5.585	0.000247
5.59	0.000145
5.595	0.00008
5.6	0.000079
5.605	0.000158
5.61	0.000274
5.615	0.000373
5.62	0.000441
5.625	0.000462
5.63	0.000441
5.635	0.000389
5.64	0.000329
5.645	0.000288
5.65	0.000258
5.655	0.000225
5.66	0.000211

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
6.665039063	0.010156
6.671142578	0.011033
6.677246094	0.011667
6.683349609	0.01099
6.689453125	0.017335
6.695556641	0.024007
6.701660156	0.024348
6.707763672	0.021312
6.713867188	0.016779
6.719970703	0.009917
6.726074219	0.004092
6.732177734	0.006254
6.73828125	0.010158
6.744384766	0.012269
6.750488281	0.012749
6.756591797	0.013887
6.762695313	0.015032
6.768798828	0.011039
6.774902344	0.007213
6.781005859	0.007832
6.787109375	0.007528
6.793212891	0.010391
6.799316406	0.014361
6.805419922	0.014145
6.811523438	0.010593
6.817626953	0.009406
6.823730469	0.009722
6.829833984	0.010979
6.8359375	0.007622
6.842041016	0.003086
6.848144531	0.004996
6.854248047	0.007831
6.860351563	0.011463
6.866455078	0.013563
6.872558594	0.013725
6.878662109	0.009952
6.884765625	0.005032
6.890869141	0.005198
6.896972656	0.008971
6.903076172	0.015271
6.909179688	0.013803
6.915283203	0.006952

Time (s)	Acceleration (g)
5.665	0.000227
5.67	0.000263
5.675	0.000312
5.68	0.000353
5.685	0.000373
5.69	0.000372
5.695	0.000351
5.7	0.000338
5.705	0.00036
5.71	0.0004
5.715	0.000434
5.72	0.000453
5.725	0.000446
5.73	0.000404
5.735	0.000327
5.74	0.000238
5.745	0.000166
5.75	0.000117
5.755	0.000092
5.76	0.000104
5.765	0.000158
5.77	0.000241
5.775	0.000334
5.78	0.000419
5.785	0.000477
5.79	0.000482
5.795	0.00042
5.8	0.000311
5.805	0.000184
5.81	0.000065
5.815	-0.000016
5.82	-0.000046
5.825	-0.000022
5.83	0.000041
5.835	0.000124
5.84	0.000207
5.845	0.000274
5.85	0.000321
5.855	0.000347
5.86	0.00036
5.865	0.000375
5.87	0.000379

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
6.921386719	0.004102
6.927490234	0.001942
6.93359375	0.005622
6.939697266	0.012383
6.945800781	0.01771
6.951904297	0.016915
6.958007813	0.014805
6.964111328	0.014856
6.970214844	0.016897
6.976318359	0.020988
6.982421875	0.02698
6.988525391	0.032213
6.994628906	0.031093
7.000732422	0.026006
7.006835938	0.022208
7.012939453	0.022756
7.019042969	0.028417
7.025146484	0.033548
7.03125	0.031849
7.037353516	0.025575
7.043457031	0.019271
7.049560547	0.01551
7.055664063	0.017422
7.061767578	0.022066
7.067871094	0.023171
7.073974609	0.019916
7.080078125	0.016077
7.086181641	0.014234
7.092285156	0.014556
7.098388672	0.014873
7.104492188	0.011789
7.110595703	0.009652
7.116699219	0.012977
7.122802734	0.01181
7.12890625	0.006467
7.135009766	0.005006
7.141113281	0.006296
7.147216797	0.00894
7.153320313	0.010692
7.159423828	0.011306
7.165527344	0.015303
7.171630859	0.017523

Input Motion

Time (s)	Acceleration (g)
5.875	0.000365
5.88	0.000337
5.885	0.000294
5.89	0.000268
5.895	0.00028
5.9	0.000321
5.905	0.000377
5.91	0.000422
5.915	0.000425
5.92	0.000402
5.925	0.000375
5.93	0.000347
5.935	0.000326
5.94	0.000312
5.945	0.000299
5.95	0.000275
5.955	0.000234
5.96	0.00019
5.965	0.000159
5.97	0.000164
5.975	0.000218
5.98	0.000309
5.985	0.000421
5.99	0.00052
5.995	0.000572
6	0.000583
6.005	0.000562
6.01	0.000519
6.015	0.000473
6.02	0.000421
6.025	0.00036
6.03	0.000309
6.035	0.000275
6.04	0.000263
6.045	0.000286
6.05	0.000307
6.055	0.000295
6.06	0.000277
6.065	0.000275
6.07	0.000304
6.075	0.000379
6.08	0.000463

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
7.177734375	0.015445
7.183837891	0.013194
7.189941406	0.010136
7.196044922	0.00519
7.202148438	0.004197
7.208251953	0.005649
7.214355469	0.009768
7.220458984	0.013236
7.2265625	0.012857
7.232666016	0.011702
7.238769531	0.009901
7.244873047	0.007448
7.250976563	0.007933
7.257080078	0.01084
7.263183594	0.013372
7.269287109	0.014512
7.275390625	0.015011
7.281494141	0.014415
7.287597656	0.014336
7.293701172	0.017069
7.299804688	0.020897
7.305908203	0.022384
7.312011719	0.020936
7.318115234	0.018789
7.32421875	0.018666
7.330322266	0.019292
7.336425781	0.017422
7.342529297	0.015285
7.348632813	0.016185
7.354736328	0.017486
7.360839844	0.015825
7.366943359	0.016835
7.373046875	0.019979
7.379150391	0.01906
7.385253906	0.01643
7.391357422	0.013391
7.397460938	0.009203
7.403564453	0.00553
7.409667969	0.005892
7.415771484	0.008334
7.421875	0.007593
7.427978516	0.00808

Time (s)	Acceleration (g)
6.085	0.000515
6.09	0.000512
6.095	0.000438
6.1	0.000326
6.105	0.000219
6.11	0.000144
6.115	0.000126
6.12	0.000167
6.125	0.000252
6.13	0.000363
6.135	0.000476
6.14	0.000573
6.145	0.00064
6.15	0.000664
6.155	0.000637
6.16	0.00057
6.165	0.000476
6.17	0.000368
6.175	0.000263
6.18	0.000178
6.185	0.000129
6.19	0.000124
6.195	0.00016
6.2	0.000223
6.205	0.000298
6.21	0.000356
6.215	0.000379
6.22	0.000372
6.225	0.000346
6.23	0.000324
6.235	0.000331
6.24	0.000362
6.245	0.000402
6.25	0.000443
6.255	0.000471
6.26	0.000481
6.265	0.000473
6.27	0.000445
6.275	0.000402
6.28	0.000358
6.285	0.000322
6.29	0.000311

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
7.434082031	0.008442
7.440185547	0.005567
7.446289063	0.005098
7.452392578	0.007348
7.458496094	0.010047
7.464599609	0.013839
7.470703125	0.015793
7.476806641	0.012264
7.482910156	0.008899
7.489013672	0.007223
7.495117188	0.004646
7.501220703	0.006589
7.507324219	0.011203
7.513427734	0.013988
7.51953125	0.012713
7.525634766	0.013494
7.531738281	0.016024
7.537841797	0.015968
7.543945313	0.015001
7.550048828	0.014378
7.556152344	0.011885
7.562255859	0.00905
7.568359375	0.00853
7.574462891	0.009083
7.580566406	0.012782
7.586669922	0.018
7.592773438	0.02145
7.598876953	0.022025
7.604980469	0.019964
7.611083984	0.017137
7.6171875	0.015112
7.623291016	0.014178
7.629394531	0.013689
7.635498047	0.0128
7.641601563	0.015054
7.647705078	0.018949
7.653808594	0.020529
7.659912109	0.021823
7.666015625	0.023361
7.672119141	0.023787
7.678222656	0.024105
7.684326172	0.024113

Input Motion

Time (s)	Acceleration (g)
6.295	0.000332
6.3	0.000368
6.305	0.000399
6.31	0.000411
6.315	0.000395
6.32	0.000366
6.325	0.000338
6.33	0.00033
6.335	0.000353
6.34	0.000385
6.345	0.000406
6.35	0.000393
6.355	0.000334
6.36	0.000253
6.365	0.000179
6.37	0.000149
6.375	0.000196
6.38	0.000296
6.385	0.000411
6.39	0.000502
6.395	0.000534
6.4	0.000498
6.405	0.000404
6.41	0.0003
6.415	0.000236
6.42	0.000232
6.425	0.000295
6.43	0.000386
6.435	0.000459
6.44	0.000491
6.445	0.000465
6.45	0.000404
6.455	0.000342
6.46	0.000289
6.465	0.000252
6.47	0.000234
6.475	0.000231
6.48	0.000236
6.485	0.000243
6.49	0.000256
6.495	0.000279
6.5	0.000309

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
7.690429688	0.024015
7.696533203	0.026342
7.702636719	0.029502
7.708740234	0.02957
7.71484375	0.026824
7.720947266	0.023671
7.727050781	0.022021
7.733154297	0.022067
7.739257813	0.02175
7.745361328	0.019064
7.751464844	0.014924
7.757568359	0.012236
7.763671875	0.010181
7.769775391	0.006296
7.775878906	0.001737
7.781982422	0.000711
7.788085938	0.005254
7.794189453	0.011038
7.800292969	0.01306
7.806396484	0.012062
7.8125	0.009856
7.818603516	0.006531
7.824707031	0.005213
7.830810547	0.007944
7.836914063	0.010641
7.843017578	0.01048
7.849121094	0.007033
7.855224609	0.003111
7.861328125	0.001862
7.867431641	0.002854
7.873535156	0.00584
7.879638672	0.008407
7.885742188	0.00913
7.891845703	0.009517
7.897949219	0.010578
7.904052734	0.013349
7.91015625	0.016948
7.916259766	0.02171
7.922363281	0.024434
7.928466797	0.023544
7.934570313	0.021162
7.940673828	0.018578

Time (s)	Acceleration (g)
6.505	0.00034
6.51	0.000357
6.515	0.000349
6.52	0.000302
6.525	0.000207
6.53	0.000106
6.535	0.00004
6.54	0.000018
6.545	0.000047
6.55	0.000113
6.555	0.000189
6.56	0.000266
6.565	0.00033
6.57	0.000375
6.575	0.000402
6.58	0.0004
6.585	0.000363
6.59	0.000314
6.595	0.000277
6.6	0.000265
6.605	0.000286
6.61	0.000329
6.615	0.00038
6.62	0.000413
6.625	0.000408
6.63	0.000368
6.635	0.000306
6.64	0.000248
6.645	0.000207
6.65	0.000212
6.655	0.000281
6.66	0.000356
6.665	0.000381
6.67	0.000359
6.675	0.000297
6.68	0.00022
6.685	0.000162
6.69	0.000134
6.695	0.000142
6.7	0.000172
6.705	0.000198
6.71	0.000232

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
7.946777344	0.016152
7.952880859	0.014262
7.958984375	0.014055
7.965087891	0.017533
7.971191406	0.023092
7.977294922	0.026979
7.983398438	0.028549
7.989501953	0.027825
7.995605469	0.024333
8.001708984	0.020887
8.0078125	0.018709
8.013916016	0.017122
8.020019531	0.017957
8.026123047	0.021225
8.032226563	0.023202
8.038330078	0.023169
8.044433594	0.02352
8.050537109	0.023394
8.056640625	0.02177
8.062744141	0.019713
8.068847656	0.018675
8.074951172	0.018726
8.081054688	0.019086
8.087158203	0.018194
8.093261719	0.01611
8.099365234	0.01456
8.10546875	0.014811
8.111572266	0.016493
8.117675781	0.017855
8.123779297	0.015642
8.129882813	0.010379
8.135986328	0.008875
8.142089844	0.010969
8.148193359	0.012379
8.154296875	0.01201
8.160400391	0.011396
8.166503906	0.012678
8.172607422	0.012233
8.178710938	0.008342
8.184814453	0.005855
8.190917969	0.007507
8.197021484	0.011498

Time (s)	Acceleration (g)
6.715	0.000284
6.72	0.000334
6.725	0.000367
6.73	0.00038
6.735	0.000369
6.74	0.000332
6.745	0.000272
6.75	0.000203
6.755	0.000145
6.76	0.000099
6.765	0.000061
6.77	0.000059
6.775	0.000114
6.78	0.000196
6.785	0.000274
6.79	0.000342
6.795	0.000392
6.8	0.000423
6.805	0.000443
6.81	0.000451
6.815	0.000452
6.82	0.00044
6.825	0.000406
6.83	0.000371
6.835	0.00036
6.84	0.000356
6.845	0.000345
6.85	0.000339
6.855	0.000351
6.86	0.000366
6.865	0.000367
6.87	0.000366
6.875	0.000372
6.88	0.000363
6.885	0.000321
6.89	0.000262
6.895	0.000206
6.9	0.000151
6.905	0.0001
6.91	0.000078
6.915	0.000098
6.92	0.000154

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
8.203125	0.015642
8.209228516	0.018425
8.215332031	0.017619
8.221435547	0.013891
8.227539063	0.010911
8.233642578	0.011167
8.239746094	0.01296
8.245849609	0.013509
8.251953125	0.012509
8.258056641	0.01128
8.264160156	0.010901
8.270263672	0.010998
8.276367188	0.01166
8.282470703	0.013436
8.288574219	0.0155
8.294677734	0.016857
8.30078125	0.01849
8.306884766	0.01976
8.312988281	0.018641
8.319091797	0.01802
8.325195313	0.020167
8.331298828	0.020035
8.337402344	0.015705
8.343505859	0.015255
8.349609375	0.018161
8.355712891	0.018978
8.361816406	0.020299
8.367919922	0.023074
8.374023438	0.024668
8.380126953	0.022723
8.386230469	0.019174
8.392333984	0.015972
8.3984375	0.014231
8.404541016	0.014279
8.410644531	0.012641
8.416748047	0.010874
8.422851563	0.009073
8.428955078	0.00714
8.435058594	0.007415
8.441162109	0.008491
8.447265625	0.007361
8.453369141	0.005854

Input Motion

Time (s)	Acceleration (g)
6.925	0.000234
6.93	0.000299
6.935	0.000323
6.94	0.000295
6.945	0.000215
6.95	0.000135
6.955	0.00011
6.96	0.000128
6.965	0.000165
6.97	0.000201
6.975	0.000214
6.98	0.000184
6.985	0.0001
6.99	0.000021
6.995	0.000003
7	0.000046
7.005	0.000142
7.01	0.000251
7.015	0.000333
7.02	0.000367
7.025	0.000339
7.03	0.000288
7.035	0.000259
7.04	0.00025
7.045	0.000252
7.05	0.000259
7.055	0.000255
7.06	0.000234
7.065	0.000192
7.07	0.000138
7.075	0.000089
7.08	0.000043
7.085	-0.000008
7.09	-0.000043
7.095	-0.000048
7.1	-0.000042
7.105	-0.000047
7.11	-0.000052
7.115	-0.000049
7.12	-0.000051
7.125	-0.000067
7.13	-0.000076

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
8.459472656	0.005197
8.465576172	0.005011
8.471679688	0.003209
8.477783203	0.004418
8.483886719	0.006432
8.489990234	0.005903
8.49609375	0.003243
8.502197266	0.002208
8.508300781	0.004446
8.514404297	0.004847
8.520507813	0.003663
8.526611328	0.005046
8.532714844	0.00868
8.538818359	0.011798
8.544921875	0.013289
8.551025391	0.014684
8.557128906	0.017127
8.563232422	0.019647
8.569335938	0.020956
8.575439453	0.020818
8.581542969	0.019003
8.587646484	0.015953
8.59375	0.012347
8.599853516	0.010119
8.605957031	0.01125
8.612060547	0.014875
8.618164063	0.018124
8.624267578	0.018529
8.630371094	0.017402
8.636474609	0.016511
8.642578125	0.017009
8.648681641	0.018692
8.654785156	0.021424
8.660888672	0.023397
8.666992188	0.021315
8.673095703	0.016156
8.679199219	0.012315
8.685302734	0.013049
8.69140625	0.017635
8.697509766	0.022183
8.703613281	0.023837
8.709716797	0.022578

Time (s)	Acceleration (g)
7.135	-0.000061
7.14	-0.000028
7.145	0.000009
7.15	0.000047
7.155	0.000086
7.16	0.00009
7.165	0.000028
7.17	-0.000067
7.175	-0.000156
7.18	-0.000227
7.185	-0.000268
7.19	-0.000264
7.195	-0.000214
7.2	-0.000139
7.205	-0.000066
7.21	-0.000014
7.215	0.000007
7.22	-0.000004
7.225	-0.000044
7.23	-0.000073
7.235	-0.000055
7.24	-0.000001
7.245	0.000069
7.25	0.000146
7.255	0.000216
7.26	0.000249
7.265	0.000223
7.27	0.000157
7.275	0.000078
7.28	-0.000003
7.285	-0.000077
7.29	-0.000126
7.295	-0.000134
7.3	-0.000123
7.305	-0.000118
7.31	-0.000115
7.315	-0.000105
7.32	-0.000105
7.325	-0.000125
7.33	-0.000147
7.335	-0.000148
7.34	-0.00013

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
8.715820313	0.019796
8.721923828	0.016367
8.728027344	0.013709
8.734130859	0.012668
8.740234375	0.011795
8.746337891	0.010065
8.752441406	0.011775
8.758544922	0.015311
8.764648438	0.013049
8.770751953	0.006473
8.776855469	0.003355
8.782958984	0.004021
8.7890625	0.004691
8.795166016	0.004593
8.801269531	0.003796
8.807373047	0.005365
8.813476563	0.00597
8.819580078	0.004395
8.825683594	0.00278
8.831787109	0.004174
8.837890625	0.004841
8.843994141	0.008732
8.850097656	0.012848
8.856201172	0.014496
8.862304688	0.013241
8.868408203	0.010385
8.874511719	0.010028
8.880615234	0.013713
8.88671875	0.017161
8.892822266	0.017826
8.898925781	0.015776
8.905029297	0.012404
8.911132813	0.009773
8.917236328	0.010353
8.923339844	0.014022
8.929443359	0.018221
8.935546875	0.02071
8.941650391	0.021759
8.947753906	0.023629
8.953857422	0.02555
8.959960938	0.025064
8.966064453	0.022831

Time (s)	Acceleration (g)
7.345	-0.000099
7.35	-0.000042
7.355	0.000047
7.36	0.000134
7.365	0.000183
7.37	0.000193
7.375	0.000173
7.38	0.000117
7.385	0.000027
7.39	-0.000058
7.395	-0.000105
7.4	-0.000123
7.405	-0.000125
7.41	-0.000118
7.415	-0.000105
7.42	-0.000101
7.425	-0.000122
7.43	-0.000127
7.435	-0.000075
7.44	0.000002
7.445	0.000073
7.45	0.000136
7.455	0.000186
7.46	0.000209
7.465	0.000195
7.47	0.000155
7.475	0.000107
7.48	0.000047
7.485	-0.000029
7.49	-0.000087
7.495	-0.000098
7.5	-0.000086
7.505	-0.000073
7.51	-0.000071
7.515	-0.000086
7.52	-0.000117
7.525	-0.000161
7.53	-0.000185
7.535	-0.000163
7.54	-0.00011
7.545	-0.000049
7.55	0.000007

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
8.972167969	0.021204
8.978271484	0.022494
8.984375	0.026503
8.990478516	0.029959
8.996582031	0.030773
9.002685547	0.029451
9.008789063	0.026004
9.014892578	0.021997
9.020996094	0.020889
9.027099609	0.022465
9.033203125	0.022894
9.039306641	0.022269
9.045410156	0.021892
9.051513672	0.02014
9.057617188	0.017379
9.063720703	0.016419
9.069824219	0.014271
9.075927734	0.011764
9.08203125	0.012188
9.088134766	0.012012
9.094238281	0.006265
9.100341797	0.003939
9.106445313	0.002738
9.112548828	0.007091
9.118652344	0.011172
9.124755859	0.010066
9.130859375	0.005989
9.136962891	0.003428
9.143066406	0.004258
9.149169922	0.003338
9.155273438	0.000278
9.161376953	0.001295
9.167480469	0.00127
9.173583984	0.004349
9.1796875	0.006805
9.185791016	0.008913
9.191894531	0.011396
9.197998047	0.014074
9.204101563	0.01582
9.210205078	0.016021
9.216308594	0.016213
9.222412109	0.016369

Time (s)	Acceleration (g)
7.555	0.000048
7.56	0.000058
7.565	0.000026
7.57	-0.000022
7.575	-0.000054
7.58	-0.000083
7.585	-0.000127
7.59	-0.000154
7.595	-0.000144
7.6	-0.000111
7.605	-0.000071
7.61	-0.000035
7.615	-0.000008
7.62	0.000002
7.625	-0.000011
7.63	-0.000013
7.635	0.000028
7.64	0.000076
7.645	0.000098
7.65	0.000096
7.655	0.000072
7.66	0.000043
7.665	0.000026
7.67	0.000027
7.675	0.00005
7.68	0.00006
7.685	0.000021
7.69	-0.000059
7.695	-0.000159
7.7	-0.000263
7.705	-0.000355
7.71	-0.000398
7.715	-0.000367
7.72	-0.000309
7.725	-0.000273
7.73	-0.000266
7.735	-0.000289
7.74	-0.000324
7.745	-0.000349
7.75	-0.000344
7.755	-0.000297
7.76	-0.000238

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
9.228515625	0.01682
9.234619141	0.016418
9.240722656	0.015928
9.246826172	0.018536
9.252929688	0.020676
9.259033203	0.021184
9.265136719	0.022819
9.271240234	0.025136
9.27734375	0.02549
9.283447266	0.023826
9.289550781	0.021081
9.295654297	0.019365
9.301757813	0.021053
9.307861328	0.024784
9.313964844	0.026451
9.320068359	0.02646
9.326171875	0.027527
9.332275391	0.028059
9.338378906	0.026978
9.344482422	0.025547
9.350585938	0.024238
9.356689453	0.023113
9.362792969	0.022085
9.368896484	0.020826
9.375	0.019879
9.381103516	0.019507
9.387207031	0.019117
9.393310547	0.018096
9.399414063	0.01581
9.405517578	0.012692
9.411621094	0.010831
9.417724609	0.010105
9.423828125	0.008924
9.429931641	0.008018
9.436035156	0.007903
9.442138672	0.006988
9.448242188	0.005188
9.454345703	0.0039
9.460449219	0.003261
9.466552734	0.002044
9.47265625	0.000883
9.478759766	0.003964

Time (s)	Acceleration (g)
7.765	-0.0002
7.77	-0.000184
7.775	-0.000184
7.78	-0.000192
7.785	-0.000199
7.79	-0.000185
7.795	-0.000134
7.8	-0.000086
7.805	-0.00008
7.81	-0.000108
7.815	-0.000154
7.82	-0.000209
7.825	-0.000262
7.83	-0.000291
7.835	-0.000282
7.84	-0.000267
7.845	-0.000279
7.85	-0.000314
7.855	-0.000362
7.86	-0.000399
7.865	-0.000401
7.87	-0.000352
7.875	-0.000244
7.88	-0.00011
7.885	0.000001
7.89	0.000083
7.895	0.000138
7.9	0.000138
7.905	0.000068
7.91	-0.000026
7.915	-0.000103
7.92	-0.000153
7.925	-0.000174
7.93	-0.000174
7.935	-0.000165
7.94	-0.000169
7.945	-0.000207
7.95	-0.000244
7.955	-0.000241
7.96	-0.000223
7.965	-0.000208
7.97	-0.000194

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
9.484863281	0.006961
9.490966797	0.009261
9.497070313	0.010864
9.503173828	0.011169
9.509277344	0.010968
9.515380859	0.011058
9.521484375	0.011058
9.527587891	0.012687
9.533691406	0.015035
9.539794922	0.015579
9.545898438	0.014701
9.552001953	0.014676
9.558105469	0.015888
9.564208984	0.019296
9.5703125	0.023792
9.576416016	0.024817
9.582519531	0.021856
9.588623047	0.019787
9.594726563	0.021815
9.600830078	0.025612
9.606933594	0.028104
9.613037109	0.027971
9.619140625	0.024838
9.625244141	0.021471
9.631347656	0.021409
9.637451172	0.02446
9.643554688	0.027767
9.649658203	0.029402
9.655761719	0.028941
9.661865234	0.025157
9.66796875	0.019713
9.674072266	0.01724
9.680175781	0.019549
9.686279297	0.024293
9.692382813	0.027177
9.698486328	0.025714
9.704589844	0.021055
9.710693359	0.016622
9.716796875	0.014774
9.722900391	0.014871
9.729003906	0.016033
9.735107422	0.016446

Input Motion

Time (s)	Acceleration (g)
7.975	-0.000189
7.98	-0.000184
7.985	-0.000167
7.99	-0.00015
7.995	-0.000142
8	-0.00015
8.005	-0.000186
8.01	-0.000239
8.015	-0.00029
8.02	-0.000338
8.025	-0.000389
8.03	-0.000416
8.035	-0.000398
8.04	-0.000356
8.045	-0.000315
8.05	-0.000268
8.055	-0.000213
8.06	-0.000163
8.065	-0.000129
8.07	-0.000107
8.075	-0.000092
8.08	-0.000085
8.085	-0.00009
8.09	-0.000102
8.095	-0.000113
8.1	-0.000133
8.105	-0.00017
8.11	-0.000209
8.115	-0.000238
8.12	-0.000252
8.125	-0.000248
8.13	-0.000238
8.135	-0.000234
8.14	-0.00024
8.145	-0.000262
8.15	-0.000277
8.155	-0.000258
8.16	-0.000221
8.165	-0.000185
8.17	-0.000153
8.175	-0.000131
8.18	-0.000134

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
9.741210938	0.013871
9.747314453	0.010697
9.753417969	0.010405
9.759521484	0.011402
9.765625	0.009456
9.771728516	0.005965
9.777832031	0.004458
9.783935547	0.003184
9.790039063	0.002938
9.796142578	0.002717
9.802246094	0.002664
9.808349609	0.002865
9.814453125	0.003649
9.820556641	0.005092
9.826660156	0.005647
9.832763672	0.004771
9.838867188	0.003915
9.844970703	0.005877
9.851074219	0.007834
9.857177734	0.008142
9.86328125	0.0089
9.869384766	0.009358
9.875488281	0.007977
9.881591797	0.007309
9.887695313	0.00852
9.893798828	0.010305
9.899902344	0.011386
9.906005859	0.01189
9.912109375	0.013056
9.918212891	0.014784
9.924316406	0.015917
9.930419922	0.016122
9.936523438	0.015762
9.942626953	0.014877
9.948730469	0.01494
9.954833984	0.016394
9.9609375	0.018837
9.967041016	0.021464
9.973144531	0.021259
9.979248047	0.018165
9.985351563	0.015596
9.991455078	0.014792

Input Motion

Time (s)	Acceleration (g)
8.185	-0.000168
8.19	-0.000225
8.195	-0.000295
8.2	-0.000371
8.205	-0.000447
8.21	-0.000519
8.215	-0.000579
8.22	-0.000627
8.225	-0.000664
8.23	-0.000662
8.235	-0.000598
8.24	-0.000494
8.245	-0.000376
8.25	-0.000267
8.255	-0.000189
8.26	-0.000158
8.265	-0.000183
8.27	-0.000246
8.275	-0.000325
8.28	-0.000408
8.285	-0.000482
8.29	-0.000541
8.295	-0.000576
8.3	-0.000597
8.305	-0.000615
8.31	-0.000607
8.315	-0.000556
8.32	-0.00047
8.325	-0.000359
8.33	-0.000264
8.335	-0.000222
8.34	-0.000225
8.345	-0.000266
8.35	-0.000303
8.355	-0.000291
8.36	-0.000253
8.365	-0.000216
8.37	-0.000181
8.375	-0.000163
8.38	-0.000156
8.385	-0.000149
8.39	-0.00016

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
9.997558594	0.013652
10.00366211	0.011261
10.00976563	0.009343
10.01586914	0.010247
10.02197266	0.013632
10.02807617	0.015884
10.03417969	0.014694
10.0402832	0.011854
10.04638672	0.009766
10.05249023	0.008947
10.05859375	0.009253
10.06469727	0.010375
10.07080078	0.011735
10.0769043	0.013197
10.08300781	0.013899
10.08911133	0.012692
10.09521484	0.010373
10.10131836	0.008304
10.10742188	0.007545
10.11352539	0.00831
10.11962891	0.008795
10.12573242	0.007801
10.13183594	0.006109
10.13793945	0.004418
10.14404297	0.004052
10.15014648	0.006756
10.15625	0.009671
10.16235352	0.008714
10.16845703	0.004894
10.17456055	0.00244
10.18066406	0.003392
10.18676758	0.009008
10.19287109	0.012854
10.19897461	0.01314
10.20507813	0.010789
10.21118164	0.007246
10.21728516	0.005857
10.22338867	0.008449
10.22949219	0.012975
10.2355957	0.016103
10.24169922	0.015206
10.24780273	0.012879

Time (s)	Acceleration (g)
8.395	-0.000197
8.4	-0.000253
8.405	-0.000324
8.41	-0.000381
8.415	-0.00039
8.42	-0.000369
8.425	-0.000343
8.43	-0.000303
8.435	-0.00025
8.44	-0.000209
8.445	-0.000193
8.45	-0.000218
8.455	-0.0003
8.46	-0.000394
8.465	-0.00046
8.47	-0.000484
8.475	-0.000457
8.48	-0.000399
8.485	-0.000337
8.49	-0.00028
8.495	-0.000238
8.5	-0.000209
8.505	-0.000185
8.51	-0.000178
8.515	-0.000191
8.52	-0.000225
8.525	-0.000285
8.53	-0.00034
8.535	-0.000365
8.54	-0.000361
8.545	-0.000338
8.55	-0.000304
8.555	-0.000279
8.56	-0.000267
8.565	-0.000269
8.57	-0.000289
8.575	-0.000325
8.58	-0.000367
8.585	-0.000409
8.59	-0.000444
8.595	-0.000464
8.6	-0.000482

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
10.25390625	0.012704
10.26000977	0.013982
10.26611328	0.014737
10.2722168	0.014932
10.27832031	0.014266
10.28442383	0.01306
10.29052734	0.013507
10.29663086	0.01401
10.30273438	0.012728
10.30883789	0.011712
10.31494141	0.011914
10.32104492	0.011979
10.32714844	0.012408
10.33325195	0.013095
10.33935547	0.012458
10.34545898	0.012032
10.3515625	0.012359
10.35766602	0.011269
10.36376953	0.009453
10.36987305	0.008794
10.37597656	0.00895
10.38208008	0.009434
10.38818359	0.009278
10.39428711	0.009403
10.40039063	0.009965
10.40649414	0.009361
10.41259766	0.007732
10.41870117	0.00605
10.42480469	0.004775
10.4309082	0.003608
10.43701172	0.002835
10.44311523	0.003372
10.44921875	0.004753
10.45532227	0.005019
10.46142578	0.004625
10.4675293	0.004848
10.47363281	0.005639
10.47973633	0.006689
10.48583984	0.00723
10.49194336	0.006219
10.49804688	0.004864
10.50415039	0.005701

Time (s)	Acceleration (g)
8.605	-0.000512
8.61	-0.000548
8.615	-0.000584
8.62	-0.000617
8.625	-0.000641
8.63	-0.000656
8.635	-0.000664
8.64	-0.000661
8.645	-0.000647
8.65	-0.00062
8.655	-0.000579
8.66	-0.000537
8.665	-0.000504
8.67	-0.000498
8.675	-0.000528
8.68	-0.000578
8.685	-0.000624
8.69	-0.000647
8.695	-0.000629
8.7	-0.000572
8.705	-0.000487
8.71	-0.0004
8.715	-0.000337
8.72	-0.000317
8.725	-0.000345
8.73	-0.000411
8.735	-0.000497
8.74	-0.000572
8.745	-0.000607
8.75	-0.000596
8.755	-0.000539
8.76	-0.000457
8.765	-0.000377
8.77	-0.000307
8.775	-0.000254
8.78	-0.00023
8.785	-0.000236
8.79	-0.000272
8.795	-0.00034
8.8	-0.000412
8.805	-0.000463
8.81	-0.000494

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
10.51025391	0.00823
10.51635742	0.010331
10.52246094	0.011515
10.52856445	0.012054
10.53466797	0.011366
10.54077148	0.010183
10.546875	0.010737
10.55297852	0.013212
10.55908203	0.015659
10.56518555	0.016533
10.57128906	0.015818
10.57739258	0.014143
10.58349609	0.012584
10.58959961	0.012621
10.59570313	0.013491
10.60180664	0.013232
10.60791016	0.012896
10.61401367	0.013554
10.62011719	0.013946
10.6262207	0.013538
10.63232422	0.012836
10.63842773	0.011884
10.64453125	0.011359
10.65063477	0.011724
10.65673828	0.01193
10.6628418	0.01217
10.66894531	0.012466
10.67504883	0.012046
10.68115234	0.011774
10.68725586	0.012052
10.69335938	0.012197
10.69946289	0.01167
10.70556641	0.010085
10.71166992	0.008547
10.71777344	0.008456
10.72387695	0.008759
10.72998047	0.008195
10.73608398	0.00788
10.7421875	0.008494
10.74829102	0.009268
10.75439453	0.008538
10.76049805	0.007442

Time (s)	Acceleration (g)
8.815	-0.000512
8.82	-0.000522
8.825	-0.000534
8.83	-0.000555
8.835	-0.00059
8.84	-0.000613
8.845	-0.000606
8.85	-0.000557
8.855	-0.00046
8.86	-0.00035
8.865	-0.000262
8.87	-0.000222
8.875	-0.00025
8.88	-0.000322
8.885	-0.000408
8.89	-0.000479
8.895	-0.000508
8.9	-0.000507
8.905	-0.000494
8.91	-0.000467
8.915	-0.000432
8.92	-0.000388
8.925	-0.00033
8.93	-0.000286
8.935	-0.000281
8.94	-0.000307
8.945	-0.000358
8.95	-0.000411
8.955	-0.000441
8.96	-0.000446
8.965	-0.000424
8.97	-0.000395
8.975	-0.000381
8.98	-0.000376
8.985	-0.000369
8.99	-0.000363
8.995	-0.000358
9	-0.000343
9.005	-0.00031
9.01	-0.000281
9.015	-0.000277
9.02	-0.000303

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
10.76660156	0.007447
10.77270508	0.007216
10.77880859	0.006326
10.78491211	0.006109
10.79101563	0.005753
10.79711914	0.004734
10.80322266	0.004738
10.80932617	0.005686
10.81542969	0.006427
10.8215332	0.007211
10.82763672	0.006634
10.83374023	0.004888
10.83984375	0.004331
10.84594727	0.005739
10.85205078	0.007015
10.8581543	0.007239
10.86425781	0.006936
10.87036133	0.006818
10.87646484	0.006915
10.88256836	0.007737
10.88867188	0.009402
10.89477539	0.010693
10.90087891	0.010712
10.90698242	0.009658
10.91308594	0.008296
10.91918945	0.008058
10.92529297	0.008314
10.93139648	0.008233
10.9375	0.007887
10.94360352	0.008202
10.94970703	0.008589
10.95581055	0.008689
10.96191406	0.009922
10.96801758	0.011947
10.97412109	0.012816
10.98022461	0.011984
10.98632813	0.010261
10.99243164	0.009062
10.99853516	0.009834
11.00463867	0.010839
11.01074219	0.011229
11.0168457	0.011379

Time (s)	Acceleration (g)
9.025	-0.000359
9.03	-0.000432
9.035	-0.000501
9.04	-0.000557
9.045	-0.000594
9.05	-0.000607
9.055	-0.000605
9.06	-0.000596
9.065	-0.000582
9.07	-0.000592
9.075	-0.000648
9.08	-0.000712
9.085	-0.000747
9.09	-0.000737
9.095	-0.000669
9.1	-0.000569
9.105	-0.000469
9.11	-0.000391
9.115	-0.000358
9.12	-0.000356
9.125	-0.000361
9.13	-0.000366
9.135	-0.000365
9.14	-0.000346
9.145	-0.000307
9.15	-0.000276
9.155	-0.000277
9.16	-0.000323
9.165	-0.000416
9.17	-0.000528
9.175	-0.000628
9.18	-0.000688
9.185	-0.000687
9.19	-0.00064
9.195	-0.000572
9.2	-0.000502
9.205	-0.000449
9.21	-0.000417
9.215	-0.000406
9.22	-0.000407
9.225	-0.0004
9.23	-0.000408

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
11.02294922	0.011011
11.02905273	0.010604
11.03515625	0.011639
11.04125977	0.012695
11.04736328	0.012215
11.0534668	0.010459
11.05957031	0.009163
11.06567383	0.010178
11.07177734	0.011592
11.07788086	0.011391
11.08398438	0.010758
11.09008789	0.01085
11.09619141	0.010639
11.10229492	0.009522
11.10839844	0.00786
11.11450195	0.006371
11.12060547	0.006246
11.12670898	0.007601
11.1328125	0.008817
11.13891602	0.009462
11.14501953	0.009215
11.15112305	0.00757
11.15722656	0.005886
11.16333008	0.005412
11.16943359	0.006204
11.17553711	0.008037
11.18164063	0.010168
11.18774414	0.01119
11.19384766	0.010347
11.19995117	0.008901
11.20605469	0.008039
11.2121582	0.007922
11.21826172	0.008412
11.22436523	0.0086
11.23046875	0.007943
11.23657227	0.007761
11.24267578	0.008539
11.2487793	0.008899
11.25488281	0.009214
11.26098633	0.010434
11.26708984	0.011228
11.27319336	0.011307

Time (s)	Acceleration (g)
9.235	-0.000457
9.24	-0.000516
9.245	-0.000557
9.25	-0.000586
9.255	-0.000602
9.26	-0.00061
9.265	-0.000619
9.27	-0.000611
9.275	-0.000575
9.28	-0.000506
9.285	-0.0004
9.29	-0.000295
9.295	-0.000239
9.3	-0.000228
9.305	-0.000256
9.31	-0.000336
9.315	-0.000459
9.32	-0.000602
9.325	-0.000741
9.33	-0.00083
9.335	-0.000836
9.34	-0.000767
9.345	-0.000636
9.35	-0.000504
9.355	-0.000437
9.36	-0.000419
9.365	-0.000426
9.37	-0.000455
9.375	-0.000494
9.38	-0.000527
9.385	-0.000544
9.39	-0.000556
9.395	-0.00058
9.4	-0.000598
9.405	-0.000594
9.41	-0.000578
9.415	-0.000554
9.42	-0.000531
9.425	-0.000515
9.43	-0.000508
9.435	-0.000508
9.44	-0.000509

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
11.27929688	0.010998
11.28540039	0.010298
11.29150391	0.009561
11.29760742	0.009296
11.30371094	0.009817
11.30981445	0.010757
11.31591797	0.011142
11.32202148	0.010714
11.328125	0.009313
11.33422852	0.008037
11.34033203	0.008338
11.34643555	0.00954
11.35253906	0.010009
11.35864258	0.010125
11.36474609	0.010214
11.37084961	0.009704
11.37695313	0.009528
11.38305664	0.010314
11.38916016	0.010845
11.39526367	0.010884
11.40136719	0.011415
11.4074707	0.011755
11.41357422	0.010819
11.41967773	0.009867
11.42578125	0.009663
11.43188477	0.009296
11.43798828	0.009144
11.4440918	0.008993
11.45019531	0.008062
11.45629883	0.007987
11.46240234	0.009323
11.46850586	0.01026
11.47460938	0.010445
11.48071289	0.010378
11.48681641	0.009877
11.49291992	0.009753
11.49902344	0.009629
11.50512695	0.008602
11.51123047	0.008272
11.51733398	0.009425
11.5234375	0.010748
11.52954102	0.011573

Time (s)	Acceleration (g)
9.445	-0.000506
9.45	-0.000494
9.455	-0.000474
9.46	-0.000451
9.465	-0.000429
9.47	-0.00041
9.475	-0.0004
9.48	-0.000392
9.485	-0.000371
9.49	-0.000361
9.495	-0.000387
9.5	-0.000421
9.505	-0.000441
9.51	-0.000449
9.515	-0.000449
9.52	-0.000444
9.525	-0.000437
9.53	-0.000442
9.535	-0.00048
9.54	-0.000512
9.545	-0.000504
9.55	-0.000484
9.555	-0.000476
9.56	-0.000481
9.565	-0.000504
9.57	-0.000521
9.575	-0.00051
9.58	-0.000469
9.585	-0.000399
9.59	-0.000329
9.595	-0.000298
9.6	-0.000294
9.605	-0.000298
9.61	-0.000321
9.615	-0.000365
9.62	-0.000396
9.625	-0.000387
9.63	-0.000346
9.635	-0.000287
9.64	-0.000233
9.645	-0.000204
9.65	-0.000218

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
11.53564453	0.011179
11.54174805	0.00929
11.54785156	0.007567
11.55395508	0.007499
11.56005859	0.008411
11.56616211	0.009346
11.57226563	0.009606
11.57836914	0.009589
11.58447266	0.009513
11.59057617	0.009405
11.59667969	0.00943
11.6027832	0.009824
11.60888672	0.010793
11.61499023	0.011132
11.62109375	0.010213
11.62719727	0.009213
11.63330078	0.008604
11.6394043	0.008184
11.64550781	0.009006
11.65161133	0.011024
11.65771484	0.012392
11.66381836	0.01214
11.66992188	0.010437
11.67602539	0.008626
11.68212891	0.008666
11.68823242	0.010097
11.69433594	0.011044
11.70043945	0.010926
11.70654297	0.009837
11.71264648	0.008803
11.71875	0.008403
11.72485352	0.008018
11.73095703	0.007709
11.73706055	0.007556
11.74316406	0.007452
11.74926758	0.008101
11.75537109	0.009104
11.76147461	0.008818
11.76757813	0.007505
11.77368164	0.006739
11.77978516	0.006707
11.78588867	0.007131

Input Motion

Time (s)	Acceleration (g)
9.655	-0.000284
9.66	-0.000369
9.665	-0.000433
9.67	-0.000468
9.675	-0.000476
9.68	-0.000445
9.685	-0.000382
9.69	-0.000324
9.695	-0.000302
9.7	-0.000335
9.705	-0.000426
9.71	-0.000544
9.715	-0.00066
9.72	-0.000715
9.725	-0.00066
9.73	-0.000544
9.735	-0.000423
9.74	-0.000326
9.745	-0.000285
9.75	-0.000297
9.755	-0.000346
9.76	-0.000405
9.765	-0.00044
9.77	-0.000452
9.775	-0.00045
9.78	-0.000424
9.785	-0.000373
9.79	-0.000322
9.795	-0.000291
9.8	-0.000283
9.805	-0.000296
9.81	-0.000315
9.815	-0.000325
9.82	-0.000307
9.825	-0.000246
9.83	-0.000171
9.835	-0.000117
9.84	-0.000085
9.845	-0.000079
9.85	-0.000101
9.855	-0.000153
9.86	-0.000217

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
11.79199219	0.008354
11.7980957	0.009706
11.80419922	0.010016
11.81030273	0.008917
11.81640625	0.007751
11.82250977	0.007514
11.82861328	0.007467
11.8347168	0.007159
11.84082031	0.006618
11.84692383	0.005677
11.85302734	0.005494
11.85913086	0.006467
11.86523438	0.00758
11.87133789	0.008356
11.87744141	0.008634
11.88354492	0.008358
11.88964844	0.007969
11.89575195	0.007265
11.90185547	0.006146
11.90795898	0.005572
11.9140625	0.00601
11.92016602	0.006832
11.92626953	0.00743
11.93237305	0.007636
11.93847656	0.007542
11.94458008	0.00722
11.95068359	0.006689
11.95678711	0.006077
11.96289063	0.005847
11.96899414	0.006745
11.97509766	0.008009
11.98120117	0.008125
11.98730469	0.007517
11.9934082	0.007026
11.99951172	0.00646
12.00561523	0.006549
12.01171875	0.007584
12.01782227	0.008515
12.02392578	0.009051
12.0300293	0.009472
12.03613281	0.009029
12.04223633	0.007662

Input Motion

Time (s)	Acceleration (g)
9.865	-0.000275
9.87	-0.000335
9.875	-0.000411
9.88	-0.000471
9.885	-0.000487
9.89	-0.000476
9.895	-0.000454
9.9	-0.000418
9.905	-0.000372
9.91	-0.000326
9.915	-0.000289
9.92	-0.000269
9.925	-0.000267
9.93	-0.0003
9.935	-0.00038
9.94	-0.000468
9.945	-0.000521
9.95	-0.000533
9.955	-0.000505
9.96	-0.000428
9.965	-0.000304
9.97	-0.000186
9.975	-0.00012
9.98	-0.000111
9.985	-0.000152
9.99	-0.000225
9.995	-0.000301
10	-0.000355
10.005	-0.000365
10.01	-0.000339
10.015	-0.000296
10.02	-0.000248
10.025	-0.0002
10.03	-0.000182
10.035	-0.00021
10.04	-0.000254
10.045	-0.000281
10.05	-0.000276
10.055	-0.000235
10.06	-0.000166
10.065	-0.000079
10.07	-0.000014

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
12.04833984	0.006939
12.05444336	0.007269
12.06054688	0.00742
12.06665039	0.00707
12.07275391	0.006513
12.07885742	0.00573
12.08496094	0.005355
12.09106445	0.005922
12.09716797	0.006576
12.10327148	0.006571
12.109375	0.006315
12.11547852	0.005962
12.12158203	0.005109
12.12768555	0.004395
12.13378906	0.004916
12.13989258	0.005596
12.14599609	0.005343
12.15209961	0.004887
12.15820313	0.004637
12.16430664	0.004745
12.17041016	0.004926
12.17651367	0.00538
12.18261719	0.005954
12.1887207	0.00565
12.19482422	0.004603
12.20092773	0.004127
12.20703125	0.004483
12.21313477	0.004289
12.21923828	0.003284
12.2253418	0.002512
12.23144531	0.002997
12.23754883	0.00381
12.24365234	0.004635
12.24975586	0.004396
12.25585938	0.003096
12.26196289	0.002491
12.26806641	0.003559
12.27416992	0.004997
12.28027344	0.005561
12.28637695	0.00548
12.29248047	0.005702
12.29858398	0.006359

Time (s)	Acceleration (g)
10.075	-0.000007
10.08	-0.000034
10.085	-0.000061
10.09	-0.000093
10.095	-0.00013
10.1	-0.000164
10.105	-0.000189
10.11	-0.000215
10.115	-0.000257
10.12	-0.000293
10.125	-0.000301
10.13	-0.000297
10.135	-0.0003
10.14	-0.000288
10.145	-0.000243
10.15	-0.00019
10.155	-0.00015
10.16	-0.000117
10.165	-0.000086
10.17	-0.000071
10.175	-0.000081
10.18	-0.000106
10.185	-0.000134
10.19	-0.000171
10.195	-0.000222
10.2	-0.000265
10.205	-0.000275
10.21	-0.000269
10.215	-0.000267
10.22	-0.000249
10.225	-0.000201
10.23	-0.000148
10.235	-0.000112
10.24	-0.000088
10.245	-0.000066
10.25	-0.000055
10.255	-0.000061
10.26	-0.000067
10.265	-0.000056
10.27	-0.000043
10.275	-0.000042
10.28	-0.000048

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
12.3046875	0.006585
12.31079102	0.006446
12.31689453	0.006229
12.32299805	0.004764
12.32910156	0.004445
12.33520508	0.005938
12.34130859	0.007082
12.34741211	0.008118
12.35351563	0.008288
12.35961914	0.007256
12.36572266	0.00655
12.37182617	0.006619
12.37792969	0.006684
12.3840332	0.006217
12.39013672	0.005135
12.39624023	0.00421
12.40234375	0.004648
12.40844727	0.006219
12.41455078	0.006779
12.4206543	0.005692
12.42675781	0.005143
12.43286133	0.005923
12.43896484	0.006652
12.44506836	0.00634
12.45117188	0.004911
12.45727539	0.003192
12.46337891	0.003865
12.46948242	0.005403
12.47558594	0.005152
12.48168945	0.004702
12.48779297	0.004616
12.49389648	0.004388
12.5	0.004816
12.50610352	0.00493
12.51220703	0.003835
12.51831055	0.003176
12.52441406	0.003278
12.53051758	0.003059
12.53662109	0.0029
12.54272461	0.003427
12.54882813	0.00485
12.55493164	0.00573

Time (s)	Acceleration (g)
10.285	-0.000052
10.29	-0.000071
10.295	-0.000117
10.3	-0.000161
10.305	-0.000178
10.31	-0.00016
10.315	-0.000108
10.32	-0.000037
10.325	0.000041
10.33	0.000083
10.335	0.000055
10.34	-0.000008
10.345	-0.000064
10.35	-0.000107
10.355	-0.000128
10.36	-0.00014
10.365	-0.000153
10.37	-0.000184
10.375	-0.000253
10.38	-0.000307
10.385	-0.000302
10.39	-0.000248
10.395	-0.000159
10.4	-0.000085
10.405	-0.000068
10.41	-0.000113
10.415	-0.000215
10.42	-0.000314
10.425	-0.00034
10.43	-0.00032
10.435	-0.000285
10.44	-0.000245
10.445	-0.000218
10.45	-0.000203
10.455	-0.000195
10.46	-0.000175
10.465	-0.000123
10.47	-0.000071
10.475	-0.000054
10.48	-0.00006
10.485	-0.000076
10.49	-0.000102

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
12.56103516	0.004783
12.56713867	0.002653
12.57324219	0.001305
12.5793457	0.002536
12.58544922	0.004093
12.59155273	0.004639
12.59765625	0.00413
12.60375977	0.003853
12.60986328	0.004595
12.6159668	0.005003
12.62207031	0.006091
12.62817383	0.007269
12.63427734	0.006603
12.64038086	0.004796
12.64648438	0.003718
12.65258789	0.00355
12.65869141	0.003817
12.66479492	0.004508
12.67089844	0.005239
12.67700195	0.00548
12.68310547	0.005626
12.68920898	0.005954
12.6953125	0.005524
12.70141602	0.004254
12.70751953	0.003776
12.71362305	0.004265
12.71972656	0.004635
12.72583008	0.005352
12.73193359	0.006452
12.73803711	0.006351
12.74414063	0.005181
12.75024414	0.004452
12.75634766	0.004449
12.76245117	0.005134
12.76855469	0.006173
12.7746582	0.006347
12.78076172	0.005115
12.78686523	0.003226
12.79296875	0.002043
12.79907227	0.002433
12.80517578	0.003693
12.8112793	0.004872

Time (s)	Acceleration (g)
10.495	-0.000131
10.5	-0.00015
10.505	-0.000145
10.51	-0.00012
10.515	-0.000084
10.52	-0.000035
10.525	0.000026
10.53	0.000075
10.535	0.000086
10.54	0.000068
10.545	0.000035
10.55	-0.00002
10.555	-0.0001
10.56	-0.000171
10.565	-0.000198
10.57	-0.000196
10.575	-0.000181
10.58	-0.000147
10.585	-0.000097
10.59	-0.000032
10.595	0.000041
10.6	0.00011
10.605	0.000174
10.61	0.000201
10.615	0.000162
10.62	0.000105
10.625	0.000075
10.63	0.000075
10.635	0.000106
10.64	0.000148
10.645	0.000176
10.65	0.000171
10.655	0.000117
10.66	0.000045
10.665	-0.00001
10.67	-0.000042
10.675	-0.000045
10.68	-0.000015
10.685	0.000048
10.69	0.000125
10.695	0.00019
10.7	0.000243

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
12.81738281	0.0057
12.82348633	0.005442
12.82958984	0.00444
12.83569336	0.003856
12.84179688	0.003717
12.84790039	0.003515
12.85400391	0.003218
12.86010742	0.003072
12.86621094	0.00302
12.87231445	0.002856
12.87841797	0.00284
12.88452148	0.003471
12.890625	0.004524
12.89672852	0.005003
12.90283203	0.004501
12.90893555	0.003449
12.91503906	0.002623
12.92114258	0.002767
12.92724609	0.003805
12.93334961	0.00454
12.93945313	0.004353
12.94555664	0.003666
12.95166016	0.003445
12.95776367	0.004115
12.96386719	0.004692
12.9699707	0.004406
12.97607422	0.003771
12.98217773	0.0037
12.98828125	0.003958
12.99438477	0.004158
13.00048828	0.00435
13.0065918	0.004134
13.01269531	0.004245
13.01879883	0.004826
13.02490234	0.005225
13.03100586	0.00514
13.03710938	0.004697
13.04321289	0.004157
13.04931641	0.003858
13.05541992	0.003836
13.06152344	0.003904
13.06762695	0.004287

Input Motion

Time (s)	Acceleration (g)
10.705	0.000291
10.71	0.000299
10.715	0.00024
10.72	0.000143
10.725	0.000037
10.73	-0.00007
10.735	-0.000168
10.74	-0.000246
10.745	-0.000293
10.75	-0.000311
10.755	-0.00031
10.76	-0.000265
10.765	-0.000153
10.77	-0.00001
10.775	0.00012
10.78	0.000233
10.785	0.000324
10.79	0.000367
10.795	0.000348
10.8	0.000289
10.805	0.000222
10.81	0.000138
10.815	0.000035
10.82	-0.000051
10.825	-0.000099
10.83	-0.000094
10.835	-0.000031
10.84	0.000059
10.845	0.000148
10.85	0.000204
10.855	0.000194
10.86	0.000168
10.865	0.000181
10.87	0.000215
10.875	0.000252
10.88	0.000289
10.885	0.000312
10.89	0.000318
10.895	0.000309
10.9	0.00029
10.905	0.000279
10.91	0.000258

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
13.07373047	0.004434
13.07983398	0.003712
13.0859375	0.002916
13.09204102	0.002555
13.09814453	0.00258
13.10424805	0.003149
13.11035156	0.003887
13.11645508	0.004189
13.12255859	0.004363
13.12866211	0.004887
13.13476563	0.005403
13.14086914	0.005262
13.14697266	0.004999
13.15307617	0.004989
13.15917969	0.004705
13.1652832	0.004375
13.17138672	0.004299
13.17749023	0.004151
13.18359375	0.004001
13.18969727	0.003868
13.19580078	0.003293
13.2019043	0.002549
13.20800781	0.002897
13.21411133	0.003389
13.22021484	0.003346
13.22631836	0.003395
13.23242188	0.003171
13.23852539	0.003183
13.24462891	0.003961
13.25073242	0.004411
13.25683594	0.003863
13.26293945	0.003201
13.26904297	0.002941
13.27514648	0.003115
13.28125	0.003303
13.28735352	0.00298
13.29345703	0.002535
13.29956055	0.002651
13.30566406	0.003225
13.31176758	0.003891
13.31787109	0.003981
13.32397461	0.003342

Time (s)	Acceleration (g)
10.915	0.000203
10.92	0.000152
10.925	0.000137
10.93	0.000128
10.935	0.000104
10.94	0.000071
10.945	0.000036
10.95	0.000003
10.955	-0.000019
10.96	-0.000023
10.965	0
10.97	0.000021
10.975	0.000007
10.98	-0.000016
10.985	-0.000021
10.99	-0.000017
10.995	-0.00001
11	0.000012
11.005	0.000052
11.01	0.00011
11.015	0.00018
11.02	0.000249
11.025	0.000316
11.03	0.000346
11.035	0.000311
11.04	0.000259
11.045	0.000231
11.05	0.00023
11.055	0.000254
11.06	0.00028
11.065	0.000277
11.07	0.000234
11.075	0.000141
11.08	0.000033
11.085	-0.000045
11.09	-0.000094
11.095	-0.000124
11.1	-0.000116
11.105	-0.000065
11.11	0.000008
11.115	0.000084
11.12	0.000159

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
13.33007813	0.002528
13.33618164	0.002538
13.34228516	0.003136
13.34838867	0.003405
13.35449219	0.003236
13.3605957	0.00288
13.36669922	0.002782
13.37280273	0.002779
13.37890625	0.003014
13.38500977	0.003502
13.39111328	0.003523
13.3972168	0.003063
13.40332031	0.003105
13.40942383	0.003006
13.41552734	0.002563
13.42163086	0.002984
13.42773438	0.003702
13.43383789	0.003931
13.43994141	0.003149
13.44604492	0.002077
13.45214844	0.00165
13.45825195	0.002137
13.46435547	0.002928
13.47045898	0.003394
13.4765625	0.003438
13.48266602	0.003271
13.48876953	0.003153
13.49487305	0.002734
13.50097656	0.0027
13.50708008	0.003464
13.51318359	0.00375
13.51928711	0.00392
13.52539063	0.003882
13.53149414	0.003432
13.53759766	0.003393
13.54370117	0.003563
13.54980469	0.003224
13.5559082	0.003377
13.56201172	0.00397
13.56811523	0.003914
13.57421875	0.003541
13.58032227	0.003203

Time (s)	Acceleration (g)
11.125	0.000232
11.13	0.000292
11.135	0.000328
11.14	0.000352
11.145	0.000382
11.15	0.0004
11.155	0.000386
11.16	0.000373
11.165	0.000384
11.17	0.0004
11.175	0.000403
11.18	0.000382
11.185	0.00033
11.19	0.000257
11.195	0.000176
11.2	0.000126
11.205	0.000144
11.21	0.000205
11.215	0.000274
11.22	0.000333
11.225	0.00037
11.23	0.000362
11.235	0.000295
11.24	0.000213
11.245	0.000162
11.25	0.000141
11.255	0.000139
11.26	0.000162
11.265	0.00021
11.27	0.00025
11.275	0.00025
11.28	0.000241
11.285	0.000253
11.29	0.000265
11.295	0.000258
11.3	0.000228
11.305	0.000176
11.31	0.000108
11.315	0.000031
11.32	-0.000009
11.325	0.000029
11.33	0.00011

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
13.58642578	0.003146
13.5925293	0.003389
13.59863281	0.003724
13.60473633	0.004383
13.61083984	0.004831
13.61694336	0.004276
13.62304688	0.00346
13.62915039	0.003208
13.63525391	0.002904
13.64135742	0.003019
13.64746094	0.003946
13.65356445	0.00408
13.65966797	0.003092
13.66577148	0.001729
13.671875	0.000743
13.67797852	0.001236
13.68408203	0.002358
13.69018555	0.002524
13.69628906	0.002215
13.70239258	0.001675
13.70849609	0.00103
13.71459961	0.001555
13.72070313	0.002816
13.72680664	0.00373
13.73291016	0.00365
13.73901367	0.003417
13.74511719	0.003018
13.7512207	0.002208
13.75732422	0.001831
13.76342773	0.002294
13.76953125	0.002785
13.77563477	0.002732
13.78173828	0.002448
13.7878418	0.002232
13.79394531	0.001999
13.80004883	0.001921
13.80615234	0.001906
13.81225586	0.001641
13.81835938	0.001733
13.82446289	0.002241
13.83056641	0.002539
13.83666992	0.002449

Input Motion

Time (s)	Acceleration (g)
11.335	0.000189
11.34	0.00026
11.345	0.000314
11.35	0.000332
11.355	0.000306
11.36	0.000255
11.365	0.0002
11.37	0.000135
11.375	0.000056
11.38	-0.000021
11.385	-0.000084
11.39	-0.000112
11.395	-0.000093
11.4	-0.000023
11.405	0.000094
11.41	0.000214
11.415	0.000285
11.42	0.000307
11.425	0.000291
11.43	0.000234
11.435	0.000144
11.44	0.000062
11.445	0.000029
11.45	0.000032
11.455	0.000055
11.46	0.000095
11.465	0.000144
11.47	0.000188
11.475	0.000217
11.48	0.000224
11.485	0.000214
11.49	0.00018
11.495	0.000115
11.5	0.000063
11.505	0.000062
11.51	0.0001
11.515	0.000153
11.52	0.0002
11.525	0.00022
11.53	0.000189
11.535	0.000094
11.54	-0.000017

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
13.84277344	0.002297
13.84887695	0.00207
13.85498047	0.00206
13.86108398	0.002693
13.8671875	0.003564
13.87329102	0.00389
13.87939453	0.003838
13.88549805	0.003384
13.89160156	0.002819
13.89770508	0.002443
13.90380859	0.002232
13.90991211	0.001889
13.91601563	0.002242
13.92211914	0.003065
13.92822266	0.003367
13.93432617	0.003211
13.94042969	0.003054
13.9465332	0.003065
13.95263672	0.002808
13.95874023	0.00246
13.96484375	0.002502
13.97094727	0.002253
13.97705078	0.002019
13.9831543	0.00242
13.98925781	0.002652
13.99536133	0.00238
14.00146484	0.002607
14.00756836	0.002843
14.01367188	0.002078
14.01977539	0.00148
14.02587891	0.001501
14.03198242	0.00186
14.03808594	0.002751
14.04418945	0.00288
14.05029297	0.002217
14.05639648	0.001683
14.0625	0.001253
14.06860352	0.001184
14.07470703	0.002029
14.08081055	0.002455
14.08691406	0.002318
14.09301758	0.002229

Input Motion

Time (s)	Acceleration (g)
11.545	-0.000096
11.55	-0.00013
11.555	-0.000117
11.56	-0.000076
11.565	-0.00003
11.57	-0.00001
11.575	-0.000042
11.58	-0.000077
11.585	-0.00006
11.59	-0.000003
11.595	0.000079
11.6	0.000177
11.605	0.00027
11.61	0.000334
11.615	0.000348
11.62	0.00032
11.625	0.000271
11.63	0.000202
11.635	0.000113
11.64	0.000046
11.645	0.000034
11.65	0.000063
11.655	0.000113
11.66	0.000168
11.665	0.000212
11.67	0.00023
11.675	0.00021
11.68	0.000174
11.685	0.000153
11.69	0.000126
11.695	0.000073
11.7	0.000017
11.705	-0.00002
11.71	-0.000044
11.715	-0.000059
11.72	-0.000047
11.725	0.000001
11.73	0.000066
11.735	0.000126
11.74	0.000172
11.745	0.000201
11.75	0.000208

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
14.09912109	0.001885
14.10522461	0.001705
14.11132813	0.002255
14.11743164	0.002619
14.12353516	0.002398
14.12963867	0.002061
14.13574219	0.001671
14.1418457	0.001658
14.14794922	0.002031
14.15405273	0.001784
14.16015625	0.001074
14.16625977	0.001091
14.17236328	0.001872
14.1784668	0.002543
14.18457031	0.002402
14.19067383	0.002421
14.19677734	0.002799
14.20288086	0.002744
14.20898438	0.00242
14.21508789	0.002013
14.22119141	0.001868
14.22729492	0.002501
14.23339844	0.002852
14.23950195	0.002773
14.24560547	0.00308
14.25170898	0.003161
14.2578125	0.002905
14.26391602	0.003022
14.27001953	0.002603
14.27612305	0.001689
14.28222656	0.002012
14.28833008	0.002878
14.29443359	0.002767
14.30053711	0.002337
14.30664063	0.002248
14.31274414	0.00219
14.31884766	0.00234
14.32495117	0.002868
14.33105469	0.00336
14.3371582	0.0035
14.34326172	0.003006
14.34936523	0.002426

Input Motion

Time (s)	Acceleration (g)
11.755	0.000187
11.76	0.000171
11.765	0.000189
11.77	0.000209
11.775	0.000199
11.78	0.000164
11.785	0.000111
11.79	0.000047
11.795	-0.000017
11.8	-0.000052
11.805	-0.000035
11.81	0.000018
11.815	0.000086
11.82	0.000163
11.825	0.000242
11.83	0.00031
11.835	0.000352
11.84	0.000378
11.845	0.000405
11.85	0.000415
11.855	0.000389
11.86	0.000361
11.865	0.000363
11.87	0.000379
11.875	0.000396
11.88	0.000407
11.885	0.000404
11.89	0.000377
11.895	0.000323
11.9	0.000257
11.905	0.000202
11.91	0.000156
11.915	0.000113
11.92	0.0001
11.925	0.000137
11.93	0.000191
11.935	0.000228
11.94	0.000242
11.945	0.00023
11.95	0.000185
11.955	0.000103
11.96	0.000022

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
14.35546875	0.00222
14.36157227	0.001775
14.36767578	0.00134
14.3737793	0.001528
14.37988281	0.001582
14.38598633	0.001484
14.39208984	0.001876
14.39819336	0.001962
14.40429688	0.00134
14.41040039	0.001099
14.41650391	0.00171
14.42260742	0.002235
14.42871094	0.002198
14.43481445	0.002277
14.44091797	0.002467
14.44702148	0.002335
14.453125	0.001873
14.45922852	0.001112
14.46533203	0.000486
14.47143555	0.001032
14.47753906	0.002388
14.48364258	0.003364
14.48974609	0.003266
14.49584961	0.002287
14.50195313	0.001707
14.50805664	0.001929
14.51416016	0.002024
14.52026367	0.002139
14.52636719	0.002494
14.5324707	0.002157
14.53857422	0.001517
14.54467773	0.001461
14.55078125	0.001398
14.55688477	0.001552
14.56298828	0.002369
14.5690918	0.002965
14.57519531	0.003128
14.58129883	0.00294
14.58740234	0.002073
14.59350586	0.001213
14.59960938	0.001229
14.60571289	0.001946

Time (s)	Acceleration (g)
11.965	-0.000018
11.97	-0.000026
11.975	-0.000013
11.98	0.00003
11.985	0.000103
11.99	0.000194
11.995	0.000288
12	0.000369
12.005	0.000424
12.01	0.000423
12.015	0.000349
12.02	0.000222
12.025	0.000069
12.03	-0.000073
12.035	-0.000171
12.04	-0.000209
12.045	-0.000183
12.05	-0.00012
12.055	-0.000059
12.06	-0.000007
12.065	0.000041
12.07	0.000057
12.075	0.000026
12.08	-0.000014
12.085	-0.000024
12.09	-0.000007
12.095	0.000032
12.1	0.000091
12.105	0.00016
12.11	0.000222
12.115	0.000254
12.12	0.000266
12.125	0.000272
12.13	0.000248
12.135	0.00018
12.14	0.00008
12.145	-0.000033
12.15	-0.000135
12.155	-0.000209
12.16	-0.000223
12.165	-0.000153
12.17	-0.000039

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
14.61181641	0.002469
14.61791992	0.002664
14.62402344	0.002815
14.63012695	0.002871
14.63623047	0.003269
14.64233398	0.003174
14.6484375	0.002168
14.65454102	0.00164
14.66064453	0.002377
14.66674805	0.003103
14.67285156	0.003358
14.67895508	0.002831
14.68505859	0.001826
14.69116211	0.001454
14.69726563	0.002127
14.70336914	0.002777
14.70947266	0.002895
14.71557617	0.002827
14.72167969	0.002564
14.7277832	0.002382
14.73388672	0.002378
14.73999023	0.002213
14.74609375	0.002022
14.75219727	0.002087
14.75830078	0.002205
14.7644043	0.001893
14.77050781	0.001474
14.77661133	0.001709
14.78271484	0.002179
14.78881836	0.00226
14.79492188	0.002355
14.80102539	0.002215
14.80712891	0.001706
14.81323242	0.001583
14.81933594	0.001856
14.82543945	0.001889
14.83154297	0.001936
14.83764648	0.002058
14.84375	0.001995
14.84985352	0.001953
14.85595703	0.002252
14.86206055	0.002277

Time (s)	Acceleration (g)
12.175	0.000065
12.18	0.000147
12.185	0.000199
12.19	0.00018
12.195	0.000072
12.2	-0.000069
12.205	-0.000184
12.21	-0.000245
12.215	-0.000236
12.22	-0.000174
12.225	-0.000087
12.23	-0.000022
12.235	-0.000022
12.24	-0.000061
12.245	-0.000099
12.25	-0.000122
12.255	-0.000121
12.26	-0.000077
12.265	0.00001
12.27	0.000103
12.275	0.000157
12.28	0.000168
12.285	0.000141
12.29	0.000076
12.295	-0.000017
12.3	-0.000088
12.305	-0.000096
12.31	-0.000047
12.315	0.000039
12.32	0.000132
12.325	0.000204
12.33	0.000222
12.335	0.000166
12.34	0.000082
12.345	0.000027
12.35	0.000007
12.355	0.000019
12.36	0.000069
12.365	0.000155
12.37	0.000217
12.375	0.000207
12.38	0.000139

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
14.86816406	0.001653
14.87426758	0.000786
14.88037109	0.001109
14.88647461	0.001549
14.89257813	0.001619
14.89868164	0.001769
14.90478516	0.001621
14.91088867	0.001649
14.91699219	0.002165
14.9230957	0.002571
14.92919922	0.002497
14.93530273	0.002259
14.94140625	0.002135
14.94750977	0.00211
14.95361328	0.001952
14.9597168	0.00183
14.96582031	0.00175
14.97192383	0.001735
14.97802734	0.001719
14.98413086	0.001697
14.99023438	0.001718
14.99633789	0.001938
15.00244141	0.002426
15.00854492	0.002419
15.01464844	0.001856
15.02075195	0.001563
15.02685547	0.001974
15.03295898	0.002207
15.0390625	0.002162
15.04516602	0.002289
15.05126953	0.002622
15.05737305	0.00277
15.06347656	0.002652
15.06958008	0.002588
15.07568359	0.002874
15.08178711	0.003026
15.08789063	0.002702
15.09399414	0.002209
15.10009766	0.00143
15.10620117	0.000942
15.11230469	0.001832
15.1184082	0.002625

Time (s)	Acceleration (g)
12.385	0.000039
12.39	-0.000074
12.395	-0.000172
12.4	-0.000225
12.405	-0.000213
12.41	-0.00015
12.415	-0.000064
12.42	0.000039
12.425	0.000151
12.43	0.000242
12.435	0.000292
12.44	0.000302
12.445	0.000283
12.45	0.000237
12.455	0.000169
12.46	0.000099
12.465	0.000048
12.47	0.000012
12.475	-0.000022
12.48	-0.000034
12.485	-0.000006
12.49	0.000026
12.495	0.000028
12.5	0.000011
12.505	-0.000015
12.51	-0.000049
12.515	-0.00008
12.52	-0.000093
12.525	-0.000076
12.53	-0.000032
12.535	0.000028
12.54	0.000087
12.545	0.000137
12.55	0.000153
12.555	0.000108
12.56	0.000048
12.565	0.000019
12.57	0.000006
12.575	-0.00001
12.58	-0.000017
12.585	-0.000019
12.59	-0.000032

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
15.12451172	0.002874
15.13061523	0.002732
15.13671875	0.002403
15.14282227	0.002033
15.14892578	0.001861
15.1550293	0.001669
15.16113281	0.001491
15.16723633	0.001647
15.17333984	0.001749
15.17944336	0.001726
15.18554688	0.001727
15.19165039	0.001721
15.19775391	0.001673
15.20385742	0.001716
15.20996094	0.001657
15.21606445	0.001684
15.22216797	0.001627
15.22827148	0.001421
15.234375	0.001646
15.24047852	0.002395
15.24658203	0.00288
15.25268555	0.002741
15.25878906	0.002363
15.26489258	0.001809
15.27099609	0.001241
15.27709961	0.001508
15.28320313	0.002216
15.28930664	0.0029
15.29541016	0.00335
15.30151367	0.003202
15.30761719	0.002214
15.3137207	0.001388
15.31982422	0.001537
15.32592773	0.00238
15.33203125	0.003137
15.33813477	0.00304
15.34423828	0.002646
15.3503418	0.002391
15.35644531	0.001972
15.36254883	0.001517
15.36865234	0.001922
15.37475586	0.002825

Time (s)	Acceleration (g)
12.595	-0.000064
12.6	-0.000121
12.605	-0.000199
12.61	-0.000283
12.615	-0.000365
12.62	-0.000399
12.625	-0.000352
12.63	-0.000255
12.635	-0.00015
12.64	-0.000059
12.645	-0.000001
12.65	0.000012
12.655	-0.000021
12.66	-0.000067
12.665	-0.000089
12.67	-0.000099
12.675	-0.000117
12.68	-0.000131
12.685	-0.000127
12.69	-0.000129
12.695	-0.000155
12.7	-0.000177
12.705	-0.000172
12.71	-0.000157
12.715	-0.000148
12.72	-0.000151
12.725	-0.000172
12.73	-0.000211
12.735	-0.000262
12.74	-0.000297
12.745	-0.00029
12.75	-0.000248
12.755	-0.00019
12.76	-0.000132
12.765	-0.000083
12.77	-0.000082
12.775	-0.000158
12.78	-0.000257
12.785	-0.000318
12.79	-0.000351
12.795	-0.000362
12.8	-0.000352

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
15.38085938	0.003112
15.38696289	0.002745
15.39306641	0.002285
15.39916992	0.002207
15.40527344	0.002422
15.41137695	0.002558
15.41748047	0.002503
15.42358398	0.002755
15.4296875	0.002772
15.43579102	0.002317
15.44189453	0.002247
15.44799805	0.002386
15.45410156	0.002323
15.46020508	0.002465
15.46630859	0.002851
15.47241211	0.002957
15.47851563	0.002769
15.48461914	0.002461
15.49072266	0.002245
15.49682617	0.002237
15.50292969	0.002204
15.5090332	0.002291
15.51513672	0.002708
15.52124023	0.002961
15.52734375	0.002549
15.53344727	0.002107
15.53955078	0.001946
15.5456543	0.001951
15.55175781	0.002566
15.55786133	0.003196
15.56396484	0.002865
15.57006836	0.002507
15.57617188	0.002495
15.58227539	0.002417
15.58837891	0.002666
15.59448242	0.003226
15.60058594	0.003349
15.60668945	0.003078
15.61279297	0.003084
15.61889648	0.003269
15.625	0.00358
15.63110352	0.003994

Time (s)	Acceleration (g)
12.805	-0.000327
12.81	-0.000306
12.815	-0.000304
12.82	-0.000306
12.825	-0.000295
12.83	-0.000275
12.835	-0.000256
12.84	-0.000233
12.845	-0.000197
12.85	-0.000174
12.855	-0.000187
12.86	-0.000206
12.865	-0.000202
12.87	-0.00019
12.875	-0.000185
12.88	-0.00019
12.885	-0.000209
12.89	-0.000242
12.895	-0.000285
12.9	-0.000311
12.905	-0.00029
12.91	-0.000238
12.915	-0.000173
12.92	-0.000102
12.925	-0.000032
12.93	0.000021
12.935	0.00004
12.94	0.000039
12.945	0.000037
12.95	0.000018
12.955	-0.000032
12.96	-0.000099
12.965	-0.000166
12.97	-0.000232
12.975	-0.000296
12.98	-0.000342
12.985	-0.000357
12.99	-0.000355
12.995	-0.000357
13	-0.000349
13.005	-0.000321
13.01	-0.000287

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
15.63720703	0.003927
15.64331055	0.003361
15.64941406	0.003134
15.65551758	0.003397
15.66162109	0.003273
15.66772461	0.003248
15.67382813	0.003701
15.67993164	0.004004
15.68603516	0.003857
15.69213867	0.00364
15.69824219	0.003835
15.7043457	0.004002
15.71044922	0.003753
15.71655273	0.003504
15.72265625	0.003713
15.72875977	0.00404
15.73486328	0.004239
15.7409668	0.004631
15.74707031	0.004853
15.75317383	0.004413
15.75927734	0.003784
15.76538086	0.003634
15.77148438	0.004081
15.77758789	0.004584
15.78369141	0.004534
15.78979492	0.004338
15.79589844	0.004192
15.80200195	0.003691
15.80810547	0.003486
15.81420898	0.003958
15.8203125	0.004144
15.82641602	0.00405
15.83251953	0.004126
15.83862305	0.003703
15.84472656	0.003289
15.85083008	0.003664
15.85693359	0.004258
15.86303711	0.00445
15.86914063	0.004469
15.87524414	0.004512
15.88134766	0.004109
15.88745117	0.003331

Input Motion

Time (s)	Acceleration (g)
13.015	-0.000263
13.02	-0.000253
13.025	-0.000254
13.03	-0.000282
13.035	-0.000354
13.04	-0.000421
13.045	-0.000437
13.05	-0.000409
13.055	-0.000354
13.06	-0.000273
13.065	-0.000175
13.07	-0.000097
13.075	-0.000072
13.08	-0.000083
13.085	-0.000107
13.09	-0.000139
13.095	-0.00017
13.1	-0.000191
13.105	-0.000195
13.11	-0.000193
13.115	-0.000198
13.12	-0.000199
13.125	-0.000186
13.13	-0.000163
13.135	-0.000134
13.14	-0.000095
13.145	-0.000045
13.15	-0.000006
13.155	0.000001
13.16	-0.000017
13.165	-0.000042
13.17	-0.000081
13.175	-0.000137
13.18	-0.000185
13.185	-0.0002
13.19	-0.000199
13.195	-0.000202
13.2	-0.00019
13.205	-0.000147
13.21	-0.000096
13.215	-0.000058
13.22	-0.000025

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
15.89355469	0.003248
15.8996582	0.003921
15.90576172	0.0043
15.91186523	0.00418
15.91796875	0.004084
15.92407227	0.004072
15.93017578	0.003763
15.9362793	0.003307
15.94238281	0.003471
15.94848633	0.003999
15.95458984	0.004149
15.96069336	0.004244
15.96679688	0.004184
15.97290039	0.003691
15.97900391	0.003779
15.98510742	0.004412
15.99121094	0.004457
15.99731445	0.004234
16.00341797	0.004266
16.00952148	0.004296
16.015625	0.004353
16.02172852	0.004403
16.02783203	0.004404
16.03393555	0.004277
16.04003906	0.004392
16.04614258	0.004799
16.05224609	0.004773
16.05834961	0.004441
16.06445313	0.004476
16.07055664	0.004564
16.07666016	0.004556
16.08276367	0.00453
16.08886719	0.004395
16.0949707	0.004409
16.10107422	0.004557
16.10717773	0.004385
16.11328125	0.004342
16.11938477	0.004762
16.12548828	0.005031
16.1315918	0.005097
16.13769531	0.005089
16.14379883	0.004747

Time (s)	Acceleration (g)
13.225	0.000008
13.23	0.000029
13.235	0.000024
13.24	-0.000003
13.245	-0.000042
13.25	-0.000106
13.255	-0.000202
13.26	-0.000294
13.265	-0.000346
13.27	-0.000354
13.275	-0.000324
13.28	-0.000247
13.285	-0.000127
13.29	-0.000014
13.295	0.000047
13.3	0.000054
13.305	0.000015
13.31	-0.000052
13.315	-0.00012
13.32	-0.000169
13.325	-0.000184
13.33	-0.00018
13.335	-0.000181
13.34	-0.000193
13.345	-0.000216
13.35	-0.000256
13.355	-0.000311
13.36	-0.000353
13.365	-0.000355
13.37	-0.000319
13.375	-0.000261
13.38	-0.000184
13.385	-0.000093
13.39	-0.000026
13.395	-0.00002
13.4	-0.000039
13.405	-0.000044
13.41	-0.00005
13.415	-0.000066
13.42	-0.000081
13.425	-0.000088
13.43	-0.00008

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
16.14990234	0.004638
16.15600586	0.005049
16.16210938	0.004934
16.16821289	0.004604
16.17431641	0.005074
16.18041992	0.005562
16.18652344	0.005494
16.19262695	0.005306
16.19873047	0.004824
16.20483398	0.004377
16.2109375	0.004683
16.21704102	0.005001
16.22314453	0.004761
16.22924805	0.004612
16.23535156	0.004603
16.24145508	0.004339
16.24755859	0.004144
16.25366211	0.004387
16.25976563	0.004822
16.26586914	0.005182
16.27197266	0.005497
16.27807617	0.005525
16.28417969	0.005042
16.2902832	0.004531
16.29638672	0.004377
16.30249023	0.004538
16.30859375	0.004844
16.31469727	0.005135
16.32080078	0.005327
16.3269043	0.005355
16.33300781	0.005197
16.33911133	0.005042
16.34521484	0.004859
16.35131836	0.004626
16.35742188	0.004779
16.36352539	0.005309
16.36962891	0.005637
16.37573242	0.00566
16.38183594	0.005367
16.38793945	0.004887
16.39404297	0.004792
16.40014648	0.005132

Time (s)	Acceleration (g)
13.435	-0.00006
13.44	-0.00001
13.445	0.000085
13.45	0.000164
13.455	0.000173
13.46	0.000118
13.465	0.000013
13.47	-0.000104
13.475	-0.000194
13.48	-0.000229
13.485	-0.000192
13.49	-0.000118
13.495	-0.000056
13.5	-0.000008
13.505	0.000031
13.51	0.000049
13.515	0.000044
13.52	0.000036
13.525	0.000041
13.53	0.000044
13.535	0.000029
13.54	-0.000003
13.545	-0.000039
13.55	-0.000087
13.555	-0.000151
13.56	-0.00019
13.565	-0.000172
13.57	-0.000121
13.575	-0.000065
13.58	-0.000021
13.585	-0.000008
13.59	-0.000023
13.595	-0.000058
13.6	-0.000094
13.605	-0.000111
13.61	-0.000119
13.615	-0.000135
13.62	-0.000158
13.625	-0.000182
13.63	-0.000211
13.635	-0.000244
13.64	-0.000257

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
16.40625	0.005369
16.41235352	0.00526
16.41845703	0.005099
16.42456055	0.005249
16.43066406	0.005345
16.43676758	0.00502
16.44287109	0.00479
16.44897461	0.004919
16.45507813	0.005149
16.46118164	0.005478
16.46728516	0.005521
16.47338867	0.005003
16.47949219	0.004611
16.4855957	0.0049
16.49169922	0.005436
16.49780273	0.005419
16.50390625	0.004937
16.51000977	0.004829
16.51611328	0.005066
16.5222168	0.004997
16.52832031	0.004879
16.53442383	0.004887
16.54052734	0.004718
16.54663086	0.004463
16.55273438	0.004457
16.55883789	0.004893
16.56494141	0.005369
16.57104492	0.005188
16.57714844	0.004904
16.58325195	0.005109
16.58935547	0.004917
16.59545898	0.004345
16.6015625	0.00456
16.60766602	0.005257
16.61376953	0.005374
16.61987305	0.004994
16.62597656	0.00473
16.63208008	0.004705
16.63818359	0.004595
16.64428711	0.004276
16.65039063	0.004048
16.65649414	0.004217

Time (s)	Acceleration (g)
13.645	-0.00023
13.65	-0.000187
13.655	-0.000156
13.66	-0.000141
13.665	-0.000144
13.67	-0.000164
13.675	-0.000192
13.68	-0.000208
13.685	-0.000185
13.69	-0.000131
13.695	-0.00007
13.7	0.000018
13.705	0.000144
13.71	0.000257
13.715	0.00031
13.72	0.000308
13.725	0.00026
13.73	0.00018
13.735	0.000085
13.74	0.000013
13.745	-0.000008
13.75	0.000005
13.755	0.00003
13.76	0.000049
13.765	0.000047
13.77	0.000021
13.775	-0.000022
13.78	-0.000061
13.785	-0.000073
13.79	-0.00006
13.795	-0.000032
13.8	0.000009
13.805	0.000062
13.81	0.000102
13.815	0.000111
13.82	0.000109
13.825	0.000118
13.83	0.000136
13.835	0.000157
13.84	0.000193
13.845	0.000249
13.85	0.000299

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
16.66259766	0.004758
16.66870117	0.005149
16.67480469	0.004877
16.6809082	0.004253
16.68701172	0.004134
16.69311523	0.004455
16.69921875	0.004525
16.70532227	0.004439
16.71142578	0.004672
16.7175293	0.00492
16.72363281	0.004712
16.72973633	0.004521
16.73583984	0.004563
16.74194336	0.004732
16.74804688	0.00483
16.75415039	0.004646
16.76025391	0.00444
16.76635742	0.004569
16.77246094	0.004731
16.77856445	0.004677
16.78466797	0.004533
16.79077148	0.004416
16.796875	0.004332
16.80297852	0.004394
16.80908203	0.004664
16.81518555	0.00485
16.82128906	0.004542
16.82739258	0.004152
16.83349609	0.0041
16.83959961	0.004171
16.84570313	0.004358
16.85180664	0.00465
16.85791016	0.004874
16.86401367	0.004916
16.87011719	0.004391
16.8762207	0.003878
16.88232422	0.004134
16.88842773	0.004325
16.89453125	0.004138
16.90063477	0.004199
16.90673828	0.003984
16.9128418	0.003553

Time (s)	Acceleration (g)
13.855	0.000316
13.86	0.000311
13.865	0.000306
13.87	0.000279
13.875	0.000216
13.88	0.000154
13.885	0.000121
13.89	0.000106
13.895	0.0001
13.9	0.000086
13.905	0.000045
13.91	-0.000015
13.915	-0.000085
13.92	-0.000136
13.925	-0.000137
13.93	-0.000109
13.935	-0.000078
13.94	-0.000043
13.945	-0.000004
13.95	0.000033
13.955	0.000069
13.96	0.000107
13.965	0.000153
13.97	0.000189
13.975	0.000194
13.98	0.000177
13.985	0.000154
13.99	0.000121
13.995	0.000073
14	0.000035
14.005	0.000028
14.01	0.000032
14.015	0.000023
14.02	0.000016
14.025	0.000028
14.03	0.000043
14.035	0.000047
14.04	0.000065
14.045	0.000112
14.05	0.000163
14.055	0.000191
14.06	0.000197

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
16.91894531	0.003754
16.92504883	0.004094
16.93115234	0.004067
16.93725586	0.004137
16.94335938	0.004047
16.94946289	0.003736
16.95556641	0.00374
16.96166992	0.00371
16.96777344	0.003493
16.97387695	0.003571
16.97998047	0.003823
16.98608398	0.004013
16.9921875	0.004087
16.99829102	0.003971
17.00439453	0.003907
17.01049805	0.003919
17.01660156	0.003821
17.02270508	0.00387
17.02880859	0.004109
17.03491211	0.004265
17.04101563	0.00439
17.04711914	0.004008
17.05322266	0.003371
17.05932617	0.00341
17.06542969	0.00375
17.0715332	0.003988
17.07763672	0.004374
17.08374023	0.004183
17.08984375	0.0035
17.09594727	0.003389
17.10205078	0.00348
17.1081543	0.003664
17.11425781	0.00397
17.12036133	0.003848
17.12646484	0.003687
17.13256836	0.003732
17.13867188	0.00359
17.14477539	0.003566
17.15087891	0.003772
17.15698242	0.003772
17.16308594	0.003591
17.16918945	0.003362

Time (s)	Acceleration (g)
14.065	0.000186
14.07	0.000157
14.075	0.000114
14.08	0.000087
14.085	0.000106
14.09	0.00015
14.095	0.000188
14.1	0.000226
14.105	0.000264
14.11	0.000288
14.115	0.000286
14.12	0.00027
14.125	0.000259
14.13	0.00024
14.135	0.000205
14.14	0.000182
14.145	0.000192
14.15	0.000228
14.155	0.000279
14.16	0.00033
14.165	0.000364
14.17	0.000374
14.175	0.000353
14.18	0.000323
14.185	0.000313
14.19	0.000309
14.195	0.000294
14.2	0.000277
14.205	0.000264
14.21	0.000244
14.215	0.000207
14.22	0.000171
14.225	0.000156
14.23	0.00014
14.235	0.000099
14.24	0.000059
14.245	0.000042
14.25	0.000043
14.255	0.000055
14.26	0.000079
14.265	0.000118
14.27	0.000147

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
17.17529297	0.003396
17.18139648	0.003704
17.1875	0.003819
17.19360352	0.003824
17.19970703	0.00377
17.20581055	0.003459
17.21191406	0.003381
17.21801758	0.003612
17.22412109	0.003576
17.23022461	0.003208
17.23632813	0.002906
17.24243164	0.003011
17.24853516	0.003402
17.25463867	0.003525
17.26074219	0.003231
17.2668457	0.002857
17.27294922	0.002834
17.27905273	0.003045
17.28515625	0.003031
17.29125977	0.00315
17.29736328	0.003482
17.3034668	0.003282
17.30957031	0.002878
17.31567383	0.002894
17.32177734	0.00303
17.32788086	0.003264
17.33398438	0.003447
17.34008789	0.003283
17.34619141	0.003139
17.35229492	0.003011
17.35839844	0.002698
17.36450195	0.002755
17.37060547	0.003291
17.37670898	0.00352
17.3828125	0.003218
17.38891602	0.00295
17.39501953	0.002939
17.40112305	0.002964
17.40722656	0.00311
17.41333008	0.003393
17.41943359	0.003329
17.42553711	0.002983

Time (s)	Acceleration (g)
14.275	0.000139
14.28	0.000128
14.285	0.00014
14.29	0.000163
14.295	0.00018
14.3	0.000183
14.305	0.000162
14.31	0.00011
14.315	0.000028
14.32	-0.000051
14.325	-0.000091
14.33	-0.000084
14.335	-0.000033
14.34	0.000048
14.345	0.000144
14.35	0.000212
14.355	0.000215
14.36	0.00018
14.365	0.000143
14.37	0.000106
14.375	0.000074
14.38	0.000066
14.385	0.000097
14.39	0.000145
14.395	0.000191
14.4	0.000241
14.405	0.000295
14.41	0.000346
14.415	0.000384
14.42	0.000395
14.425	0.000377
14.43	0.000305
14.435	0.000167
14.44	0.000025
14.445	-0.000063
14.45	-0.000072
14.455	0.000011
14.46	0.000155
14.465	0.000316
14.47	0.000454
14.475	0.000529
14.48	0.000553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
17.43164063	0.002874
17.43774414	0.003004
17.44384766	0.003204
17.44995117	0.003245
17.45605469	0.002975
17.4621582	0.002849
17.46826172	0.002923
17.47436523	0.002862
17.48046875	0.003004
17.48657227	0.003402
17.49267578	0.003613
17.4987793	0.00364
17.50488281	0.003393
17.51098633	0.00284
17.51708984	0.00266
17.52319336	0.0033
17.52929688	0.003821
17.53540039	0.003783
17.54150391	0.003645
17.54760742	0.003302
17.55371094	0.002755
17.55981445	0.002696
17.56591797	0.00314
17.57202148	0.003485
17.578125	0.003731
17.58422852	0.003757
17.59033203	0.003384
17.59643555	0.003149
17.60253906	0.003257
17.60864258	0.003181
17.61474609	0.003035
17.62084961	0.003052
17.62695313	0.003161
17.63305664	0.003317
17.63916016	0.003145
17.64526367	0.002724
17.65136719	0.002756
17.6574707	0.003039
17.66357422	0.003081
17.66967773	0.00318
17.67578125	0.003228
17.68188477	0.002915

Input Motion

Time (s)	Acceleration (g)
14.485	0.000556
14.49	0.000525
14.495	0.000457
14.5	0.000375
14.505	0.000299
14.51	0.000238
14.515	0.000193
14.52	0.000183
14.525	0.00022
14.53	0.000273
14.535	0.00031
14.54	0.000325
14.545	0.000317
14.55	0.00029
14.555	0.000248
14.56	0.000223
14.565	0.000241
14.57	0.000281
14.575	0.000319
14.58	0.000354
14.585	0.000384
14.59	0.000401
14.595	0.000401
14.6	0.000398
14.605	0.000406
14.61	0.000417
14.615	0.000418
14.62	0.000414
14.625	0.00041
14.63	0.00039
14.635	0.000347
14.64	0.000305
14.645	0.000286
14.65	0.000301
14.655	0.000355
14.66	0.000431
14.665	0.000515
14.67	0.00057
14.675	0.000567
14.68	0.000532
14.685	0.000501
14.69	0.000483

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
17.68798828	0.002705
17.6940918	0.002787
17.70019531	0.00287
17.70629883	0.002975
17.71240234	0.003007
17.71850586	0.002832
17.72460938	0.002691
17.73071289	0.002571
17.73681641	0.002463
17.74291992	0.002744
17.74902344	0.003166
17.75512695	0.003286
17.76123047	0.003294
17.76733398	0.003238
17.7734375	0.002981
17.77954102	0.0029
17.78564453	0.003109
17.79174805	0.003226
17.79785156	0.003137
17.80395508	0.002934
17.81005859	0.002728
17.81616211	0.002832
17.82226563	0.003204
17.82836914	0.003186
17.83447266	0.002651
17.84057617	0.002362
17.84667969	0.002631
17.8527832	0.002865
17.85888672	0.002833
17.86499023	0.00281
17.87109375	0.002931
17.87719727	0.002937
17.88330078	0.002758
17.8894043	0.002779
17.89550781	0.003009
17.90161133	0.003104
17.90771484	0.003141
17.91381836	0.003162
17.91992188	0.002933
17.92602539	0.002678
17.93212891	0.002626
17.93823242	0.002699

Time (s)	Acceleration (g)
14.695	0.000489
14.7	0.000522
14.705	0.000579
14.71	0.000632
14.715	0.00065
14.72	0.000637
14.725	0.000608
14.73	0.000557
14.735	0.000481
14.74	0.000418
14.745	0.0004
14.75	0.000408
14.755	0.000421
14.76	0.000434
14.765	0.000441
14.77	0.000443
14.775	0.000442
14.78	0.000454
14.785	0.000499
14.79	0.000549
14.795	0.00057
14.8	0.000588
14.805	0.000621
14.81	0.000664
14.815	0.000715
14.82	0.00076
14.825	0.000785
14.83	0.000777
14.835	0.000726
14.84	0.000656
14.845	0.000601
14.85	0.000551
14.855	0.000499
14.86	0.000455
14.865	0.000423
14.87	0.000395
14.875	0.000371
14.88	0.000353
14.885	0.000345
14.89	0.000355
14.895	0.000386
14.9	0.000434

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
17.94433594	0.002818
17.95043945	0.002702
17.95654297	0.002606
17.96264648	0.002968
17.96875	0.002993
17.97485352	0.002384
17.98095703	0.002228
17.98706055	0.002547
17.99316406	0.002734
17.99926758	0.003032
18.00537109	0.003197
18.01147461	0.002789
18.01757813	0.00246
18.02368164	0.002666
18.02978516	0.002826
18.03588867	0.002777
18.04199219	0.002973
18.0480957	0.003289
18.05419922	0.003175
18.06030273	0.00293
18.06640625	0.002961
18.07250977	0.002952
18.07861328	0.002859
18.0847168	0.002873
18.09082031	0.002674
18.09692383	0.002392
18.10302734	0.002582
18.10913086	0.003035
18.11523438	0.003098
18.12133789	0.002834
18.12744141	0.002714
18.13354492	0.00285
18.13964844	0.002931
18.14575195	0.002837
18.15185547	0.002886
18.15795898	0.003098
18.1640625	0.003042
18.17016602	0.002679
18.17626953	0.002685
18.18237305	0.003104
18.18847656	0.003122
18.19458008	0.002867

Input Motion

Time (s)	Acceleration (g)
14.905	0.0005
14.91	0.000545
14.915	0.000533
14.92	0.000496
14.925	0.000472
14.93	0.000465
14.935	0.000477
14.94	0.000518
14.945	0.000591
14.95	0.000656
14.955	0.000679
14.96	0.000676
14.965	0.00067
14.97	0.000667
14.975	0.000676
14.98	0.000701
14.985	0.000739
14.99	0.000767
14.995	0.000755
15	0.000723
15.005	0.000693
15.01	0.000664
15.015	0.000635
15.02	0.000617
15.025	0.000617
15.03	0.000627
15.035	0.000635
15.04	0.000657
15.045	0.000702
15.05	0.000752
15.055	0.000791
15.06	0.000815
15.065	0.000816
15.07	0.000793
15.075	0.000746
15.08	0.000682
15.085	0.000618
15.09	0.000548
15.095	0.000467
15.1	0.000412
15.105	0.000414
15.11	0.000467

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
18.20068359	0.002853
18.20678711	0.00275
18.21289063	0.002658
18.21899414	0.00286
18.22509766	0.003012
18.23120117	0.002937
18.23730469	0.002825
18.2434082	0.002636
18.24951172	0.00256
18.25561523	0.002753
18.26171875	0.00288
18.26782227	0.002759
18.27392578	0.002569
18.2800293	0.002483
18.28613281	0.002461
18.29223633	0.002512
18.29833984	0.00265
18.30444336	0.002743
18.31054688	0.002791
18.31665039	0.002863
18.32275391	0.002769
18.32885742	0.002637
18.33496094	0.002707
18.34106445	0.002602
18.34716797	0.002224
18.35327148	0.002268
18.359375	0.002643
18.36547852	0.002782
18.37158203	0.002806
18.37768555	0.002798
18.38378906	0.002629
18.38989258	0.002666
18.39599609	0.002819
18.40209961	0.002682
18.40820313	0.002471
18.41430664	0.002375
18.42041016	0.002298
18.42651367	0.002435
18.43261719	0.002533
18.4387207	0.00243
18.44482422	0.002424
18.45092773	0.002557

Input Motion

Time (s)	Acceleration (g)
15.115	0.000558
15.12	0.000665
15.125	0.000767
15.13	0.000834
15.135	0.000843
15.14	0.000827
15.145	0.000822
15.15	0.000823
15.155	0.000827
15.16	0.000829
15.165	0.00082
15.17	0.000798
15.175	0.000763
15.18	0.00073
15.185	0.000718
15.19	0.000715
15.195	0.000709
15.2	0.000707
15.205	0.000719
15.21	0.000734
15.215	0.00074
15.22	0.000748
15.225	0.000772
15.23	0.000792
15.235	0.000796
15.24	0.000798
15.245	0.000805
15.25	0.000826
15.255	0.000865
15.26	0.000895
15.265	0.000897
15.27	0.000854
15.275	0.000754
15.28	0.000653
15.285	0.000609
15.29	0.000608
15.295	0.000636
15.3	0.000675
15.305	0.000697
15.31	0.000708
15.315	0.000715
15.32	0.000723

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
18.45703125	0.002757
18.46313477	0.002706
18.46923828	0.002399
18.4753418	0.002425
18.48144531	0.002668
18.48754883	0.002605
18.49365234	0.002547
18.49975586	0.002584
18.50585938	0.002474
18.51196289	0.002558
18.51806641	0.002697
18.52416992	0.002416
18.53027344	0.002359
18.53637695	0.002604
18.54248047	0.002551
18.54858398	0.002499
18.5546875	0.002592
18.56079102	0.002405
18.56689453	0.002331
18.57299805	0.00254
18.57910156	0.002514
18.58520508	0.002433
18.59130859	0.002597
18.59741211	0.002687
18.60351563	0.002611
18.60961914	0.0025
18.61572266	0.002305
18.62182617	0.002192
18.62792969	0.00237
18.6340332	0.002709
18.64013672	0.002894
18.64624023	0.002657
18.65234375	0.002195
18.65844727	0.001875
18.66455078	0.001904
18.6706543	0.002253
18.67675781	0.002452
18.68286133	0.002174
18.68896484	0.002038
18.69506836	0.002178
18.70117188	0.002292
18.70727539	0.002229

Time (s)	Acceleration (g)
15.325	0.000743
15.33	0.000757
15.335	0.000739
15.34	0.000703
15.345	0.000665
15.35	0.000617
15.355	0.000561
15.36	0.000511
15.365	0.000476
15.37	0.000462
15.375	0.000475
15.38	0.00051
15.385	0.000559
15.39	0.000614
15.395	0.000667
15.4	0.000719
15.405	0.000778
15.41	0.000829
15.415	0.000859
15.42	0.000868
15.425	0.000868
15.43	0.000849
15.435	0.000799
15.44	0.000764
15.445	0.00078
15.45	0.000815
15.455	0.000841
15.46	0.000845
15.465	0.000814
15.47	0.000757
15.475	0.000693
15.48	0.000638
15.485	0.000612
15.49	0.000619
15.495	0.000652
15.5	0.000715
15.505	0.000808
15.51	0.000904
15.515	0.000976
15.52	0.001021
15.525	0.001037
15.53	0.001008

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
18.71337891	0.002083
18.71948242	0.00216
18.72558594	0.002348
18.73168945	0.002348
18.73779297	0.0024
18.74389648	0.002498
18.75	0.00258
18.75610352	0.002611
18.76220703	0.002415
18.76831055	0.002251
18.77441406	0.002426
18.78051758	0.002492
18.78662109	0.0024
18.79272461	0.00244
18.79882813	0.002364
18.80493164	0.002292
18.81103516	0.002496
18.81713867	0.002635
18.82324219	0.002512
18.8293457	0.002306
18.83544922	0.002062
18.84155273	0.001929
18.84765625	0.002124
18.85375977	0.002538
18.85986328	0.002621
18.8659668	0.002331
18.87207031	0.002222
18.87817383	0.002306
18.88427734	0.002357
18.89038086	0.002508
18.89648438	0.002449
18.90258789	0.002145
18.90869141	0.002225
18.91479492	0.002526
18.92089844	0.002324
18.92700195	0.002122
18.93310547	0.002381
18.93920898	0.002681
18.9453125	0.002775
18.95141602	0.002613
18.95751953	0.002227
18.96362305	0.00204

Time (s)	Acceleration (g)
15.535	0.000927
15.54	0.000813
15.545	0.000686
15.55	0.000571
15.555	0.000492
15.56	0.00046
15.565	0.00048
15.57	0.000545
15.575	0.000637
15.58	0.000743
15.585	0.000848
15.59	0.000935
15.595	0.000993
15.6	0.001014
15.605	0.000996
15.61	0.000946
15.615	0.000878
15.62	0.000802
15.625	0.000734
15.63	0.000688
15.635	0.000668
15.64	0.000701
15.645	0.0008
15.65	0.000927
15.655	0.001044
15.66	0.001117
15.665	0.001111
15.67	0.001052
15.675	0.00097
15.68	0.000886
15.685	0.000823
15.69	0.000775
15.695	0.00073
15.7	0.0007
15.705	0.000689
15.71	0.000708
15.715	0.000766
15.72	0.000842
15.725	0.000916
15.73	0.000963
15.735	0.000961
15.74	0.000929

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
18.96972656	0.002063
18.97583008	0.002044
18.98193359	0.002046
18.98803711	0.002152
18.99414063	0.002244
19.00024414	0.00212
19.00634766	0.001836
19.01245117	0.001796
19.01855469	0.002013
19.0246582	0.002143
19.03076172	0.002321
19.03686523	0.002489
19.04296875	0.00218
19.04907227	0.001913
19.05517578	0.002157
19.0612793	0.002229
19.06738281	0.002011
19.07348633	0.002066
19.07958984	0.002209
19.08569336	0.002245
19.09179688	0.002354
19.09790039	0.002227
19.10400391	0.001906
19.11010742	0.001986
19.11621094	0.002386
19.12231445	0.002456
19.12841797	0.002316
19.13452148	0.002164
19.140625	0.002131
19.14672852	0.002146
19.15283203	0.002012
19.15893555	0.00205
19.16503906	0.002406
19.17114258	0.002537
19.17724609	0.002302
19.18334961	0.002046
19.18945313	0.00197
19.19555664	0.002038
19.20166016	0.002141
19.20776367	0.002337
19.21386719	0.002618
19.2199707	0.00247

Time (s)	Acceleration (g)
15.745	0.000897
15.75	0.000876
15.755	0.000876
15.76	0.000894
15.765	0.000922
15.77	0.000945
15.775	0.000944
15.78	0.00094
15.785	0.000952
15.79	0.000972
15.795	0.000991
15.8	0.00099
15.805	0.000948
15.81	0.000866
15.815	0.000755
15.82	0.000654
15.825	0.000597
15.83	0.000608
15.835	0.000694
15.84	0.000815
15.845	0.000921
15.85	0.000982
15.855	0.000978
15.86	0.000916
15.865	0.000821
15.87	0.000732
15.875	0.00068
15.88	0.000685
15.885	0.000747
15.89	0.000832
15.895	0.000907
15.9	0.000926
15.905	0.00086
15.91	0.000747
15.915	0.000629
15.92	0.00055
15.925	0.000547
15.93	0.000599
15.935	0.000675
15.94	0.000753
15.945	0.000806
15.95	0.000842

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
19.22607422	0.002113
19.23217773	0.002274
19.23828125	0.002527
19.24438477	0.002486
19.25048828	0.00244
19.2565918	0.002437
19.26269531	0.002427
19.26879883	0.002389
19.27490234	0.002215
19.28100586	0.002155
19.28710938	0.002189
19.29321289	0.002097
19.29931641	0.002185
19.30541992	0.002372
19.31152344	0.002328
19.31762695	0.002236
19.32373047	0.002155
19.32983398	0.002127
19.3359375	0.002151
19.34204102	0.00192
19.34814453	0.001814
19.35424805	0.002107
19.36035156	0.002263
19.36645508	0.002169
19.37255859	0.00207
19.37866211	0.00197
19.38476563	0.001928
19.39086914	0.001848
19.39697266	0.001848
19.40307617	0.002132
19.40917969	0.002296
19.4152832	0.002172
19.42138672	0.001964
19.42749023	0.001682
19.43359375	0.001708
19.43969727	0.002041
19.44580078	0.002082
19.4519043	0.002069
19.45800781	0.00225
19.46411133	0.002027
19.47021484	0.001669
19.47631836	0.001701

Input Motion

Time (s)	Acceleration (g)
15.955	0.000878
15.96	0.000911
15.965	0.000945
15.97	0.000976
15.975	0.000995
15.98	0.000998
15.985	0.000983
15.99	0.00094
15.995	0.000867
16	0.000783
16.005	0.000707
16.01	0.000662
16.015	0.00067
16.02	0.000706
16.025	0.000741
16.03	0.000758
16.035	0.000747
16.04	0.000712
16.045	0.000665
16.05	0.000634
16.055	0.000643
16.06	0.000688
16.065	0.000753
16.07	0.00083
16.075	0.000905
16.08	0.000964
16.085	0.000993
16.09	0.000995
16.095	0.000979
16.1	0.000929
16.105	0.000838
16.11	0.000728
16.115	0.000621
16.12	0.000546
16.125	0.00053
16.13	0.000562
16.135	0.000632
16.14	0.000712
16.145	0.000767
16.15	0.000806
16.155	0.000847
16.16	0.000866

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
19.48242188	0.001817
19.48852539	0.001934
19.49462891	0.002045
19.50073242	0.001898
19.50683594	0.00187
19.51293945	0.002058
19.51904297	0.00198
19.52514648	0.001928
19.53125	0.002044
19.53735352	0.001796
19.54345703	0.0016
19.54956055	0.001848
19.55566406	0.001965
19.56176758	0.002075
19.56787109	0.002198
19.57397461	0.001877
19.58007813	0.001665
19.58618164	0.001813
19.59228516	0.001663
19.59838867	0.001561
19.60449219	0.001976
19.6105957	0.002219
19.61669922	0.00201
19.62280273	0.001782
19.62890625	0.001775
19.63500977	0.001854
19.64111328	0.001863
19.6472168	0.001916
19.65332031	0.001958
19.65942383	0.001924
19.66552734	0.001968
19.67163086	0.001864
19.67773438	0.001703
19.68383789	0.001789
19.68994141	0.001682
19.69604492	0.001476
19.70214844	0.001768
19.70825195	0.002102
19.71435547	0.001873
19.72045898	0.0017
19.7265625	0.00176
19.73266602	0.00166

Input Motion

Time (s)	Acceleration (g)
16.165	0.000847
16.17	0.000799
16.175	0.000729
16.18	0.000656
16.185	0.000598
16.19	0.000576
16.195	0.0006
16.2	0.000656
16.205	0.000721
16.21	0.000776
16.215	0.000807
16.22	0.000814
16.225	0.000795
16.23	0.000778
16.235	0.000787
16.24	0.000798
16.245	0.000789
16.25	0.000759
16.255	0.000708
16.26	0.000646
16.265	0.000589
16.27	0.000549
16.275	0.000535
16.28	0.000534
16.285	0.00053
16.29	0.000516
16.295	0.000491
16.3	0.000451
16.305	0.000399
16.31	0.000353
16.315	0.000336
16.32	0.000343
16.325	0.000365
16.33	0.00041
16.335	0.000485
16.34	0.000567
16.345	0.000632
16.35	0.000693
16.355	0.000757
16.36	0.000805
16.365	0.000823
16.37	0.000799

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
19.73876953	0.001611
19.74487305	0.00187
19.75097656	0.002124
19.75708008	0.002031
19.76318359	0.001945
19.76928711	0.002132
19.77539063	0.002193
19.78149414	0.001971
19.78759766	0.001869
19.79370117	0.002054
19.79980469	0.00221
19.8059082	0.002176
19.81201172	0.002135
19.81811523	0.002194
19.82421875	0.002189
19.83032227	0.001934
19.83642578	0.001738
19.8425293	0.001881
19.84863281	0.002033
19.85473633	0.00197
19.86083984	0.001982
19.86694336	0.002056
19.87304688	0.002001
19.87915039	0.002039
19.88525391	0.002147
19.89135742	0.002076
19.89746094	0.002072
19.90356445	0.002263
19.90966797	0.002198
19.91577148	0.001903
19.921875	0.001884
19.92797852	0.002086
19.93408203	0.002169
19.94018555	0.002088
19.94628906	0.001887
19.95239258	0.001744
19.95849609	0.001845
19.96459961	0.001991
19.97070313	0.002079
19.97680664	0.002044
19.98291016	0.00167
19.98901367	0.001356

Time (s)	Acceleration (g)
16.375	0.000732
16.38	0.000633
16.385	0.000514
16.39	0.00042
16.395	0.000389
16.4	0.000407
16.405	0.000451
16.41	0.0005
16.415	0.000534
16.42	0.000542
16.425	0.000518
16.43	0.000496
16.435	0.00051
16.44	0.000544
16.445	0.000576
16.45	0.000605
16.455	0.000626
16.46	0.00062
16.465	0.000576
16.47	0.000511
16.475	0.000443
16.48	0.000385
16.485	0.000346
16.49	0.000329
16.495	0.000341
16.5	0.000358
16.505	0.000354
16.51	0.000361
16.515	0.000402
16.52	0.000462
16.525	0.000529
16.53	0.000579
16.535	0.000592
16.54	0.000579
16.545	0.000552
16.55	0.000537
16.555	0.000566
16.56	0.000602
16.565	0.000606
16.57	0.000593
16.575	0.000577
16.58	0.00056

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
19.99511719	0.001506
20.0012207	0.001644
20.00732422	0.001577
20.01342773	0.001656
20.01953125	0.001744
20.02563477	0.001533
20.03173828	0.001268
20.0378418	0.001219
20.04394531	0.001428
20.05004883	0.001619
20.05615234	0.001572
20.06225586	0.00142
20.06835938	0.001423
20.07446289	0.001561
20.08056641	0.001703
20.08666992	0.001673
20.09277344	0.001549
20.09887695	0.00154
20.10498047	0.001681
20.11108398	0.00166
20.1171875	0.001618
20.12329102	0.001595
20.12939453	0.001641
20.13549805	0.001628
20.14160156	0.001588
20.14770508	0.001557
20.15380859	0.001561
20.15991211	0.001534
20.16601563	0.001538
20.17211914	0.001693
20.17822266	0.001772
20.18432617	0.001613
20.19042969	0.001592
20.1965332	0.001745
20.20263672	0.001808
20.20874023	0.001815
20.21484375	0.001895
20.22094727	0.001815
20.22705078	0.001643
20.2331543	0.0017
20.23925781	0.001868
20.24536133	0.001919

Time (s)	Acceleration (g)
16.585	0.000549
16.59	0.000555
16.595	0.000587
16.6	0.000616
16.605	0.000617
16.61	0.000586
16.615	0.000523
16.62	0.000442
16.625	0.000366
16.63	0.000315
16.635	0.000307
16.64	0.000343
16.645	0.000412
16.65	0.000499
16.655	0.000586
16.66	0.00064
16.665	0.00063
16.67	0.000585
16.675	0.000539
16.68	0.000496
16.685	0.000464
16.69	0.000452
16.695	0.000463
16.7	0.000478
16.705	0.000475
16.71	0.000451
16.715	0.000411
16.72	0.000352
16.725	0.000273
16.73	0.00021
16.735	0.000193
16.74	0.000209
16.745	0.000246
16.75	0.000288
16.755	0.000319
16.76	0.000337
16.765	0.000344
16.77	0.000362
16.775	0.000421
16.78	0.000493
16.785	0.000544
16.79	0.000575

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
20.25146484	0.001902
20.25756836	0.001911
20.26367188	0.001932
20.26977539	0.001894
20.27587891	0.001761
20.28198242	0.001791
20.28808594	0.001985
20.29418945	0.002039
20.30029297	0.00201
20.30639648	0.002024
20.3125	0.001894
20.31860352	0.001665
20.32470703	0.001632
20.33081055	0.001824
20.33691406	0.002025
20.34301758	0.002055
20.34912109	0.001993
20.35522461	0.001919
20.36132813	0.001749
20.36743164	0.001635
20.37353516	0.001656
20.37963867	0.001618
20.38574219	0.001577
20.3918457	0.001498
20.39794922	0.001395
20.40405273	0.001529
20.41015625	0.001657
20.41625977	0.001606
20.42236328	0.001696
20.4284668	0.001744
20.43457031	0.001507
20.44067383	0.00152
20.44677734	0.001786
20.45288086	0.001687
20.45898438	0.001472
20.46508789	0.00142
20.47119141	0.001331
20.47729492	0.001445
20.48339844	0.001665
20.48950195	0.001539
20.49560547	0.001497
20.50170898	0.001719

Input Motion

Time (s)	Acceleration (g)
16.795	0.000583
16.8	0.000549
16.805	0.000465
16.81	0.000342
16.815	0.00021
16.82	0.000085
16.825	-0.000027
16.83	-0.000062
16.835	0.000031
16.84	0.000176
16.845	0.000298
16.85	0.000378
16.855	0.000396
16.86	0.000362
16.865	0.000298
16.87	0.000229
16.875	0.00018
16.88	0.000137
16.885	0.000079
16.89	0.000029
16.895	0.000005
16.9	0.000016
16.905	0.000067
16.91	0.000156
16.915	0.000279
16.92	0.000395
16.925	0.000463
16.93	0.000486
16.935	0.000478
16.94	0.000433
16.945	0.000356
16.95	0.000272
16.955	0.000212
16.96	0.00017
16.965	0.000133
16.97	0.000131
16.975	0.000189
16.98	0.000263
16.985	0.000311
16.99	0.000334
16.995	0.000336
17	0.000313

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
20.5078125	0.001599
20.51391602	0.001427
20.52001953	0.001625
20.52612305	0.001728
20.53222656	0.001722
20.53833008	0.001724
20.54443359	0.001622
20.55053711	0.001663
20.55664063	0.001892
20.56274414	0.001869
20.56884766	0.001686
20.57495117	0.001647
20.58105469	0.001561
20.5871582	0.001437
20.59326172	0.001513
20.59936523	0.001813
20.60546875	0.001997
20.61157227	0.001804
20.61767578	0.001563
20.6237793	0.001607
20.62988281	0.001567
20.63598633	0.001493
20.64208984	0.001552
20.64819336	0.001551
20.65429688	0.001513
20.66040039	0.00172
20.66650391	0.001823
20.67260742	0.001593
20.67871094	0.00148
20.68481445	0.001551
20.69091797	0.001559
20.69702148	0.001635
20.703125	0.00176
20.70922852	0.001622
20.71533203	0.001481
20.72143555	0.001447
20.72753906	0.001385
20.73364258	0.001438
20.73974609	0.001393
20.74584961	0.001188
20.75195313	0.001303
20.75805664	0.001526

Time (s)	Acceleration (g)
17.005	0.000275
17.01	0.00023
17.015	0.000188
17.02	0.000156
17.025	0.000134
17.03	0.000135
17.035	0.000175
17.04	0.000232
17.045	0.000278
17.05	0.000321
17.055	0.000371
17.06	0.000394
17.065	0.000363
17.07	0.000305
17.075	0.000254
17.08	0.0002
17.085	0.000136
17.09	0.000092
17.095	0.000089
17.1	0.000111
17.105	0.000142
17.11	0.000175
17.115	0.000204
17.12	0.000214
17.125	0.000194
17.13	0.00015
17.135	0.000097
17.14	0.000047
17.145	0.000004
17.15	0.000005
17.155	0.000072
17.16	0.000174
17.165	0.000275
17.17	0.000347
17.175	0.000365
17.18	0.00033
17.185	0.00025
17.19	0.000165
17.195	0.000118
17.2	0.000097
17.205	0.000078
17.21	0.000078

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
20.76416016	0.001448
20.77026367	0.001402
20.77636719	0.001557
20.7824707	0.001503
20.78857422	0.001224
20.79467773	0.00106
20.80078125	0.001282
20.80688477	0.001614
20.81298828	0.001656
20.8190918	0.001589
20.82519531	0.001583
20.83129883	0.001508
20.83740234	0.001419
20.84350586	0.00141
20.84960938	0.001452
20.85571289	0.001586
20.86181641	0.001515
20.86791992	0.001403
20.87402344	0.001536
20.88012695	0.001418
20.88623047	0.001185
20.89233398	0.001295
20.8984375	0.001491
20.90454102	0.001527
20.91064453	0.001613
20.91674805	0.001587
20.92285156	0.001466
20.92895508	0.001478
20.93505859	0.001445
20.94116211	0.001462
20.94726563	0.001673
20.95336914	0.001673
20.95947266	0.001576
20.96557617	0.001705
20.97167969	0.001662
20.9777832	0.001486
20.98388672	0.001605
20.98999023	0.001752
20.99609375	0.001723
21.00219727	0.001631
21.00830078	0.001476
21.0144043	0.001403

Time (s)	Acceleration (g)
17.215	0.000104
17.22	0.000133
17.225	0.000139
17.23	0.00013
17.235	0.000121
17.24	0.000084
17.245	-0.000001
17.25	-0.000098
17.255	-0.000174
17.26	-0.00022
17.265	-0.00023
17.27	-0.000207
17.275	-0.000159
17.28	-0.000112
17.285	-0.000091
17.29	-0.000085
17.295	-0.000078
17.3	-0.000081
17.305	-0.000104
17.31	-0.00013
17.315	-0.000144
17.32	-0.000152
17.325	-0.000162
17.33	-0.00015
17.335	-0.000096
17.34	-0.000017
17.345	0.000063
17.35	0.000133
17.355	0.000178
17.36	0.000169
17.365	0.000088
17.37	-0.000028
17.375	-0.000135
17.38	-0.000201
17.385	-0.000204
17.39	-0.000149
17.395	-0.000051
17.4	0.000027
17.405	0.000027
17.41	-0.000034
17.415	-0.000127
17.42	-0.000219

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
21.02050781	0.001381
21.02661133	0.001239
21.03271484	0.00126
21.03881836	0.00145
21.04492188	0.001461
21.05102539	0.001302
21.05712891	0.001084
21.06323242	0.000995
21.06933594	0.00111
21.07543945	0.001154
21.08154297	0.00123
21.08764648	0.001424
21.09375	0.001493
21.09985352	0.001377
21.10595703	0.001157
21.11206055	0.001122
21.11816406	0.001392
21.12426758	0.001564
21.13037109	0.001524
21.13647461	0.001533
21.14257813	0.001415
21.14868164	0.001273
21.15478516	0.001245
21.16088867	0.001259
21.16699219	0.001369
21.1730957	0.0014
21.17919922	0.001352
21.18530273	0.001486
21.19140625	0.001528
21.19750977	0.00145
21.20361328	0.001488
21.2097168	0.001326
21.21582031	0.001149
21.22192383	0.001261
21.22802734	0.001326
21.23413086	0.001226
21.24023438	0.001227
21.24633789	0.001209
21.25244141	0.001204
21.25854492	0.001253
21.26464844	0.001274
21.27075195	0.001398

Time (s)	Acceleration (g)
17.425	-0.000276
17.43	-0.000279
17.435	-0.000222
17.44	-0.000141
17.445	-0.000082
17.45	-0.000054
17.455	-0.000058
17.46	-0.000095
17.465	-0.000157
17.47	-0.000216
17.475	-0.00024
17.48	-0.000241
17.485	-0.000237
17.49	-0.000219
17.495	-0.00018
17.5	-0.000151
17.505	-0.000157
17.51	-0.000184
17.515	-0.000216
17.52	-0.000237
17.525	-0.000231
17.53	-0.000186
17.535	-0.000102
17.54	0.000001
17.545	0.000093
17.55	0.000156
17.555	0.000183
17.56	0.000159
17.565	0.000082
17.57	-0.000013
17.575	-0.000087
17.58	-0.000137
17.585	-0.000164
17.59	-0.000154
17.595	-0.000104
17.6	-0.000036
17.605	0.000024
17.61	0.000063
17.615	0.000075
17.62	0.000042
17.625	-0.000044
17.63	-0.00016

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
21.27685547	0.001496
21.28295898	0.00145
21.2890625	0.00144
21.29516602	0.001378
21.30126953	0.001203
21.30737305	0.001094
21.31347656	0.001123
21.31958008	0.00122
21.32568359	0.001393
21.33178711	0.001512
21.33789063	0.001241
21.34399414	0.000873
21.35009766	0.00089
21.35620117	0.001084
21.36230469	0.001106
21.3684082	0.001106
21.37451172	0.001099
21.38061523	0.000986
21.38671875	0.000931
21.39282227	0.000899
21.39892578	0.000927
21.4050293	0.001102
21.41113281	0.001188
21.41723633	0.00103
21.42333984	0.000953
21.42944336	0.000947
21.43554688	0.000833
21.44165039	0.000872
21.44775391	0.00107
21.45385742	0.001076
21.45996094	0.000986
21.46606445	0.000993
21.47216797	0.000897
21.47827148	0.000789
21.484375	0.000894
21.49047852	0.001024
21.49658203	0.001084
21.50268555	0.00119
21.50878906	0.001288
21.51489258	0.001252
21.52099609	0.001043
21.52709961	0.000889

Time (s)	Acceleration (g)
17.635	-0.000283
17.64	-0.000384
17.645	-0.000437
17.65	-0.000441
17.655	-0.000403
17.66	-0.00034
17.665	-0.000278
17.67	-0.000225
17.675	-0.000181
17.68	-0.000167
17.685	-0.000198
17.69	-0.000249
17.695	-0.000295
17.7	-0.000334
17.705	-0.000362
17.71	-0.000375
17.715	-0.000372
17.72	-0.000361
17.725	-0.000355
17.73	-0.000348
17.735	-0.000329
17.74	-0.000312
17.745	-0.000305
17.75	-0.000294
17.755	-0.000273
17.76	-0.000238
17.765	-0.000186
17.77	-0.000147
17.775	-0.000144
17.78	-0.000177
17.785	-0.000237
17.79	-0.000295
17.795	-0.000318
17.8	-0.000296
17.805	-0.000231
17.81	-0.00015
17.815	-0.000088
17.82	-0.000068
17.825	-0.000102
17.83	-0.000186
17.835	-0.000301
17.84	-0.000405

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
21.53320313	0.00105
21.53930664	0.001229
21.54541016	0.001242
21.55151367	0.001265
21.55761719	0.001287
21.5637207	0.001187
21.56982422	0.001111
21.57592773	0.001135
21.58203125	0.001242
21.58813477	0.00145
21.59423828	0.001585
21.6003418	0.001508
21.60644531	0.001353
21.61254883	0.001311
21.61865234	0.00137
21.62475586	0.001414
21.63085938	0.00137
21.63696289	0.001392
21.64306641	0.001571
21.64916992	0.001548
21.65527344	0.001351
21.66137695	0.001318
21.66748047	0.00129
21.67358398	0.001174
21.6796875	0.001262
21.68579102	0.001446
21.69189453	0.00134
21.69799805	0.001114
21.70410156	0.001042
21.71020508	0.000948
21.71630859	0.000784
21.72241211	0.00079
21.72851563	0.000916
21.73461914	0.000977
21.74072266	0.001006
21.74682617	0.000967
21.75292969	0.000881
21.7590332	0.000908
21.76513672	0.000853
21.77124023	0.000726
21.77734375	0.000859
21.78344727	0.000961

Time (s)	Acceleration (g)
17.845	-0.000463
17.85	-0.000459
17.855	-0.000391
17.86	-0.000304
17.865	-0.000246
17.87	-0.000231
17.875	-0.000262
17.88	-0.000307
17.885	-0.000327
17.89	-0.000314
17.895	-0.000264
17.9	-0.000207
17.905	-0.00018
17.91	-0.000198
17.915	-0.000268
17.92	-0.000373
17.925	-0.000482
17.93	-0.000563
17.935	-0.00059
17.94	-0.000544
17.945	-0.000428
17.95	-0.000279
17.955	-0.000142
17.96	-0.000059
17.965	-0.000057
17.97	-0.000133
17.975	-0.000273
17.98	-0.000422
17.985	-0.000525
17.99	-0.000577
17.995	-0.000584
18	-0.000557
18.005	-0.000523
18.01	-0.000481
18.015	-0.000432
18.02	-0.000379
18.025	-0.00032
18.03	-0.000265
18.035	-0.00022
18.04	-0.000184
18.045	-0.000155
18.05	-0.000126

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
21.78955078	0.000852
21.7956543	0.00092
21.80175781	0.00098
21.80786133	0.000806
21.81396484	0.000568
21.82006836	0.000662
21.82617188	0.000864
21.83227539	0.000918
21.83837891	0.000773
21.84448242	0.0008
21.85058594	0.000923
21.85668945	0.000823
21.86279297	0.000722
21.86889648	0.000824
21.875	0.000914
21.88110352	0.000978
21.88720703	0.000979
21.89331055	0.00088
21.89941406	0.000777
21.90551758	0.000758
21.91162109	0.000877
21.91772461	0.001034
21.92382813	0.001119
21.92993164	0.001115
21.93603516	0.00099
21.94213867	0.000923
21.94824219	0.001095
21.9543457	0.001157
21.96044922	0.001003
21.96655273	0.0011
21.97265625	0.001299
21.97875977	0.001192
21.98486328	0.001021
21.9909668	0.001055
21.99707031	0.00111
22.00317383	0.001104
22.00927734	0.001029
22.01538086	0.000872
22.02148438	0.000897
22.02758789	0.000937
22.03369141	0.000823
22.03979492	0.000878

Time (s)	Acceleration (g)
18.055	-0.000093
18.06	-0.000071
18.065	-0.000074
18.07	-0.000114
18.075	-0.000196
18.08	-0.000296
18.085	-0.000384
18.09	-0.000436
18.095	-0.00044
18.1	-0.000392
18.105	-0.000299
18.11	-0.000219
18.115	-0.000201
18.12	-0.000248
18.125	-0.000356
18.13	-0.00047
18.135	-0.000536
18.14	-0.00054
18.145	-0.000474
18.15	-0.00037
18.155	-0.000274
18.16	-0.000188
18.165	-0.000114
18.17	-0.00007
18.175	-0.00006
18.18	-0.000088
18.185	-0.000153
18.19	-0.000232
18.195	-0.000307
18.2	-0.00035
18.205	-0.00034
18.21	-0.00031
18.215	-0.000294
18.22	-0.000305
18.225	-0.000348
18.23	-0.000403
18.235	-0.000448
18.24	-0.000446
18.245	-0.000365
18.25	-0.000251
18.255	-0.000157
18.26	-0.0001

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
22.04589844	0.000966
22.05200195	0.000831
22.05810547	0.000869
22.06420898	0.000923
22.0703125	0.000687
22.07641602	0.000598
22.08251953	0.000716
22.08862305	0.000825
22.09472656	0.001066
22.10083008	0.001058
22.10693359	0.000763
22.11303711	0.00072
22.11914063	0.000808
22.12524414	0.000694
22.13134766	0.000654
22.13745117	0.000859
22.14355469	0.001019
22.1496582	0.000994
22.15576172	0.000883
22.16186523	0.000839
22.16796875	0.000868
22.17407227	0.000898
22.18017578	0.000958
22.1862793	0.001009
22.19238281	0.001015
22.19848633	0.001035
22.20458984	0.001046
22.21069336	0.000981
22.21679688	0.000889
22.22290039	0.00092
22.22900391	0.000951
22.23510742	0.001079
22.24121094	0.001097
22.24731445	0.001004
22.25341797	0.000916
22.25952148	0.000881
22.265625	0.000975
22.27172852	0.001115
22.27783203	0.001111
22.28393555	0.001093
22.29003906	0.001106
22.29614258	0.001025

Time (s)	Acceleration (g)
18.265	-0.000093
18.27	-0.000142
18.275	-0.000239
18.28	-0.000342
18.285	-0.00041
18.29	-0.000431
18.295	-0.000412
18.3	-0.000351
18.305	-0.00026
18.31	-0.000182
18.315	-0.000157
18.32	-0.00018
18.325	-0.000239
18.33	-0.000319
18.335	-0.000401
18.34	-0.000463
18.345	-0.000484
18.35	-0.000475
18.355	-0.000454
18.36	-0.000419
18.365	-0.00037
18.37	-0.000341
18.375	-0.000354
18.38	-0.00041
18.385	-0.000502
18.39	-0.000599
18.395	-0.000671
18.4	-0.000697
18.405	-0.000659
18.41	-0.000588
18.415	-0.000527
18.42	-0.000476
18.425	-0.000436
18.43	-0.00042
18.435	-0.00043
18.44	-0.000459
18.445	-0.000497
18.45	-0.000548
18.455	-0.000615
18.46	-0.000681
18.465	-0.000723
18.47	-0.000741

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
22.30224609	0.001098
22.30834961	0.001292
22.31445313	0.001252
22.32055664	0.001102
22.32666016	0.000983
22.33276367	0.000841
22.33886719	0.000896
22.3449707	0.001097
22.35107422	0.001091
22.35717773	0.000947
22.36328125	0.000805
22.36938477	0.000842
22.37548828	0.000967
22.3815918	0.000831
22.38769531	0.000642
22.39379883	0.000763
22.39990234	0.000837
22.40600586	0.000764
22.41210938	0.000841
22.41821289	0.000836
22.42431641	0.000681
22.43041992	0.00074
22.43652344	0.000938
22.44262695	0.000886
22.44873047	0.000787
22.45483398	0.000918
22.4609375	0.000946
22.46704102	0.000922
22.47314453	0.001134
22.47924805	0.001197
22.48535156	0.000967
22.49145508	0.000959
22.49755859	0.001093
22.50366211	0.001154
22.50976563	0.00121
22.51586914	0.001206
22.52197266	0.001211
22.52807617	0.001252
22.53417969	0.001221
22.5402832	0.001203
22.54638672	0.001211
22.55249023	0.001206

Input Motion

Time (s)	Acceleration (g)
18.475	-0.000742
18.48	-0.000706
18.485	-0.000614
18.49	-0.000515
18.495	-0.000456
18.5	-0.000426
18.505	-0.000414
18.51	-0.000415
18.515	-0.000419
18.52	-0.000427
18.525	-0.000436
18.53	-0.000457
18.535	-0.000509
18.54	-0.000557
18.545	-0.000568
18.55	-0.00056
18.555	-0.000552
18.56	-0.000551
18.565	-0.000564
18.57	-0.000593
18.575	-0.000636
18.58	-0.00067
18.585	-0.000672
18.59	-0.000654
18.595	-0.000637
18.6	-0.000626
18.605	-0.000619
18.61	-0.000636
18.615	-0.000693
18.62	-0.00074
18.625	-0.000733
18.63	-0.000693
18.635	-0.000642
18.64	-0.000583
18.645	-0.00053
18.65	-0.00049
18.655	-0.000465
18.66	-0.000456
18.665	-0.000453
18.67	-0.000465
18.675	-0.000502
18.68	-0.000536

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
22.55859375	0.001258
22.56469727	0.001194
22.57080078	0.001116
22.5769043	0.001249
22.58300781	0.001361
22.58911133	0.001362
22.59521484	0.001275
22.60131836	0.001129
22.60742188	0.001167
22.61352539	0.001258
22.61962891	0.001196
22.62573242	0.001333
22.63183594	0.001414
22.63793945	0.001218
22.64404297	0.001256
22.65014648	0.001397
22.65625	0.001309
22.66235352	0.001289
22.66845703	0.001338
22.67456055	0.001318
22.68066406	0.001418
22.68676758	0.001453
22.69287109	0.001359
22.69897461	0.001327
22.70507813	0.001303
22.71118164	0.001311
22.71728516	0.001385
22.72338867	0.001321
22.72949219	0.001215
22.7355957	0.001226
22.74169922	0.001294
22.74780273	0.001422
22.75390625	0.001462
22.76000977	0.001277
22.76611328	0.001227
22.7722168	0.00134
22.77832031	0.001246
22.78442383	0.001123
22.79052734	0.001247
22.79663086	0.001407
22.80273438	0.001485
22.80883789	0.001568

Time (s)	Acceleration (g)
18.685	-0.00054
18.69	-0.000536
18.695	-0.000546
18.7	-0.00056
18.705	-0.000565
18.71	-0.000579
18.715	-0.000617
18.72	-0.000646
18.725	-0.000637
18.73	-0.0006
18.735	-0.00055
18.74	-0.000503
18.745	-0.000475
18.75	-0.000487
18.755	-0.000551
18.76	-0.000634
18.765	-0.000694
18.77	-0.00073
18.775	-0.000743
18.78	-0.000722
18.785	-0.000663
18.79	-0.000585
18.795	-0.000515
18.8	-0.000443
18.805	-0.000361
18.81	-0.000318
18.815	-0.000353
18.82	-0.000449
18.825	-0.00058
18.83	-0.000722
18.835	-0.000849
18.84	-0.000931
18.845	-0.000941
18.85	-0.000908
18.855	-0.000868
18.86	-0.000811
18.865	-0.000729
18.87	-0.000633
18.875	-0.000531
18.88	-0.000432
18.885	-0.000341
18.89	-0.000289

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
22.81494141	0.001559
22.82104492	0.001536
22.82714844	0.001571
22.83325195	0.001549
22.83935547	0.00161
22.84545898	0.001809
22.8515625	0.001775
22.85766602	0.001615
22.86376953	0.001697
22.86987305	0.001822
22.87597656	0.001764
22.88208008	0.001702
22.88818359	0.001746
22.89428711	0.00175
22.90039063	0.001669
22.90649414	0.001703
22.91259766	0.001846
22.91870117	0.001798
22.92480469	0.001629
22.9309082	0.001592
22.93701172	0.00159
22.94311523	0.001606
22.94921875	0.001701
22.95532227	0.001738
22.96142578	0.001722
22.9675293	0.001683
22.97363281	0.001566
22.97973633	0.001546
22.98583984	0.001662
22.99194336	0.001735
22.99804688	0.001776
23.00415039	0.001744
23.01025391	0.001593
23.01635742	0.001486
23.02246094	0.001514
23.02856445	0.001648
23.03466797	0.001701
23.04077148	0.001603
23.046875	0.001645
23.05297852	0.001702
23.05908203	0.001547
23.06518555	0.001528

Time (s)	Acceleration (g)
18.895	-0.000302
18.9	-0.00035
18.905	-0.000396
18.91	-0.000443
18.915	-0.000496
18.92	-0.000532
18.925	-0.000541
18.93	-0.000547
18.935	-0.000566
18.94	-0.000597
18.945	-0.000641
18.95	-0.000673
18.955	-0.000675
18.96	-0.000645
18.965	-0.000584
18.97	-0.000515
18.975	-0.000472
18.98	-0.00044
18.985	-0.000398
18.99	-0.000375
18.995	-0.000386
19	-0.000423
19.005	-0.000478
19.01	-0.000542
19.015	-0.000606
19.02	-0.000656
19.025	-0.000681
19.03	-0.000693
19.035	-0.000705
19.04	-0.000703
19.045	-0.000677
19.05	-0.000626
19.055	-0.000559
19.06	-0.000484
19.065	-0.000408
19.07	-0.000373
19.075	-0.000413
19.08	-0.000493
19.085	-0.000571
19.09	-0.000641
19.095	-0.000693
19.1	-0.00072

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
23.07128906	0.001708
23.07739258	0.001774
23.08349609	0.001732
23.08959961	0.001613
23.09570313	0.001556
23.10180664	0.001707
23.10791016	0.001754
23.11401367	0.001667
23.12011719	0.001766
23.1262207	0.001867
23.13232422	0.001801
23.13842773	0.00181
23.14453125	0.001865
23.15063477	0.001853
23.15673828	0.001854
23.1628418	0.001888
23.16894531	0.001944
23.17504883	0.002043
23.18115234	0.002097
23.18725586	0.002032
23.19335938	0.001936
23.19946289	0.001952
23.20556641	0.002055
23.21166992	0.00211
23.21777344	0.002116
23.22387695	0.002154
23.22998047	0.002093
23.23608398	0.001982
23.2421875	0.002054
23.24829102	0.002131
23.25439453	0.002023
23.26049805	0.001956
23.26660156	0.002061
23.27270508	0.002139
23.27880859	0.002122
23.28491211	0.002164
23.29101563	0.002245
23.29711914	0.002233
23.30322266	0.002278
23.30932617	0.002435
23.31542969	0.002332
23.3215332	0.00201

Time (s)	Acceleration (g)
19.105	-0.000723
19.11	-0.000716
19.115	-0.000715
19.12	-0.000709
19.125	-0.000687
19.13	-0.000654
19.135	-0.000621
19.14	-0.000591
19.145	-0.000567
19.15	-0.000577
19.155	-0.000643
19.16	-0.000727
19.165	-0.000793
19.17	-0.00082
19.175	-0.000797
19.18	-0.000737
19.185	-0.000659
19.19	-0.000601
19.195	-0.000595
19.2	-0.000615
19.205	-0.000624
19.21	-0.000621
19.215	-0.000606
19.22	-0.000572
19.225	-0.000524
19.23	-0.00048
19.235	-0.000451
19.24	-0.000445
19.245	-0.00046
19.25	-0.000477
19.255	-0.000481
19.26	-0.00046
19.265	-0.000407
19.27	-0.000354
19.275	-0.000337
19.28	-0.000357
19.285	-0.000408
19.29	-0.000478
19.295	-0.000547
19.3	-0.000599
19.305	-0.00062
19.31	-0.00062

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
23.32763672	0.002043
23.33374023	0.002357
23.33984375	0.002399
23.34594727	0.00227
23.35205078	0.002254
23.3581543	0.002153
23.36425781	0.001993
23.37036133	0.002077
23.37646484	0.002219
23.38256836	0.002155
23.38867188	0.002072
23.39477539	0.002088
23.40087891	0.002109
23.40698242	0.002071
23.41308594	0.002004
23.41918945	0.002037
23.42529297	0.002089
23.43139648	0.002011
23.4375	0.002013
23.44360352	0.002142
23.44970703	0.002191
23.45581055	0.002225
23.46191406	0.00227
23.46801758	0.002233
23.47412109	0.002167
23.48022461	0.002132
23.48632813	0.002237
23.49243164	0.002389
23.49853516	0.002336
23.50463867	0.002263
23.51074219	0.002369
23.5168457	0.00241
23.52294922	0.002341
23.52905273	0.002343
23.53515625	0.002371
23.54125977	0.002348
23.54736328	0.002326
23.5534668	0.002363
23.55957031	0.002393
23.56567383	0.002333
23.57177734	0.002255
23.57788086	0.002263

Time (s)	Acceleration (g)
19.315	-0.000616
19.32	-0.000607
19.325	-0.000596
19.33	-0.000599
19.335	-0.000626
19.34	-0.000671
19.345	-0.000721
19.35	-0.00078
19.355	-0.000844
19.36	-0.000903
19.365	-0.000948
19.37	-0.000965
19.375	-0.000942
19.38	-0.000882
19.385	-0.000797
19.39	-0.000702
19.395	-0.000618
19.4	-0.000561
19.405	-0.000539
19.41	-0.000549
19.415	-0.000581
19.42	-0.000612
19.425	-0.000615
19.43	-0.000602
19.435	-0.000591
19.44	-0.000575
19.445	-0.000556
19.45	-0.000538
19.455	-0.000521
19.46	-0.00052
19.465	-0.000549
19.47	-0.00059
19.475	-0.000626
19.48	-0.000646
19.485	-0.000637
19.49	-0.000608
19.495	-0.000569
19.5	-0.000534
19.505	-0.000516
19.51	-0.000508
19.515	-0.000501
19.52	-0.000498

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
23.58398438	0.002316
23.59008789	0.002351
23.59619141	0.002321
23.60229492	0.002295
23.60839844	0.002395
23.61450195	0.002505
23.62060547	0.002466
23.62670898	0.002388
23.6328125	0.002372
23.63891602	0.002348
23.64501953	0.00232
23.65112305	0.00235
23.65722656	0.002384
23.66333008	0.002332
23.66943359	0.002257
23.67553711	0.002265
23.68164063	0.00228
23.68774414	0.002266
23.69384766	0.002322
23.69995117	0.002345
23.70605469	0.002256
23.7121582	0.002273
23.71826172	0.002417
23.72436523	0.002471
23.73046875	0.002432
23.73657227	0.002349
23.74267578	0.002223
23.7487793	0.002207
23.75488281	0.002343
23.76098633	0.002393
23.76708984	0.002281
23.77319336	0.002227
23.77929688	0.002271
23.78540039	0.00223
23.79150391	0.002163
23.79760742	0.00224
23.80371094	0.00237
23.80981445	0.002435
23.81591797	0.002419
23.82202148	0.00237
23.828125	0.002377
23.83422852	0.002431

Input Motion

Time (s)	Acceleration (g)
19.525	-0.000499
19.53	-0.000506
19.535	-0.000518
19.54	-0.000548
19.545	-0.000599
19.55	-0.000659
19.555	-0.000714
19.56	-0.000742
19.565	-0.000728
19.57	-0.000685
19.575	-0.000629
19.58	-0.000599
19.585	-0.000634
19.59	-0.000708
19.595	-0.000785
19.6	-0.00085
19.605	-0.000884
19.61	-0.000886
19.615	-0.000863
19.62	-0.00084
19.625	-0.000836
19.63	-0.000855
19.635	-0.000897
19.64	-0.00093
19.645	-0.000925
19.65	-0.000892
19.655	-0.000841
19.66	-0.000798
19.665	-0.000792
19.67	-0.000808
19.675	-0.000821
19.68	-0.000829
19.685	-0.000821
19.69	-0.000796
19.695	-0.000762
19.7	-0.000713
19.705	-0.000649
19.71	-0.0006
19.715	-0.000586
19.72	-0.000619
19.725	-0.000709
19.73	-0.000816

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
23.84033203	0.002435
23.84643555	0.002368
23.85253906	0.002325
23.85864258	0.002399
23.86474609	0.002442
23.87084961	0.002362
23.87695313	0.002421
23.88305664	0.002562
23.88916016	0.002457
23.89526367	0.002345
23.90136719	0.002396
23.9074707	0.002357
23.91357422	0.002345
23.91967773	0.002475
23.92578125	0.002483
23.93188477	0.002436
23.93798828	0.002484
23.9440918	0.002472
23.95019531	0.002456
23.95629883	0.002534
23.96240234	0.002551
23.96850586	0.002549
23.97460938	0.002601
23.98071289	0.002517
23.98681641	0.002421
23.99291992	0.002541
23.99902344	0.002632
24.00512695	0.002513
24.01123047	0.002466
24.01733398	0.002551
24.0234375	0.002608
24.02954102	0.002581
24.03564453	0.002526
24.04174805	0.002564
24.04785156	0.002621
24.05395508	0.002521
24.06005859	0.002466
24.06616211	0.002596
24.07226563	0.002584
24.07836914	0.002404
24.08447266	0.002382
24.09057617	0.002462

Input Motion

Time (s)	Acceleration (g)
19.735	-0.000896
19.74	-0.000953
19.745	-0.000991
19.75	-0.001
19.755	-0.000978
19.76	-0.000938
19.765	-0.000896
19.77	-0.000853
19.775	-0.000809
19.78	-0.00079
19.785	-0.00082
19.79	-0.000875
19.795	-0.000926
19.8	-0.00097
19.805	-0.001003
19.81	-0.001004
19.815	-0.000962
19.82	-0.00089
19.825	-0.000806
19.83	-0.000722
19.835	-0.00065
19.84	-0.000612
19.845	-0.000623
19.85	-0.000677
19.855	-0.000753
19.86	-0.000835
19.865	-0.000914
19.87	-0.000952
19.875	-0.000917
19.88	-0.000857
19.885	-0.000819
19.89	-0.000809
19.895	-0.00083
19.9	-0.000867
19.905	-0.0009
19.91	-0.000914
19.915	-0.000898
19.92	-0.000871
19.925	-0.000862
19.93	-0.000862
19.935	-0.000854
19.94	-0.00085

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
24.09667969	0.002418
24.1027832	0.002363
24.10888672	0.002417
24.11499023	0.002426
24.12109375	0.002334
24.12719727	0.002327
24.13330078	0.002378
24.1394043	0.002327
24.14550781	0.002344
24.15161133	0.002487
24.15771484	0.002489
24.16381836	0.002401
24.16992188	0.00242
24.17602539	0.002457
24.18212891	0.002519
24.18823242	0.002589
24.19433594	0.002467
24.20043945	0.00234
24.20654297	0.00242
24.21264648	0.002447
24.21875	0.002376
24.22485352	0.002387
24.23095703	0.002399
24.23706055	0.00235
24.24316406	0.002323
24.24926758	0.002336
24.25537109	0.002375
24.26147461	0.002399
24.26757813	0.002369
24.27368164	0.002319
24.27978516	0.002297
24.28588867	0.002323
24.29199219	0.002335
24.2980957	0.002308
24.30419922	0.002344
24.31030273	0.002379
24.31640625	0.002314
24.32250977	0.002297
24.32861328	0.002382
24.3347168	0.002456
24.34082031	0.002488
24.34692383	0.00244

Time (s)	Acceleration (g)
19.945	-0.000858
19.95	-0.000856
19.955	-0.000823
19.96	-0.000779
19.965	-0.000742
19.97	-0.000711
19.975	-0.000684
19.98	-0.000672
19.985	-0.000684
19.99	-0.000713
19.995	-0.000748
20	-0.00079
20.005	-0.000843
20.01	-0.000885
20.015	-0.000896
20.02	-0.000892
20.025	-0.000894
20.03	-0.00089
20.035	-0.000873
20.04	-0.000862
20.045	-0.000874
20.05	-0.000898
20.055	-0.000918
20.06	-0.000941
20.065	-0.000973
20.07	-0.000978
20.075	-0.00093
20.08	-0.000848
20.085	-0.000753
20.09	-0.000682
20.095	-0.000672
20.1	-0.000729
20.105	-0.000846
20.11	-0.000986
20.115	-0.0011
20.12	-0.001172
20.125	-0.001201
20.13	-0.001176
20.135	-0.001098
20.14	-0.001013
20.145	-0.000964
20.15	-0.00095

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
24.35302734	0.002329
24.35913086	0.002269
24.36523438	0.002275
24.37133789	0.002277
24.37744141	0.002292
24.38354492	0.002312
24.38964844	0.002292
24.39575195	0.002266
24.40185547	0.002254
24.40795898	0.002171
24.4140625	0.002075
24.42016602	0.002111
24.42626953	0.002182
24.43237305	0.002148
24.43847656	0.002147
24.44458008	0.002207
24.45068359	0.002163
24.45678711	0.002093
24.46289063	0.002103
24.46899414	0.002087
24.47509766	0.002068
24.48120117	0.002124
24.48730469	0.002161
24.4934082	0.002163
24.49951172	0.002185
24.50561523	0.002206
24.51171875	0.002256
24.51782227	0.002321
24.52392578	0.002321
24.5300293	0.002272
24.53613281	0.002223
24.54223633	0.002236
24.54833984	0.002315
24.55444336	0.002281
24.56054688	0.00215
24.56665039	0.002189
24.57275391	0.002324
24.57885742	0.002325
24.58496094	0.002292
24.59106445	0.002284
24.59716797	0.002241
24.60327148	0.00228

Time (s)	Acceleration (g)
20.155	-0.000956
20.16	-0.000976
20.165	-0.000999
20.17	-0.000995
20.175	-0.000939
20.18	-0.000868
20.185	-0.000822
20.19	-0.000791
20.195	-0.000764
20.2	-0.000753
20.205	-0.000764
20.21	-0.000773
20.215	-0.000758
20.22	-0.000741
20.225	-0.000745
20.23	-0.000771
20.235	-0.000812
20.24	-0.00089
20.245	-0.001017
20.25	-0.001145
20.255	-0.001224
20.26	-0.001246
20.265	-0.001212
20.27	-0.001131
20.275	-0.001021
20.28	-0.000934
20.285	-0.00092
20.29	-0.000942
20.295	-0.000961
20.3	-0.000967
20.305	-0.000949
20.31	-0.000919
20.315	-0.000897
20.32	-0.000899
20.325	-0.000944
20.33	-0.001012
20.335	-0.001073
20.34	-0.001134
20.345	-0.001201
20.35	-0.001256
20.355	-0.001288
20.36	-0.001296

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
24.609375	0.002381
24.61547852	0.002363
24.62158203	0.002348
24.62768555	0.002421
24.63378906	0.002321
24.63989258	0.002165
24.64599609	0.002262
24.65209961	0.002354
24.65820313	0.002294
24.66430664	0.002309
24.67041016	0.002286
24.67651367	0.002182
24.68261719	0.002246
24.6887207	0.002334
24.69482422	0.002273
24.70092773	0.002231
24.70703125	0.002221
24.71313477	0.002201
24.71923828	0.002222
24.7253418	0.002213
24.73144531	0.002166
24.73754883	0.002136
24.74365234	0.00211
24.74975586	0.002134
24.75585938	0.002137
24.76196289	0.001982
24.76806641	0.001845
24.77416992	0.001898
24.78027344	0.002006
24.78637695	0.00203
24.79248047	0.002003
24.79858398	0.001961
24.8046875	0.001915
24.81079102	0.001899
24.81689453	0.001901
24.82299805	0.001878
24.82910156	0.001875
24.83520508	0.001944
24.84130859	0.001984
24.84741211	0.001925
24.85351563	0.001879
24.85961914	0.001947

Time (s)	Acceleration (g)
20.365	-0.00128
20.37	-0.001246
20.375	-0.001197
20.38	-0.001148
20.385	-0.00112
20.39	-0.001101
20.395	-0.001078
20.4	-0.00107
20.405	-0.001089
20.41	-0.001123
20.415	-0.001161
20.42	-0.001179
20.425	-0.001163
20.43	-0.001121
20.435	-0.001066
20.44	-0.00104
20.445	-0.001083
20.45	-0.001163
20.455	-0.001242
20.46	-0.001296
20.465	-0.001304
20.47	-0.001259
20.475	-0.001171
20.48	-0.001068
20.485	-0.000986
20.49	-0.000943
20.495	-0.000944
20.5	-0.000982
20.505	-0.001048
20.51	-0.001102
20.515	-0.001105
20.52	-0.001093
20.525	-0.001106
20.53	-0.001139
20.535	-0.001188
20.54	-0.001244
20.545	-0.001297
20.55	-0.001313
20.555	-0.001266
20.56	-0.001185
20.565	-0.001104
20.57	-0.001034

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
24.86572266	0.002039
24.87182617	0.002043
24.87792969	0.002038
24.8840332	0.002035
24.89013672	0.00194
24.89624023	0.001893
24.90234375	0.00203
24.90844727	0.002173
24.91455078	0.002179
24.9206543	0.002111
24.92675781	0.002088
24.93286133	0.002157
24.93896484	0.002171
24.94506836	0.002073
24.95117188	0.002064
24.95727539	0.002143
24.96337891	0.002078
24.96948242	0.00194
24.97558594	0.001941
24.98168945	0.002012
24.98779297	0.002042
24.99389648	0.002048
25	0.002043
25.00610352	0.002053
25.01220703	0.00209
25.01831055	0.002087
25.02441406	0.002077
25.03051758	0.00214
25.03662109	0.002188
25.04272461	0.002106
25.04882813	0.001989
25.05493164	0.001994
25.06103516	0.00206
25.06713867	0.002013
25.07324219	0.001933
25.0793457	0.001984
25.08544922	0.002021
25.09155273	0.00194
25.09765625	0.001916
25.10375977	0.00197
25.10986328	0.001994
25.1159668	0.001991

Time (s)	Acceleration (g)
20.575	-0.000986
20.58	-0.000966
20.585	-0.000972
20.59	-0.000992
20.595	-0.001012
20.6	-0.001034
20.605	-0.001062
20.61	-0.00108
20.615	-0.001078
20.62	-0.001067
20.625	-0.001055
20.63	-0.001059
20.635	-0.001097
20.64	-0.001148
20.645	-0.001197
20.65	-0.001231
20.655	-0.001234
20.66	-0.001229
20.665	-0.001243
20.67	-0.001255
20.675	-0.001249
20.68	-0.001235
20.685	-0.001217
20.69	-0.0012
20.695	-0.001189
20.7	-0.001183
20.705	-0.001179
20.71	-0.001169
20.715	-0.001142
20.72	-0.001104
20.725	-0.001063
20.73	-0.001023
20.735	-0.000995
20.74	-0.000979
20.745	-0.000975
20.75	-0.000995
20.755	-0.00104
20.76	-0.001109
20.765	-0.001197
20.77	-0.001281
20.775	-0.00134
20.78	-0.001359

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
25.12207031	0.001949
25.12817383	0.00187
25.13427734	0.001861
25.14038086	0.001896
25.14648438	0.001874
25.15258789	0.001843
25.15869141	0.001857
25.16479492	0.001863
25.17089844	0.001831
25.17700195	0.00181
25.18310547	0.00184
25.18920898	0.001879
25.1953125	0.001851
25.20141602	0.001836
25.20751953	0.001927
25.21362305	0.001913
25.21972656	0.001751
25.22583008	0.001791
25.23193359	0.001955
25.23803711	0.001909
25.24414063	0.001884
25.25024414	0.001972
25.25634766	0.001891
25.26245117	0.001805
25.26855469	0.001912
25.2746582	0.001955
25.28076172	0.001924
25.28686523	0.00192
25.29296875	0.001891
25.29907227	0.00189
25.30517578	0.001892
25.3112793	0.00184
25.31738281	0.00184
25.32348633	0.001824
25.32958984	0.001787
25.33569336	0.001889
25.34179688	0.001932
25.34790039	0.001864
25.35400391	0.00192
25.36010742	0.001907
25.36621094	0.001788
25.37231445	0.001833

Input Motion

Time (s)	Acceleration (g)
20.785	-0.001331
20.79	-0.001262
20.795	-0.001169
20.8	-0.001079
20.805	-0.001019
20.81	-0.001003
20.815	-0.001036
20.82	-0.001105
20.825	-0.001189
20.83	-0.001255
20.835	-0.001276
20.84	-0.00125
20.845	-0.001183
20.85	-0.001105
20.855	-0.001049
20.86	-0.001029
20.865	-0.001049
20.87	-0.00109
20.875	-0.001129
20.88	-0.001139
20.885	-0.001098
20.89	-0.001025
20.895	-0.000944
20.9	-0.000879
20.905	-0.000857
20.91	-0.000864
20.915	-0.000882
20.92	-0.000913
20.925	-0.000948
20.93	-0.000983
20.935	-0.001025
20.94	-0.001042
20.945	-0.001016
20.95	-0.000969
20.955	-0.000921
20.96	-0.000903
20.965	-0.000941
20.97	-0.001006
20.975	-0.001069
20.98	-0.001098
20.985	-0.001068
20.99	-0.001004

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
25.37841797	0.001884
25.38452148	0.001851
25.390625	0.001878
25.39672852	0.001835
25.40283203	0.001756
25.40893555	0.00176
25.41503906	0.001691
25.42114258	0.001652
25.42724609	0.001733
25.43334961	0.001721
25.43945313	0.001699
25.44555664	0.001735
25.45166016	0.001656
25.45776367	0.001598
25.46386719	0.001698
25.4699707	0.001722
25.47607422	0.001658
25.48217773	0.001705
25.48828125	0.001748
25.49438477	0.001698
25.50048828	0.00173
25.5065918	0.001795
25.51269531	0.001758
25.51879883	0.001768
25.52490234	0.001826
25.53100586	0.001783
25.53710938	0.001723
25.54321289	0.001726
25.54931641	0.001781
25.55541992	0.001886
25.56152344	0.001909
25.56762695	0.001836
25.57373047	0.001829
25.57983398	0.001899
25.5859375	0.001951
25.59204102	0.001915
25.59814453	0.001866
25.60424805	0.001896
25.61035156	0.001839
25.61645508	0.001688
25.62255859	0.001692
25.62866211	0.001784

Time (s)	Acceleration (g)
20.995	-0.000935
21	-0.000892
21.005	-0.000906
21.01	-0.000954
21.015	-0.001006
21.02	-0.001045
21.025	-0.001051
21.03	-0.001033
21.035	-0.001012
21.04	-0.000983
21.045	-0.00094
21.05	-0.000904
21.055	-0.00089
21.06	-0.000894
21.065	-0.000913
21.07	-0.000944
21.075	-0.000975
21.08	-0.001016
21.085	-0.001074
21.09	-0.001133
21.095	-0.001183
21.1	-0.001214
21.105	-0.001211
21.11	-0.001193
21.115	-0.00118
21.12	-0.001153
21.125	-0.001093
21.13	-0.001014
21.135	-0.000931
21.14	-0.000858
21.145	-0.000807
21.15	-0.000808
21.155	-0.000876
21.16	-0.000983
21.165	-0.001095
21.17	-0.00118
21.175	-0.001216
21.18	-0.001199
21.185	-0.001138
21.19	-0.001075
21.195	-0.00105
21.2	-0.001062

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
25.63476563	0.001836
25.64086914	0.001868
25.64697266	0.001812
25.65307617	0.001762
25.65917969	0.001827
25.6652832	0.001852
25.67138672	0.001816
25.67749023	0.001806
25.68359375	0.001792
25.68969727	0.001771
25.69580078	0.001757
25.7019043	0.001765
25.70800781	0.001805
25.71411133	0.001776
25.72021484	0.001663
25.72631836	0.00159
25.73242188	0.001606
25.73852539	0.00165
25.74462891	0.001643
25.75073242	0.001621
25.75683594	0.001633
25.76293945	0.0016
25.76904297	0.001508
25.77514648	0.001458
25.78125	0.001474
25.78735352	0.0015
25.79345703	0.001476
25.79956055	0.001436
25.80566406	0.001439
25.81176758	0.001417
25.81787109	0.001369
25.82397461	0.001367
25.83007813	0.00141
25.83618164	0.001456
25.84228516	0.001464
25.84838867	0.001452
25.85449219	0.001432
25.8605957	0.001405
25.86669922	0.001467
25.87280273	0.00155
25.87890625	0.001512
25.88500977	0.001449

Time (s)	Acceleration (g)
21.205	-0.001102
21.21	-0.001148
21.215	-0.001176
21.22	-0.001177
21.225	-0.00115
21.23	-0.00112
21.235	-0.001118
21.24	-0.001142
21.245	-0.001175
21.25	-0.00121
21.255	-0.001238
21.26	-0.001218
21.265	-0.001124
21.27	-0.001
21.275	-0.000889
21.28	-0.000824
21.285	-0.00083
21.29	-0.000888
21.295	-0.000972
21.3	-0.001046
21.305	-0.00108
21.31	-0.001087
21.315	-0.001092
21.32	-0.001104
21.325	-0.001127
21.33	-0.001175
21.335	-0.001251
21.34	-0.001318
21.345	-0.00134
21.35	-0.001318
21.355	-0.001259
21.36	-0.00117
21.365	-0.001066
21.37	-0.000975
21.375	-0.000918
21.38	-0.000895
21.385	-0.000899
21.39	-0.00092
21.395	-0.000947
21.4	-0.000972
21.405	-0.000986
21.41	-0.001006

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
25.89111328	0.001441
25.8972168	0.001433
25.90332031	0.001487
25.90942383	0.001508
25.91552734	0.001418
25.92163086	0.001423
25.92773438	0.001499
25.93383789	0.001461
25.93994141	0.00145
25.94604492	0.001528
25.95214844	0.0015
25.95825195	0.001432
25.96435547	0.00147
25.97045898	0.001494
25.9765625	0.001425
25.98266602	0.001379
25.98876953	0.001374
25.99487305	0.001373
26.00097656	0.00141
26.00708008	0.001444
26.01318359	0.001409
26.01928711	0.00136
26.02539063	0.001363
26.03149414	0.001437
26.03759766	0.001494
26.04370117	0.001431
26.04980469	0.001348
26.0559082	0.001342
26.06201172	0.001354
26.06811523	0.001387
26.07421875	0.001402
26.08032227	0.001333
26.08642578	0.001283
26.0925293	0.001273
26.09863281	0.001251
26.10473633	0.001291
26.11083984	0.001367
26.11694336	0.001391
26.12304688	0.001384
26.12915039	0.00135
26.13525391	0.001319
26.14135742	0.001332

Time (s)	Acceleration (g)
21.415	-0.001053
21.42	-0.001096
21.425	-0.001104
21.43	-0.0011
21.435	-0.0011
21.44	-0.001103
21.445	-0.001109
21.45	-0.00111
21.455	-0.0011
21.46	-0.001059
21.465	-0.000969
21.47	-0.000875
21.475	-0.000822
21.48	-0.000808
21.485	-0.00083
21.49	-0.000868
21.495	-0.000901
21.5	-0.000917
21.505	-0.000902
21.51	-0.000879
21.515	-0.000872
21.52	-0.000865
21.525	-0.000839
21.53	-0.000798
21.535	-0.000754
21.54	-0.000699
21.545	-0.00063
21.55	-0.000591
21.555	-0.000619
21.56	-0.000688
21.565	-0.000772
21.57	-0.000842
21.575	-0.000874
21.58	-0.000862
21.585	-0.000809
21.59	-0.000763
21.595	-0.000769
21.6	-0.000819
21.605	-0.000895
21.61	-0.000973
21.615	-0.001022
21.62	-0.001036

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
26.14746094	0.001343
26.15356445	0.001323
26.15966797	0.001264
26.16577148	0.001184
26.171875	0.001185
26.17797852	0.00125
26.18408203	0.001257
26.19018555	0.001187
26.19628906	0.001144
26.20239258	0.001182
26.20849609	0.001203
26.21459961	0.001153
26.22070313	0.00114
26.22680664	0.001164
26.23291016	0.001175
26.23901367	0.001249
26.24511719	0.001314
26.2512207	0.001217
26.25732422	0.001125
26.26342773	0.001173
26.26953125	0.001218
26.27563477	0.001241
26.28173828	0.001262
26.2878418	0.001173
26.29394531	0.001086
26.30004883	0.001084
26.30615234	0.001024
26.31225586	0.001003
26.31835938	0.0011
26.32446289	0.001115
26.33056641	0.00104
26.33666992	0.000974
26.34277344	0.000924
26.34887695	0.000978
26.35498047	0.001035
26.36108398	0.000963
26.3671875	0.000954
26.37329102	0.000992
26.37939453	0.000913
26.38549805	0.000907
26.39160156	0.000996
26.39770508	0.000979

Input Motion

Time (s)	Acceleration (g)
21.625	-0.001017
21.63	-0.000985
21.635	-0.000968
21.64	-0.000957
21.645	-0.000937
21.65	-0.000909
21.655	-0.000875
21.66	-0.000824
21.665	-0.000752
21.67	-0.000688
21.675	-0.000663
21.68	-0.000665
21.685	-0.000682
21.69	-0.00071
21.695	-0.00074
21.7	-0.000766
21.705	-0.000784
21.71	-0.000793
21.715	-0.000798
21.72	-0.000798
21.725	-0.000783
21.73	-0.000778
21.735	-0.000799
21.74	-0.000811
21.745	-0.000783
21.75	-0.000716
21.755	-0.000621
21.76	-0.000529
21.765	-0.000472
21.77	-0.000486
21.775	-0.000595
21.78	-0.000747
21.785	-0.000881
21.79	-0.000972
21.795	-0.001
21.8	-0.000974
21.805	-0.000916
21.81	-0.000854
21.815	-0.00082
21.82	-0.000808
21.825	-0.000804
21.83	-0.000809

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
26.40380859	0.000922
26.40991211	0.000892
26.41601563	0.00086
26.42211914	0.000901
26.42822266	0.000958
26.43432617	0.000932
26.44042969	0.000886
26.4465332	0.000864
26.45263672	0.000869
26.45874023	0.00087
26.46484375	0.000792
26.47094727	0.000746
26.47705078	0.000844
26.4831543	0.000886
26.48925781	0.000774
26.49536133	0.000704
26.50146484	0.000676
26.50756836	0.000612
26.51367188	0.000659
26.51977539	0.000785
26.52587891	0.000818
26.53198242	0.000798
26.53808594	0.000764
26.54418945	0.000752
26.55029297	0.000795
26.55639648	0.000788
26.5625	0.000755
26.56860352	0.000828
26.57470703	0.000824
26.58081055	0.000733
26.58691406	0.000732
26.59301758	0.000754
26.59912109	0.000741
26.60522461	0.000754
26.61132813	0.000747
26.61743164	0.000702
26.62353516	0.000709
26.62963867	0.000739
26.63574219	0.000705
26.6418457	0.000654
26.64794922	0.000651
26.65405273	0.00065

Input Motion

Time (s)	Acceleration (g)
21.835	-0.000823
21.84	-0.000826
21.845	-0.000806
21.85	-0.000771
21.855	-0.000737
21.86	-0.000713
21.865	-0.000705
21.87	-0.00073
21.875	-0.000802
21.88	-0.00088
21.885	-0.000919
21.89	-0.000917
21.895	-0.000884
21.9	-0.000823
21.905	-0.000742
21.91	-0.000698
21.915	-0.000728
21.92	-0.000807
21.925	-0.000899
21.93	-0.000958
21.935	-0.000942
21.94	-0.000837
21.945	-0.000647
21.95	-0.000431
21.955	-0.000266
21.96	-0.000163
21.965	-0.000124
21.97	-0.000172
21.975	-0.000308
21.98	-0.000485
21.985	-0.000657
21.99	-0.000782
21.995	-0.000832
22	-0.000804
22.005	-0.000714
22.01	-0.000603
22.015	-0.000519
22.02	-0.000482
22.025	-0.000497
22.03	-0.000565
22.035	-0.00067
22.04	-0.000771

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
26.66015625	0.000608
26.66625977	0.000565
26.67236328	0.000539
26.6784668	0.000559
26.68457031	0.000627
26.69067383	0.000644
26.69677734	0.000612
26.70288086	0.000626
26.70898438	0.000618
26.71508789	0.000561
26.72119141	0.000556
26.72729492	0.000577
26.73339844	0.000522
26.73950195	0.000479
26.74560547	0.000466
26.75170898	0.000418
26.7578125	0.000385
26.76391602	0.000385
26.77001953	0.000412
26.77612305	0.000451
26.78222656	0.00037
26.78833008	0.000249
26.79443359	0.000309
26.80053711	0.00042
26.80664063	0.000386
26.81274414	0.000337
26.81884766	0.000323
26.82495117	0.000301
26.83105469	0.00031
26.8371582	0.000341
26.84326172	0.000325
26.84936523	0.000246
26.85546875	0.000202
26.86157227	0.000264
26.86767578	0.000292
26.8737793	0.00025
26.87988281	0.000273
26.88598633	0.000287
26.89208984	0.000285
26.89819336	0.000354
26.90429688	0.000323
26.91040039	0.000216

Time (s)	Acceleration (g)
22.045	-0.000828
22.05	-0.000822
22.055	-0.000753
22.06	-0.000631
22.065	-0.000482
22.07	-0.000362
22.075	-0.000321
22.08	-0.000361
22.085	-0.000464
22.09	-0.000607
22.095	-0.000754
22.1	-0.000852
22.105	-0.00086
22.11	-0.000791
22.115	-0.000676
22.12	-0.000542
22.125	-0.000425
22.13	-0.000343
22.135	-0.000304
22.14	-0.000312
22.145	-0.000352
22.15	-0.000411
22.155	-0.000484
22.16	-0.000526
22.165	-0.000501
22.17	-0.000444
22.175	-0.000398
22.18	-0.000374
22.185	-0.00038
22.19	-0.000433
22.195	-0.00054
22.2	-0.000651
22.205	-0.000719
22.21	-0.000742
22.215	-0.00072
22.22	-0.000657
22.225	-0.000568
22.23	-0.000462
22.235	-0.000352
22.24	-0.000243
22.245	-0.000129
22.25	-0.000054

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
26.91650391	0.000209
26.92260742	0.000288
26.92871094	0.00029
26.93481445	0.00024
26.94091797	0.000215
26.94702148	0.000253
26.953125	0.000248
26.95922852	0.000255
26.96533203	0.000292
26.97143555	0.000295
26.97753906	0.000221
26.98364258	0.000229
26.98974609	0.000242
26.99584961	0.000165
27.00195313	0.00014
27.00805664	0.000204
27.01416016	0.000239
27.02026367	0.000222
27.02636719	0.000129
27.0324707	3.54E-05
27.03857422	4.37E-05
27.04467773	1.65E-05
27.05078125	3.98E-05
27.05688477	4.15E-05
27.06298828	4.21E-05
27.0690918	9.72E-05
27.07519531	0.00013
27.08129883	0.000141
27.08740234	0.000125
27.09350586	0.000112
27.09960938	0.000166
27.10571289	0.000179
27.11181641	0.000179
27.11791992	0.000206
27.12402344	0.000236
27.13012695	0.000186
27.13623047	0.000202
27.14233398	0.000305
27.1484375	0.000353
27.15454102	0.000327
27.16064453	0.000307
27.16674805	0.000328

Time (s)	Acceleration (g)
22.255	-0.000055
22.26	-0.000104
22.265	-0.00017
22.27	-0.000237
22.275	-0.000287
22.28	-0.000307
22.285	-0.000295
22.29	-0.000255
22.295	-0.000201
22.3	-0.000139
22.305	-0.000076
22.31	-0.000039
22.315	-0.000054
22.32	-0.000111
22.325	-0.000191
22.33	-0.000294
22.335	-0.000414
22.34	-0.000517
22.345	-0.000578
22.35	-0.0006
22.355	-0.00059
22.36	-0.00056
22.365	-0.000528
22.37	-0.000486
22.375	-0.000428
22.38	-0.000357
22.385	-0.000276
22.39	-0.000203
22.395	-0.000154
22.4	-0.00014
22.405	-0.000162
22.41	-0.000203
22.415	-0.000241
22.42	-0.000251
22.425	-0.000217
22.43	-0.00015
22.435	-0.000069
22.44	-0.000005
22.445	0.00002
22.45	-0.000004
22.455	-0.000078
22.46	-0.000165

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
27.17285156	0.000344
27.17895508	0.000351
27.18505859	0.000357
27.19116211	0.000344
27.19726563	0.000352
27.20336914	0.000385
27.20947266	0.000377
27.21557617	0.000378
27.22167969	0.000448
27.2277832	0.000454
27.23388672	0.000381
27.23999023	0.000381
27.24609375	0.000385
27.25219727	0.000307
27.25830078	0.000277
27.2644043	0.000313
27.27050781	0.000335
27.27661133	0.000361
27.28271484	0.000373
27.28881836	0.00037
27.29492188	0.000398
27.30102539	0.000425
27.30712891	0.000414
27.31323242	0.000403
27.31933594	0.000426
27.32543945	0.000483
27.33154297	0.000498
27.33764648	0.00049
27.34375	0.000547
27.34985352	0.000576
27.35595703	0.000524
27.36206055	0.000522
27.36816406	0.000562
27.37426758	0.000578
27.38037109	0.000596
27.38647461	0.000614
27.39257813	0.000622
27.39868164	0.000638
27.40478516	0.000592
27.41088867	0.000546
27.41699219	0.000616
27.4230957	0.000664

Input Motion

Time (s)	Acceleration (g)
22.465	-0.000226
22.47	-0.000258
22.475	-0.000258
22.48	-0.00025
22.485	-0.000261
22.49	-0.000282
22.495	-0.000301
22.5	-0.000306
22.505	-0.00028
22.51	-0.000227
22.515	-0.000153
22.52	-0.000083
22.525	-0.000039
22.53	-0.000024
22.535	-0.000037
22.54	-0.000069
22.545	-0.000101
22.55	-0.000138
22.555	-0.000181
22.56	-0.000208
22.565	-0.000201
22.57	-0.000152
22.575	-0.00006
22.58	0.000054
22.585	0.000162
22.59	0.00023
22.595	0.000239
22.6	0.000174
22.605	0.000043
22.61	-0.000104
22.615	-0.000217
22.62	-0.000263
22.625	-0.000219
22.63	-0.000136
22.635	-0.000067
22.64	-0.000039
22.645	-0.000081
22.65	-0.000148
22.655	-0.000184
22.66	-0.000191
22.665	-0.000175
22.67	-0.00013

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
27.42919922	0.000627
27.43530273	0.000667
27.44140625	0.000723
27.44750977	0.000712
27.45361328	0.000743
27.4597168	0.000763
27.46582031	0.000736
27.47192383	0.000785
27.47802734	0.000854
27.48413086	0.000858
27.49023438	0.000857
27.49633789	0.000824
27.50244141	0.0008
27.50854492	0.000899
27.51464844	0.001004
27.52075195	0.000984
27.52685547	0.000936
27.53295898	0.000923
27.5390625	0.000908
27.54516602	0.000886
27.55126953	0.000882
27.55737305	0.000905
27.56347656	0.00092
27.56958008	0.000923
27.57568359	0.000923
27.58178711	0.000914
27.58789063	0.000922
27.59399414	0.000948
27.60009766	0.000954
27.60620117	0.000949
27.61230469	0.000969
27.6184082	0.000985
27.62451172	0.000991
27.63061523	0.00099
27.63671875	0.000946
27.64282227	0.000922
27.64892578	0.000989
27.6550293	0.001036
27.66113281	0.001
27.66723633	0.000979
27.67333984	0.00099
27.67944336	0.000992

Input Motion

Time (s)	Acceleration (g)
22.675	-0.000066
22.68	-0.000005
22.685	0.00004
22.69	0.000062
22.695	0.000063
22.7	0.000059
22.705	0.000061
22.71	0.000075
22.715	0.000103
22.72	0.000117
22.725	0.000088
22.73	0.00003
22.735	-0.000034
22.74	-0.000084
22.745	-0.000101
22.75	-0.000063
22.755	0.000043
22.76	0.000175
22.765	0.00029
22.77	0.000369
22.775	0.000399
22.78	0.000377
22.785	0.000313
22.79	0.000221
22.795	0.000127
22.8	0.000043
22.805	-0.000026
22.81	-0.000044
22.815	0.000016
22.82	0.000112
22.825	0.000196
22.83	0.000256
22.835	0.00028
22.84	0.000268
22.845	0.000229
22.85	0.000189
22.855	0.000175
22.86	0.000175
22.865	0.000166
22.87	0.00016
22.875	0.000167
22.88	0.000179

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
27.68554688	0.001017
27.69165039	0.001042
27.69775391	0.001062
27.70385742	0.001128
27.70996094	0.001165
27.71606445	0.001141
27.72216797	0.001158
27.72827148	0.001195
27.734375	0.001202
27.74047852	0.001242
27.74658203	0.001292
27.75268555	0.001286
27.75878906	0.001274
27.76489258	0.001296
27.77099609	0.001293
27.77709961	0.001276
27.78320313	0.001332
27.78930664	0.001405
27.79541016	0.001388
27.80151367	0.001354
27.80761719	0.001379
27.8137207	0.001398
27.81982422	0.001404
27.82592773	0.001448
27.83203125	0.001501
27.83813477	0.001484
27.84423828	0.001433
27.8503418	0.001458
27.85644531	0.001517
27.86254883	0.001541
27.86865234	0.001602
27.87475586	0.001654
27.88085938	0.001582
27.88696289	0.001539
27.89306641	0.001598
27.89916992	0.001618
27.90527344	0.001617
27.91137695	0.001631
27.91748047	0.001612
27.92358398	0.001625
27.9296875	0.001653
27.93579102	0.00162

Time (s)	Acceleration (g)
22.885	0.000189
22.89	0.000228
22.895	0.000317
22.9	0.000434
22.905	0.000553
22.91	0.000652
22.915	0.000709
22.92	0.00071
22.925	0.000651
22.93	0.000558
22.935	0.000467
22.94	0.000385
22.945	0.000314
22.95	0.000274
22.955	0.000279
22.96	0.000314
22.965	0.000362
22.97	0.000429
22.975	0.000525
22.98	0.000618
22.985	0.00068
22.99	0.000722
22.995	0.000755
23	0.000766
23.005	0.00075
23.01	0.000717
23.015	0.000687
23.02	0.000657
23.025	0.000625
23.03	0.00062
23.035	0.000664
23.04	0.000727
23.045	0.000772
23.05	0.000793
23.055	0.000789
23.06	0.000748
23.065	0.000668
23.07	0.000588
23.075	0.000545
23.08	0.000537
23.085	0.000555
23.09	0.000596

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
27.94189453	0.001619
27.94799805	0.001631
27.95410156	0.001583
27.96020508	0.001574
27.96630859	0.001588
27.97241211	0.001573
27.97851563	0.001599
27.98461914	0.001615
27.99072266	0.001584
27.99682617	0.001596
28.00292969	0.001585
28.0090332	0.001528
28.01513672	0.001531
28.02124023	0.001574
28.02734375	0.001637
28.03344727	0.001714
28.03955078	0.001733
28.0456543	0.001741
28.05175781	0.001783
28.05786133	0.001791
28.06396484	0.001787
28.07006836	0.00181
28.07617188	0.001806
28.08227539	0.001782
28.08837891	0.001757
28.09448242	0.00174
28.10058594	0.001766
28.10668945	0.001772
28.11279297	0.001732
28.11889648	0.001751
28.125	0.001817
28.13110352	0.001828
28.13720703	0.001812
28.14331055	0.001839
28.14941406	0.001877
28.15551758	0.001915
28.16162109	0.001959
28.16772461	0.001987
28.17382813	0.002002
28.17993164	0.002011
28.18603516	0.002034
28.19213867	0.002096

Input Motion

Time (s)	Acceleration (g)
23.095	0.000658
23.1	0.000706
23.105	0.00071
23.11	0.000696
23.115	0.000695
23.12	0.000693
23.125	0.000684
23.13	0.00068
23.135	0.000687
23.14	0.000721
23.145	0.000783
23.15	0.000881
23.155	0.001016
23.16	0.001118
23.165	0.001124
23.17	0.001056
23.175	0.000942
23.18	0.000825
23.185	0.000756
23.19	0.000752
23.195	0.000816
23.2	0.000923
23.205	0.001027
23.21	0.001112
23.215	0.001162
23.22	0.001149
23.225	0.00106
23.23	0.000906
23.235	0.000708
23.24	0.000512
23.245	0.000361
23.25	0.000296
23.255	0.000342
23.26	0.000467
23.265	0.000626
23.27	0.000784
23.275	0.000911
23.28	0.000994
23.285	0.001026
23.29	0.001052
23.295	0.001109
23.3	0.001173

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
28.19824219	0.002133
28.2043457	0.002095
28.21044922	0.002085
28.21655273	0.002124
28.22265625	0.002114
28.22875977	0.002086
28.23486328	0.002089
28.2409668	0.002091
28.24707031	0.002109
28.25317383	0.002146
28.25927734	0.002152
28.26538086	0.002117
28.27148438	0.002062
28.27758789	0.002043
28.28369141	0.002081
28.28979492	0.002079
28.29589844	0.002033
28.30200195	0.002051
28.30810547	0.00209
28.31420898	0.002073
28.3203125	0.002065
28.32641602	0.002102
28.33251953	0.002139
28.33862305	0.002148
28.34472656	0.002132
28.35083008	0.00215
28.35693359	0.002209
28.36303711	0.002193
28.36914063	0.002135
28.37524414	0.002171
28.38134766	0.002218
28.38745117	0.002208
28.39355469	0.002234
28.3996582	0.002236
28.40576172	0.002167
28.41186523	0.002161
28.41796875	0.002208
28.42407227	0.002204
28.43017578	0.002195
28.4362793	0.002223
28.44238281	0.002266
28.44848633	0.002303

Input Motion

Time (s)	Acceleration (g)
23.305	0.001221
23.31	0.001219
23.315	0.001136
23.32	0.001013
23.325	0.000897
23.33	0.000816
23.335	0.000798
23.34	0.000828
23.345	0.000874
23.35	0.00092
23.355	0.000949
23.36	0.000963
23.365	0.000977
23.37	0.001009
23.375	0.001077
23.38	0.001178
23.385	0.001304
23.39	0.001426
23.395	0.001512
23.4	0.001553
23.405	0.00155
23.41	0.001503
23.415	0.001422
23.42	0.001327
23.425	0.001237
23.43	0.001158
23.435	0.001093
23.44	0.001048
23.445	0.00103
23.45	0.001035
23.455	0.001055
23.46	0.001092
23.465	0.001153
23.47	0.001194
23.475	0.001181
23.48	0.001137
23.485	0.001088
23.49	0.001055
23.495	0.001059
23.5	0.001096
23.505	0.001151
23.51	0.001201

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
28.45458984	0.002288
28.46069336	0.002262
28.46679688	0.002292
28.47290039	0.002313
28.47900391	0.002326
28.48510742	0.002385
28.49121094	0.002392
28.49731445	0.002312
28.50341797	0.002312
28.50952148	0.002418
28.515625	0.002464
28.52172852	0.002441
28.52783203	0.002454
28.53393555	0.002469
28.54003906	0.002434
28.54614258	0.002432
28.55224609	0.002468
28.55834961	0.002458
28.56445313	0.002448
28.57055664	0.002478
28.57666016	0.002452
28.58276367	0.002408
28.58886719	0.002451
28.5949707	0.002491
28.60107422	0.002457
28.60717773	0.002445
28.61328125	0.002472
28.61938477	0.002484
28.62548828	0.00248
28.6315918	0.002461
28.63769531	0.00244
28.64379883	0.002441
28.64990234	0.002427
28.65600586	0.002403
28.66210938	0.002398
28.66821289	0.002362
28.67431641	0.002312
28.68041992	0.002326
28.68652344	0.002343
28.69262695	0.002308
28.69873047	0.002305
28.70483398	0.002356

Time (s)	Acceleration (g)
23.515	0.001223
23.52	0.001213
23.525	0.001183
23.53	0.001141
23.535	0.001099
23.54	0.001087
23.545	0.001128
23.55	0.001201
23.555	0.00128
23.56	0.001344
23.565	0.001376
23.57	0.001362
23.575	0.0013
23.58	0.001233
23.585	0.001209
23.59	0.001231
23.595	0.001294
23.6	0.001393
23.605	0.001512
23.61	0.001616
23.615	0.001677
23.62	0.001687
23.625	0.001649
23.63	0.001577
23.635	0.001485
23.64	0.001403
23.645	0.001362
23.65	0.001342
23.655	0.001317
23.66	0.001311
23.665	0.001338
23.67	0.001385
23.675	0.001441
23.68	0.001493
23.685	0.001529
23.69	0.001539
23.695	0.001518
23.7	0.001489
23.705	0.00148
23.71	0.001478
23.715	0.001467
23.72	0.001461

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
28.7109375	0.002391
28.71704102	0.002389
28.72314453	0.002368
28.72924805	0.002362
28.73535156	0.002405
28.74145508	0.002439
28.74755859	0.002425
28.75366211	0.002445
28.75976563	0.002485
28.76586914	0.00246
28.77197266	0.002426
28.77807617	0.002442
28.78417969	0.002469
28.7902832	0.002504
28.79638672	0.002533
28.80249023	0.002521
28.80859375	0.002513
28.81469727	0.002537
28.82080078	0.002578
28.8269043	0.002618
28.83300781	0.002611
28.83911133	0.002564
28.84521484	0.002566
28.85131836	0.002614
28.85742188	0.002613
28.86352539	0.002579
28.86962891	0.002583
28.87573242	0.002616
28.88183594	0.002634
28.88793945	0.002639
28.89404297	0.002635
28.90014648	0.002634
28.90625	0.002665
28.91235352	0.0027
28.91845703	0.002707
28.92456055	0.002711
28.93066406	0.002702
28.93676758	0.002667
28.94287109	0.00265
28.94897461	0.002648
28.95507813	0.00263
28.96118164	0.002609

Time (s)	Acceleration (g)
23.725	0.001473
23.73	0.001491
23.735	0.001502
23.74	0.001525
23.745	0.001575
23.75	0.001629
23.755	0.001665
23.76	0.001679
23.765	0.001674
23.77	0.001648
23.775	0.001603
23.78	0.001564
23.785	0.001555
23.79	0.001563
23.795	0.001567
23.8	0.001576
23.805	0.001597
23.81	0.001608
23.815	0.001586
23.82	0.001545
23.825	0.001502
23.83	0.001443
23.835	0.001361
23.84	0.00128
23.845	0.001216
23.85	0.001177
23.855	0.001171
23.86	0.001182
23.865	0.001198
23.87	0.001214
23.875	0.001221
23.88	0.001241
23.885	0.001296
23.89	0.001352
23.895	0.001383
23.9	0.001383
23.905	0.00135
23.91	0.00131
23.915	0.001294
23.92	0.001314
23.925	0.001376
23.93	0.001455

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
28.96728516	0.002594
28.97338867	0.002589
28.97949219	0.002574
28.9855957	0.002523
28.99169922	0.00249
28.99780273	0.002499
29.00390625	0.002488
29.01000977	0.002466
29.01611328	0.002452
29.0222168	0.002438
29.02832031	0.002446
29.03442383	0.002439
29.04052734	0.002418
29.04663086	0.002437
29.05273438	0.002436
29.05883789	0.002412
29.06494141	0.002442
29.07104492	0.002454
29.07714844	0.00241
29.08325195	0.002406
29.08935547	0.002431
29.09545898	0.002425
29.1015625	0.002405
29.10766602	0.002401
29.11376953	0.002424
29.11987305	0.002454
29.12597656	0.002458
29.13208008	0.002432
29.13818359	0.002403
29.14428711	0.002423
29.15039063	0.00248
29.15649414	0.002502
29.16259766	0.002499
29.16870117	0.00249
29.17480469	0.002498
29.1809082	0.002563
29.18701172	0.002597
29.19311523	0.00257
29.19921875	0.002604
29.20532227	0.002639
29.21142578	0.002588
29.2175293	0.002575

Time (s)	Acceleration (g)
23.935	0.001519
23.94	0.001555
23.945	0.001555
23.95	0.001522
23.955	0.001468
23.96	0.001411
23.965	0.001379
23.97	0.001373
23.975	0.001388
23.98	0.001439
23.985	0.001534
23.99	0.001641
23.995	0.001732
24	0.00178
24.005	0.001767
24.01	0.001697
24.015	0.00159
24.02	0.001483
24.025	0.001414
24.03	0.001397
24.035	0.001441
24.04	0.001517
24.045	0.001586
24.05	0.001641
24.055	0.001678
24.06	0.001695
24.065	0.0017
24.07	0.001699
24.075	0.001698
24.08	0.001689
24.085	0.001667
24.09	0.001628
24.095	0.001575
24.1	0.001528
24.105	0.001499
24.11	0.001505
24.115	0.001558
24.12	0.001612
24.125	0.001621
24.13	0.001584
24.135	0.001509
24.14	0.00142

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
29.22363281	0.002607
29.22973633	0.002592
29.23583984	0.002578
29.24194336	0.002572
29.24804688	0.002563
29.25415039	0.002574
29.26025391	0.002563
29.26635742	0.002549
29.27246094	0.002584
29.27856445	0.002589
29.28466797	0.00254
29.29077148	0.002524
29.296875	0.002555
29.30297852	0.002565
29.30908203	0.002535
29.31518555	0.002522
29.32128906	0.00251
29.32739258	0.002444
29.33349609	0.00241
29.33959961	0.002427
29.34570313	0.002388
29.35180664	0.002359
29.35791016	0.002387
29.36401367	0.002375
29.37011719	0.002362
29.3762207	0.002362
29.38232422	0.002307
29.38842773	0.002286
29.39453125	0.002315
29.40063477	0.002289
29.40673828	0.002266
29.4128418	0.002271
29.41894531	0.002252
29.42504883	0.00226
29.43115234	0.002261
29.43725586	0.002213
29.44335938	0.002231
29.44946289	0.002297
29.45556641	0.002297
29.46166992	0.002294
29.46777344	0.002332
29.47387695	0.00234

Time (s)	Acceleration (g)
24.145	0.001344
24.15	0.001312
24.155	0.001354
24.16	0.001436
24.165	0.001514
24.17	0.001591
24.175	0.001665
24.18	0.001704
24.185	0.00169
24.19	0.001632
24.195	0.001545
24.2	0.001454
24.205	0.001382
24.21	0.001347
24.215	0.001365
24.22	0.001403
24.225	0.001419
24.23	0.001427
24.235	0.001444
24.24	0.001454
24.245	0.001448
24.25	0.001454
24.255	0.001495
24.26	0.001547
24.265	0.001585
24.27	0.001613
24.275	0.001635
24.28	0.001641
24.285	0.001623
24.29	0.001605
24.295	0.001611
24.3	0.001641
24.305	0.001684
24.31	0.00175
24.315	0.001839
24.32	0.001907
24.325	0.001915
24.33	0.001873
24.335	0.001804
24.34	0.001727
24.345	0.001665
24.35	0.001661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
29.47998047	0.002345
29.48608398	0.002362
29.4921875	0.002342
29.49829102	0.002319
29.50439453	0.002325
29.51049805	0.002304
29.51660156	0.002285
29.52270508	0.002321
29.52880859	0.002339
29.53491211	0.002296
29.54101563	0.002279
29.54711914	0.002309
29.55322266	0.002305
29.55932617	0.00228
29.56542969	0.00232
29.5715332	0.002376
29.57763672	0.002359
29.58374023	0.002319
29.58984375	0.002313
29.59594727	0.002325
29.60205078	0.002336
29.6081543	0.002324
29.61425781	0.00231
29.62036133	0.002325
29.62646484	0.002305
29.63256836	0.002241
29.63867188	0.002214
29.64477539	0.002197
29.65087891	0.002155
29.65698242	0.002149
29.66308594	0.002151
29.66918945	0.0021
29.67529297	0.002056
29.68139648	0.002049
29.6875	0.002036
29.69360352	0.002016
29.69970703	0.001988
29.70581055	0.001932
29.71191406	0.0019
29.71801758	0.001931
29.72412109	0.001953
29.73022461	0.001928

Input Motion

Time (s)	Acceleration (g)
24.355	0.001746
24.36	0.001888
24.365	0.002048
24.37	0.002199
24.375	0.002314
24.38	0.002388
24.385	0.002424
24.39	0.002435
24.395	0.002442
24.4	0.002444
24.405	0.002433
24.41	0.002441
24.415	0.002488
24.42	0.002548
24.425	0.002592
24.43	0.002591
24.435	0.002512
24.44	0.002364
24.445	0.002174
24.45	0.00197
24.455	0.001788
24.46	0.001676
24.465	0.001655
24.47	0.001717
24.475	0.001843
24.48	0.001964
24.485	0.002017
24.49	0.002002
24.495	0.001931
24.5	0.001847
24.505	0.001798
24.51	0.001794
24.515	0.001832
24.52	0.001886
24.525	0.001922
24.53	0.001933
24.535	0.001919
24.54	0.001895
24.545	0.001882
24.55	0.001884
24.555	0.001899
24.56	0.001925

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
29.73632813	0.001913
29.74243164	0.001933
29.74853516	0.001948
29.75463867	0.001932
29.76074219	0.001919
29.7668457	0.001945
29.77294922	0.001973
29.77905273	0.001956
29.78515625	0.00193
29.79125977	0.00193
29.79736328	0.001923
29.8034668	0.001915
29.80957031	0.001942
29.81567383	0.001965
29.82177734	0.001947
29.82788086	0.001939
29.83398438	0.001953
29.84008789	0.001953
29.84619141	0.001954
29.85229492	0.001955
29.85839844	0.001943
29.86450195	0.00197
29.87060547	0.00201
29.87670898	0.001996
29.8828125	0.001983
29.88891602	0.001995
29.89501953	0.001992
29.90112305	0.00201
29.90722656	0.002032
29.91333008	0.002024
29.91943359	0.002041
29.92553711	0.002051
29.93164063	0.002021
29.93774414	0.002015
29.94384766	0.002009
29.94995117	0.001981
29.95605469	0.001984
29.9621582	0.001986
29.96826172	0.001958
29.97436523	0.001943
29.98046875	0.001919
29.98657227	0.001849

Input Motion

Time (s)	Acceleration (g)
24.565	0.001958
24.57	0.001988
24.575	0.002008
24.58	0.002038
24.585	0.002096
24.59	0.002174
24.595	0.002263
24.6	0.002336
24.605	0.002369
24.61	0.002355
24.615	0.002289
24.62	0.002214
24.625	0.002184
24.63	0.00219
24.635	0.002213
24.64	0.002269
24.645	0.00236
24.65	0.002441
24.655	0.002468
24.66	0.002458
24.665	0.002433
24.67	0.002387
24.675	0.002321
24.68	0.002259
24.685	0.00222
24.69	0.002199
24.695	0.002185
24.7	0.002179
24.705	0.002183
24.71	0.00218
24.715	0.002155
24.72	0.002126
24.725	0.002112
24.73	0.002104
24.735	0.002096
24.74	0.002092
24.745	0.002092
24.75	0.002099
24.755	0.00212
24.76	0.002151
24.765	0.002179
24.77	0.00222

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
29.99267578	0.001794
29.9987793	0.001818
30.00488281	0.001866
30.01098633	0.001843
30.01708984	0.001807
30.02319336	0.001825
30.02929688	0.001807
30.03540039	0.001761
30.04150391	0.001793
30.04760742	0.001817
30.05371094	0.001774
30.05981445	0.001748
30.06591797	0.001712
30.07202148	0.001642
30.078125	0.001631
30.08422852	0.00164
30.09033203	0.001591
30.09643555	0.001545
30.10253906	0.001533
30.10864258	0.001527
30.11474609	0.001529
30.12084961	0.00152
30.12695313	0.001515
30.13305664	0.001533
30.13916016	0.001526
30.14526367	0.0015
30.15136719	0.001487
30.1574707	0.001473
30.16357422	0.001479
30.16967773	0.001506
30.17578125	0.001506
30.18188477	0.001505
30.18798828	0.001534
30.1940918	0.00155
30.20019531	0.001542
30.20629883	0.001548
30.21240234	0.001571
30.21850586	0.001585
30.22460938	0.001577
30.23071289	0.001557
30.23681641	0.001539
30.24291992	0.001531

Time (s)	Acceleration (g)
24.775	0.002285
24.78	0.002347
24.785	0.002389
24.79	0.002398
24.795	0.002362
24.8	0.002304
24.805	0.002249
24.81	0.002198
24.815	0.00215
24.82	0.002101
24.825	0.002046
24.83	0.001998
24.835	0.001964
24.84	0.00196
24.845	0.002001
24.85	0.002048
24.855	0.00206
24.86	0.002049
24.865	0.002028
24.87	0.002004
24.875	0.001988
24.88	0.001995
24.885	0.002032
24.89	0.002074
24.895	0.002094
24.9	0.002075
24.905	0.002008
24.91	0.001892
24.915	0.001736
24.92	0.00157
24.925	0.00142
24.93	0.001312
24.935	0.001272
24.94	0.001277
24.945	0.0013
24.95	0.001361
24.955	0.001464
24.96	0.001601
24.965	0.001769
24.97	0.00192
24.975	0.002008
24.98	0.002039

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
30.24902344	0.001534
30.25512695	0.001544
30.26123047	0.001554
30.26733398	0.001543
30.2734375	0.001527
30.27954102	0.001547
30.28564453	0.001561
30.29174805	0.001537
30.29785156	0.001527
30.30395508	0.001532
30.31005859	0.001514
30.31616211	0.001499
30.32226563	0.001498
30.32836914	0.001493
30.33447266	0.001473
30.34057617	0.001435
30.34667969	0.001417
30.3527832	0.00141
30.35888672	0.001391
30.36499023	0.001393
30.37109375	0.00139
30.37719727	0.001352
30.38330078	0.001321
30.3894043	0.001278
30.39550781	0.00124
30.40161133	0.001264
30.40771484	0.001285
30.41381836	0.00126
30.41992188	0.001238
30.42602539	0.001233
30.43212891	0.001249
30.43823242	0.001259
30.44433594	0.001238
30.45043945	0.001223
30.45654297	0.00121
30.46264648	0.001188
30.46875	0.001199
30.47485352	0.001226
30.48095703	0.001236
30.48706055	0.001229
30.49316406	0.001206
30.49926758	0.001192

Time (s)	Acceleration (g)
24.985	0.002024
24.99	0.00198
24.995	0.001936
25	0.001904
25.005	0.001891
25.01	0.001905
25.015	0.001947
25.02	0.00201
25.025	0.002086
25.03	0.002157
25.035	0.002206
25.04	0.00223
25.045	0.002225
25.05	0.002202
25.055	0.002168
25.06	0.002117
25.065	0.002047
25.07	0.001935
25.075	0.00176
25.08	0.001553
25.085	0.001344
25.09	0.001166
25.095	0.001053
25.1	0.000994
25.105	0.00097
25.11	0.000979
25.115	0.00101
25.12	0.001062
25.125	0.001132
25.13	0.001213
25.135	0.001305
25.14	0.001381
25.145	0.001418
25.15	0.001447
25.155	0.001492
25.16	0.001552
25.165	0.001629
25.17	0.001699
25.175	0.001733
25.18	0.001738
25.185	0.00172
25.19	0.001694

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
30.50537109	0.001191
30.51147461	0.001189
30.51757813	0.001193
30.52368164	0.001189
30.52978516	0.001178
30.53588867	0.001175
30.54199219	0.001152
30.5480957	0.001121
30.55419922	0.00112
30.56030273	0.001133
30.56640625	0.001146
30.57250977	0.001162
30.57861328	0.00117
30.5847168	0.001162
30.59082031	0.00117
30.59692383	0.001215
30.60302734	0.001242
30.60913086	0.001224
30.61523438	0.001234
30.62133789	0.001276
30.62744141	0.001252
30.63354492	0.001198
30.63964844	0.001208
30.64575195	0.001236
30.65185547	0.001195
30.65795898	0.001135
30.6640625	0.00113
30.67016602	0.001146
30.67626953	0.001136
30.68237305	0.001126
30.68847656	0.001121
30.69458008	0.001085
30.70068359	0.001028
30.70678711	0.000992
30.71289063	0.000984
30.71899414	0.000987
30.72509766	0.000969
30.73120117	0.000931
30.73730469	0.000903
30.7434082	0.000887
30.74951172	0.000877
30.75561523	0.000877

Time (s)	Acceleration (g)
25.195	0.001684
25.2	0.001681
25.205	0.001677
25.21	0.001684
25.215	0.001702
25.22	0.001744
25.225	0.001821
25.23	0.001904
25.235	0.001965
25.24	0.002006
25.245	0.00202
25.25	0.002021
25.255	0.002024
25.26	0.002003
25.265	0.001941
25.27	0.001842
25.275	0.00171
25.28	0.001594
25.285	0.001541
25.29	0.001558
25.295	0.001641
25.3	0.001757
25.305	0.001856
25.31	0.001924
25.315	0.001951
25.32	0.001917
25.325	0.00182
25.33	0.001675
25.335	0.001503
25.34	0.001343
25.345	0.001228
25.35	0.001174
25.355	0.001186
25.36	0.001237
25.365	0.001291
25.37	0.001324
25.375	0.001313
25.38	0.001259
25.385	0.001172
25.39	0.001076
25.395	0.000997
25.4	0.000949

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
30.76171875	0.000867
30.76782227	0.000842
30.77392578	0.000833
30.7800293	0.000841
30.78613281	0.000824
30.79223633	0.000795
30.79833984	0.000811
30.80444336	0.000842
30.81054688	0.000813
30.81665039	0.000766
30.82275391	0.000758
30.82885742	0.000755
30.83496094	0.000753
30.84106445	0.000756
30.84716797	0.000745
30.85327148	0.000763
30.859375	0.000792
30.86547852	0.000755
30.87158203	0.000721
30.87768555	0.000754
30.88378906	0.000776
30.88989258	0.000777
30.89599609	0.000778
30.90209961	0.000764
30.90820313	0.000785
30.91430664	0.000819
30.92041016	0.000807
30.92651367	0.000826
30.93261719	0.000877
30.9387207	0.000861
30.94482422	0.000843
30.95092773	0.000879
30.95703125	0.000894
30.96313477	0.000899
30.96923828	0.000923
30.9753418	0.000913
30.98144531	0.000886
30.98754883	0.000901
30.99365234	0.000925
30.99975586	0.000929
31.00585938	0.000944
31.01196289	0.000942

Time (s)	Acceleration (g)
25.405	0.000944
25.41	0.000982
25.415	0.001061
25.42	0.001175
25.425	0.001315
25.43	0.001473
25.435	0.001638
25.44	0.00178
25.445	0.001873
25.45	0.001908
25.455	0.001889
25.46	0.001836
25.465	0.001778
25.47	0.001739
25.475	0.001739
25.48	0.001771
25.485	0.001815
25.49	0.001861
25.495	0.001892
25.5	0.001897
25.505	0.001872
25.51	0.001811
25.515	0.001716
25.52	0.00159
25.525	0.001445
25.53	0.001297
25.535	0.001162
25.54	0.001069
25.545	0.001042
25.55	0.001069
25.555	0.001132
25.56	0.001205
25.565	0.00126
25.57	0.001282
25.575	0.001265
25.58	0.001231
25.585	0.001209
25.59	0.001207
25.595	0.001239
25.6	0.001291
25.605	0.001347
25.61	0.001408

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
31.01806641	0.000897
31.02416992	0.000882
31.03027344	0.000911
31.03637695	0.000908
31.04248047	0.000885
31.04858398	0.000873
31.0546875	0.000843
31.06079102	0.000837
31.06689453	0.000858
31.07299805	0.000828
31.07910156	0.00079
31.08520508	0.000783
31.09130859	0.000748
31.09741211	0.000722
31.10351563	0.000721
31.10961914	0.000668
31.11572266	0.000628
31.12182617	0.000654
31.12792969	0.000645
31.1340332	0.000605
31.14013672	0.000593
31.14624023	0.000572
31.15234375	0.000564
31.15844727	0.00058
31.16455078	0.000573
31.1706543	0.000568
31.17675781	0.000573
31.18286133	0.000571
31.18896484	0.000566
31.19506836	0.000525
31.20117188	0.000479
31.20727539	0.000496
31.21337891	0.000507
31.21948242	0.000469
31.22558594	0.000459
31.23168945	0.000472
31.23779297	0.000476
31.24389648	0.000502
31.25	0.000538
31.25610352	0.000554
31.26220703	0.000555
31.26831055	0.000563

Time (s)	Acceleration (g)
25.615	0.001473
25.62	0.001539
25.625	0.001607
25.63	0.001656
25.635	0.001665
25.64	0.001633
25.645	0.001561
25.65	0.001466
25.655	0.001372
25.66	0.001292
25.665	0.001233
25.67	0.001196
25.675	0.001176
25.68	0.001148
25.685	0.00109
25.69	0.001009
25.695	0.000911
25.7	0.00081
25.705	0.000721
25.71	0.000635
25.715	0.000548
25.72	0.000465
25.725	0.000392
25.73	0.000369
25.735	0.000426
25.74	0.000566
25.745	0.000779
25.75	0.001006
25.755	0.001183
25.76	0.001284
25.765	0.001295
25.77	0.001225
25.775	0.001107
25.78	0.000973
25.785	0.000857
25.79	0.000787
25.795	0.000773
25.8	0.000817
25.805	0.00091
25.81	0.001007
25.815	0.001069
25.82	0.001092

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
31.27441406	0.000578
31.28051758	0.000592
31.28662109	0.000609
31.29272461	0.000619
31.29882813	0.000608
31.30493164	0.000609
31.31103516	0.000646
31.31713867	0.00068
31.32324219	0.000692
31.3293457	0.000705
31.33544922	0.000728
31.34155273	0.000736
31.34765625	0.000717
31.35375977	0.000717
31.35986328	0.000747
31.3659668	0.000759
31.37207031	0.000747
31.37817383	0.000723
31.38427734	0.000692
31.39038086	0.000698
31.39648438	0.000722
31.40258789	0.000703
31.40869141	0.000679
31.41479492	0.000676
31.42089844	0.000663
31.42700195	0.000665
31.43310547	0.000675
31.43920898	0.000652
31.4453125	0.000633
31.45141602	0.000633
31.45751953	0.000604
31.46362305	0.000554
31.46972656	0.000525
31.47583008	0.000539
31.48193359	0.00057
31.48803711	0.000553
31.49414063	0.000508
31.50024414	0.000491
31.50634766	0.000489
31.51245117	0.000487
31.51855469	0.000494
31.5246582	0.000484

Time (s)	Acceleration (g)
25.825	0.00108
25.83	0.001061
25.835	0.001069
25.84	0.001106
25.845	0.001163
25.85	0.001226
25.855	0.001276
25.86	0.001299
25.865	0.001285
25.87	0.001254
25.875	0.001229
25.88	0.001218
25.885	0.001228
25.89	0.001252
25.895	0.001276
25.9	0.001303
25.905	0.001335
25.91	0.001354
25.915	0.001347
25.92	0.001314
25.925	0.001254
25.93	0.001189
25.935	0.001138
25.94	0.0011
25.945	0.00107
25.95	0.001029
25.955	0.00096
25.96	0.000861
25.965	0.000732
25.97	0.0006
25.975	0.00049
25.98	0.000393
25.985	0.000301
25.99	0.0002
25.995	0.000079
26	-0.000036
26.005	-0.000116
26.01	-0.00013
26.015	-0.000054
26.02	0.000087
26.025	0.000262
26.03	0.000419

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
31.53076172	0.000462
31.53686523	0.000445
31.54296875	0.000423
31.54907227	0.000426
31.55517578	0.000435
31.5612793	0.000405
31.56738281	0.000398
31.57348633	0.000409
31.57958984	0.00038
31.58569336	0.000377
31.59179688	0.000396
31.59790039	0.00039
31.60400391	0.000416
31.61010742	0.000447
31.61621094	0.000433
31.62231445	0.000441
31.62841797	0.000471
31.63452148	0.000495
31.640625	0.000515
31.64672852	0.00051
31.65283203	0.000498
31.65893555	0.000509
31.66503906	0.000515
31.67114258	0.000529
31.67724609	0.00056
31.68334961	0.000591
31.68945313	0.000618
31.69555664	0.000612
31.70166016	0.000606
31.70776367	0.000657
31.71386719	0.00069
31.7199707	0.00068
31.72607422	0.00069
31.73217773	0.000677
31.73828125	0.000654
31.74438477	0.000678
31.75048828	0.000685
31.7565918	0.000667
31.76269531	0.00069
31.76879883	0.000684
31.77490234	0.000641
31.78100586	0.000631

Input Motion

Time (s)	Acceleration (g)
26.035	0.000515
26.04	0.00056
26.045	0.000574
26.05	0.000592
26.055	0.000654
26.06	0.000754
26.065	0.000873
26.07	0.001001
26.075	0.00112
26.08	0.001209
26.085	0.00126
26.09	0.001264
26.095	0.001224
26.1	0.001154
26.105	0.001067
26.11	0.000985
26.115	0.000925
26.12	0.000884
26.125	0.00085
26.13	0.000808
26.135	0.000741
26.14	0.000638
26.145	0.000501
26.15	0.00033
26.155	0.000133
26.16	-0.000052
26.165	-0.000196
26.17	-0.000292
26.175	-0.00034
26.18	-0.00037
26.185	-0.000414
26.19	-0.00047
26.195	-0.000523
26.2	-0.000545
26.205	-0.000504
26.21	-0.000375
26.215	-0.000154
26.22	0.000133
26.225	0.000441
26.23	0.000713
26.235	0.0009
26.24	0.000979

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
31.78710938	0.000621
31.79321289	0.000608
31.79931641	0.000619
31.80541992	0.000613
31.81152344	0.000589
31.81762695	0.000589
31.82373047	0.00059
31.82983398	0.000581
31.8359375	0.000581
31.84204102	0.00059
31.84814453	0.000581
31.85424805	0.000547
31.86035156	0.000533
31.86645508	0.000548
31.87255859	0.000551
31.87866211	0.000556
31.88476563	0.000553
31.89086914	0.000519
31.89697266	0.000504
31.90307617	0.000523
31.90917969	0.000515
31.9152832	0.000495
31.92138672	0.000499
31.92749023	0.000507
31.93359375	0.000484
31.93969727	0.000431
31.94580078	0.000423
31.9519043	0.000467
31.95800781	0.000478
31.96411133	0.000476
31.97021484	0.0005
31.97631836	0.000501
31.98242188	0.000509
31.98852539	0.000544
31.99462891	0.000558
32.00073242	0.000569
32.00683594	0.000586
32.01293945	0.000593
32.01904297	0.000606
32.02514648	0.000608
32.03125	0.000605
32.03735352	0.000644

Time (s)	Acceleration (g)
26.245	0.000946
26.25	0.00083
26.255	0.000675
26.26	0.000512
26.265	0.000372
26.27	0.000264
26.275	0.000187
26.28	0.000145
26.285	0.000131
26.29	0.000125
26.295	0.000109
26.3	0.00005
26.305	-0.00007
26.31	-0.00024
26.315	-0.00044
26.32	-0.00061
26.325	-0.00069
26.33	-0.000673
26.335	-0.000565
26.34	-0.000389
26.345	-0.000184
26.35	0.000027
26.355	0.000223
26.36	0.00038
26.365	0.000486
26.37	0.000532
26.375	0.000513
26.38	0.00044
26.385	0.000334
26.39	0.000202
26.395	0.000059
26.4	-0.00007
26.405	-0.000164
26.41	-0.000206
26.415	-0.000188
26.42	-0.00013
26.425	-0.00006
26.43	-0.000003
26.435	0.000022
26.44	0.000016
26.445	-0.000015
26.45	-0.000037

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
32.04345703	0.000691
32.04956055	0.000711
32.05566406	0.000719
32.06176758	0.000719
32.06787109	0.000728
32.07397461	0.000758
32.08007813	0.000789
32.08618164	0.000804
32.09228516	0.000778
32.09838867	0.000734
32.10449219	0.000746
32.1105957	0.000788
32.11669922	0.000784
32.12280273	0.000763
32.12890625	0.000766
32.13500977	0.000774
32.14111328	0.000765
32.1472168	0.000753
32.15332031	0.000759
32.15942383	0.000772
32.16552734	0.000773
32.17163086	0.000772
32.17773438	0.000762
32.18383789	0.000742
32.18994141	0.000732
32.19604492	0.000729
32.20214844	0.00073
32.20825195	0.000721
32.21435547	0.000677
32.22045898	0.000646
32.2265625	0.000646
32.23266602	0.000631
32.23876953	0.000615
32.24487305	0.00061
32.25097656	0.000589
32.25708008	0.000593
32.26318359	0.000619
32.26928711	0.000607
32.27539063	0.000601
32.28149414	0.000638
32.28759766	0.000637
32.29370117	0.000596

Input Motion

Time (s)	Acceleration (g)
26.455	-0.000016
26.46	0.000038
26.465	0.000113
26.47	0.000209
26.475	0.000317
26.48	0.00043
26.485	0.000547
26.49	0.00064
26.495	0.000681
26.5	0.000677
26.505	0.000637
26.51	0.000557
26.515	0.00045
26.52	0.000327
26.525	0.000202
26.53	0.000106
26.535	0.000069
26.54	0.000083
26.545	0.00014
26.55	0.000219
26.555	0.000298
26.56	0.000367
26.565	0.000416
26.57	0.000443
26.575	0.000454
26.58	0.000442
26.585	0.000405
26.59	0.000377
26.595	0.000384
26.6	0.000433
26.605	0.000522
26.61	0.000616
26.615	0.000681
26.62	0.00069
26.625	0.000621
26.63	0.000504
26.635	0.000384
26.64	0.000271
26.645	0.000179
26.65	0.000127
26.655	0.000119
26.66	0.000162

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
32.29980469	0.000581
32.3059082	0.000576
32.31201172	0.000563
32.31811523	0.000581
32.32421875	0.000602
32.33032227	0.000582
32.33642578	0.000571
32.3425293	0.000587
32.34863281	0.000596
32.35473633	0.00063
32.36083984	0.00069
32.36694336	0.000704
32.37304688	0.000694
32.37915039	0.000714
32.38525391	0.000715
32.39135742	0.000712
32.39746094	0.000762
32.40356445	0.000803
32.40966797	0.000794
32.41577148	0.000795
32.421875	0.000805
32.42797852	0.00082
32.43408203	0.000851
32.44018555	0.000863
32.44628906	0.00086
32.45239258	0.000876
32.45849609	0.000883
32.46459961	0.00088
32.47070313	0.000881
32.47680664	0.000873
32.48291016	0.000878
32.48901367	0.00089
32.49511719	0.000874
32.5012207	0.000862
32.50732422	0.00087
32.51342773	0.000867
32.51953125	0.000858
32.52563477	0.000836
32.53173828	0.000801
32.5378418	0.000796
32.54394531	0.000798
32.55004883	0.000787

Input Motion

Time (s)	Acceleration (g)
26.665	0.000259
26.67	0.00039
26.675	0.000532
26.68	0.000672
26.685	0.000793
26.69	0.00088
26.695	0.000929
26.7	0.000921
26.705	0.000847
26.71	0.00072
26.715	0.000558
26.72	0.000394
26.725	0.000261
26.73	0.000175
26.735	0.000145
26.74	0.000168
26.745	0.000223
26.75	0.000301
26.755	0.000391
26.76	0.000461
26.765	0.000482
26.77	0.000455
26.775	0.000383
26.78	0.000277
26.785	0.000152
26.79	0.000025
26.795	-0.000095
26.8	-0.000207
26.805	-0.000311
26.81	-0.000429
26.815	-0.000572
26.82	-0.000727
26.825	-0.000872
26.83	-0.000964
26.835	-0.000965
26.84	-0.000855
26.845	-0.000637
26.85	-0.000357
26.855	-0.000074
26.86	0.000147
26.865	0.000252
26.87	0.000227

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
32.55615234	0.000799
32.56225586	0.000793
32.56835938	0.000744
32.57446289	0.000726
32.58056641	0.000723
32.58666992	0.000705
32.59277344	0.000718
32.59887695	0.000724
32.60498047	0.000685
32.61108398	0.000668
32.6171875	0.000666
32.62329102	0.000646
32.62939453	0.000643
32.63549805	0.000646
32.64160156	0.000639
32.64770508	0.000648
32.65380859	0.000657
32.65991211	0.000637
32.66601563	0.000613
32.67211914	0.000597
32.67822266	0.000588
32.68432617	0.000606
32.69042969	0.000625
32.6965332	0.000619
32.70263672	0.000631
32.70874023	0.00067
32.71484375	0.000682
32.72094727	0.000692
32.72705078	0.000745
32.7331543	0.000795
32.73925781	0.000811
32.74536133	0.000828
32.75146484	0.00084
32.75756836	0.000842
32.76367188	0.000865
32.76977539	0.000894
32.77587891	0.000898
32.78198242	0.000892
32.78808594	0.000893
32.79418945	0.00091
32.80029297	0.000945
32.80639648	0.00096

Input Motion

Time (s)	Acceleration (g)
26.875	0.000078
26.88	-0.000171
26.885	-0.000476
26.89	-0.000823
26.895	-0.00119
26.9	-0.001533
26.905	-0.001826
26.91	-0.002027
26.915	-0.002105
26.92	-0.002096
26.925	-0.002036
26.93	-0.001956
26.935	-0.001893
26.94	-0.001834
26.945	-0.001763
26.95	-0.001687
26.955	-0.001609
26.96	-0.001542
26.965	-0.001504
26.97	-0.001478
26.975	-0.001454
26.98	-0.001423
26.985	-0.001378
26.99	-0.001351
26.995	-0.001375
27	-0.001442
27.005	-0.001543
27.01	-0.001649
27.015	-0.001726
27.02	-0.001764
27.025	-0.001759
27.03	-0.001722
27.035	-0.001671
27.04	-0.001619
27.045	-0.001584
27.05	-0.00156
27.055	-0.001539
27.06	-0.001534
27.065	-0.001549
27.07	-0.001575
27.075	-0.001604
27.08	-0.001608

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
32.8125	0.000945
32.81860352	0.000951
32.82470703	0.000958
32.83081055	0.000933
32.83691406	0.000927
32.84301758	0.000935
32.84912109	0.000916
32.85522461	0.00091
32.86132813	0.000905
32.86743164	0.000872
32.87353516	0.000859
32.87963867	0.00087
32.88574219	0.000875
32.8918457	0.000877
32.89794922	0.000836
32.90405273	0.000788
32.91015625	0.000809
32.91625977	0.000819
32.92236328	0.000787
32.9284668	0.000785
32.93457031	0.000789
32.94067383	0.000777
32.94677734	0.000777
32.95288086	0.00076
32.95898438	0.000731
32.96508789	0.00072
32.97119141	0.000716
32.97729492	0.000707
32.98339844	0.00068
32.98950195	0.000648
32.99560547	0.000648
33.00170898	0.000663
33.0078125	0.000667
33.01391602	0.00067
33.02001953	0.000679
33.02612305	0.000688
33.03222656	0.000684
33.03833008	0.000682
33.04443359	0.000705
33.05053711	0.000728
33.05664063	0.000741
33.06274414	0.000749

Time (s)	Acceleration (g)
27.085	-0.001563
27.09	-0.001473
27.095	-0.001345
27.1	-0.001198
27.105	-0.00105
27.11	-0.0009
27.115	-0.000748
27.12	-0.000591
27.125	-0.00043
27.13	-0.000291
27.135	-0.000203
27.14	-0.00018
27.145	-0.000227
27.15	-0.000322
27.155	-0.000438
27.16	-0.000539
27.165	-0.000593
27.17	-0.000615
27.175	-0.000627
27.18	-0.000644
27.185	-0.000683
27.19	-0.000734
27.195	-0.00078
27.2	-0.000819
27.205	-0.000849
27.21	-0.000873
27.215	-0.000895
27.22	-0.00091
27.225	-0.000913
27.23	-0.000882
27.235	-0.000805
27.24	-0.000679
27.245	-0.000514
27.25	-0.000349
27.255	-0.000228
27.26	-0.00018
27.265	-0.000224
27.27	-0.000356
27.275	-0.000556
27.28	-0.000781
27.285	-0.000987
27.29	-0.001145

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
33.06884766	0.000738
33.07495117	0.000745
33.08105469	0.000793
33.0871582	0.000828
33.09326172	0.000834
33.09936523	0.000844
33.10546875	0.00086
33.11157227	0.000873
33.11767578	0.000884
33.1237793	0.0009
33.12988281	0.000913
33.13598633	0.000907
33.14208984	0.000912
33.14819336	0.00093
33.15429688	0.000919
33.16040039	0.000909
33.16650391	0.000928
33.17260742	0.000944
33.17871094	0.000956
33.18481445	0.000965
33.19091797	0.00096
33.19702148	0.000965
33.203125	0.000975
33.20922852	0.000977
33.21533203	0.000995
33.22143555	0.000997
33.22753906	0.000976
33.23364258	0.000974
33.23974609	0.000959
33.24584961	0.000927
33.25195313	0.00093
33.25805664	0.000926
33.26416016	0.000894
33.27026367	0.000874
33.27636719	0.000854
33.2824707	0.000827
33.28857422	0.000822
33.29467773	0.000805
33.30078125	0.000762
33.30688477	0.000742
33.31298828	0.000735
33.3190918	0.00071

Time (s)	Acceleration (g)
27.295	-0.001238
27.3	-0.001273
27.305	-0.001271
27.31	-0.001241
27.315	-0.001196
27.32	-0.001144
27.325	-0.001081
27.33	-0.001009
27.335	-0.000927
27.34	-0.000822
27.345	-0.00069
27.35	-0.000544
27.355	-0.000401
27.36	-0.000295
27.365	-0.000257
27.37	-0.000303
27.375	-0.000439
27.38	-0.000645
27.385	-0.000894
27.39	-0.001146
27.395	-0.001364
27.4	-0.001535
27.405	-0.001656
27.41	-0.00173
27.415	-0.001771
27.42	-0.001775
27.425	-0.00174
27.43	-0.001674
27.435	-0.00158
27.44	-0.001466
27.445	-0.001338
27.45	-0.001199
27.455	-0.001056
27.46	-0.000902
27.465	-0.000726
27.47	-0.000558
27.475	-0.000421
27.48	-0.000311
27.485	-0.000224
27.49	-0.000143
27.495	-0.000048
27.5	0.000043

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
33.32519531	0.000699
33.33129883	0.000709
33.33740234	0.000692
33.34350586	0.000664
33.34960938	0.000665
33.35571289	0.000661
33.36181641	0.00064
33.36791992	0.000648
33.37402344	0.000671
33.38012695	0.000683
33.38623047	0.000704
33.39233398	0.000717
33.3984375	0.000727
33.40454102	0.000759
33.41064453	0.000768
33.41674805	0.000761
33.42285156	0.000804
33.42895508	0.000831
33.43505859	0.000795
33.44116211	0.000797
33.44726563	0.000832
33.45336914	0.000828
33.45947266	0.000833
33.46557617	0.000851
33.47167969	0.00083
33.4777832	0.000833
33.48388672	0.000875
33.48999023	0.000882
33.49609375	0.000875
33.50219727	0.000896
33.50830078	0.000897
33.5144043	0.000875
33.52050781	0.000875
33.52661133	0.00089
33.53271484	0.00089
33.53881836	0.000887
33.54492188	0.000888
33.55102539	0.000881
33.55712891	0.000873
33.56323242	0.000874
33.56933594	0.000878
33.57543945	0.000882

Time (s)	Acceleration (g)
27.505	0.000115
27.51	0.000156
27.515	0.000155
27.52	0.000135
27.525	0.00012
27.53	0.000119
27.535	0.000139
27.54	0.00017
27.545	0.000192
27.55	0.000204
27.555	0.000203
27.56	0.000173
27.565	0.000106
27.57	0.000016
27.575	-0.000087
27.58	-0.000192
27.585	-0.000291
27.59	-0.000403
27.595	-0.000548
27.6	-0.000734
27.605	-0.000964
27.61	-0.001225
27.615	-0.001497
27.62	-0.001764
27.625	-0.002014
27.63	-0.002228
27.635	-0.0024
27.64	-0.002548
27.645	-0.002688
27.65	-0.002854
27.655	-0.003069
27.66	-0.003315
27.665	-0.003568
27.67	-0.003793
27.675	-0.003955
27.68	-0.004046
27.685	-0.004065
27.69	-0.004011
27.695	-0.003888
27.7	-0.003687
27.705	-0.003409
27.71	-0.003066

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
33.58154297	0.000866
33.58764648	0.000832
33.59375	0.000819
33.59985352	0.000827
33.60595703	0.000817
33.61206055	0.000799
33.61816406	0.000798
33.62426758	0.000801
33.63037109	0.000788
33.63647461	0.000765
33.64257813	0.000753
33.64868164	0.00075
33.65478516	0.000752
33.66088867	0.000761
33.66699219	0.000753
33.6730957	0.000716
33.67919922	0.000686
33.68530273	0.000682
33.69140625	0.000698
33.69750977	0.000715
33.70361328	0.000707
33.7097168	0.000698
33.71582031	0.000713
33.72192383	0.000713
33.72802734	0.000703
33.73413086	0.000727
33.74023438	0.000762
33.74633789	0.000771
33.75244141	0.000776
33.75854492	0.000794
33.76464844	0.000812
33.77075195	0.000832
33.77685547	0.000855
33.78295898	0.000865
33.7890625	0.000868
33.79516602	0.000885
33.80126953	0.000889
33.80737305	0.000879
33.81347656	0.000898
33.81958008	0.000932
33.82568359	0.000935
33.83178711	0.000922

Input Motion

Time (s)	Acceleration (g)
27.715	-0.002675
27.72	-0.002283
27.725	-0.001939
27.73	-0.00165
27.735	-0.001417
27.74	-0.001234
27.745	-0.001083
27.75	-0.000958
27.755	-0.000856
27.76	-0.000757
27.765	-0.000646
27.77	-0.000544
27.775	-0.000476
27.78	-0.000445
27.785	-0.000459
27.79	-0.00051
27.795	-0.000581
27.8	-0.000668
27.805	-0.000764
27.81	-0.000835
27.815	-0.000852
27.82	-0.00081
27.825	-0.000713
27.83	-0.000581
27.835	-0.00044
27.84	-0.000324
27.845	-0.000262
27.85	-0.000252
27.855	-0.000284
27.86	-0.00036
27.865	-0.00047
27.87	-0.00061
27.875	-0.000772
27.88	-0.000922
27.885	-0.001029
27.89	-0.001086
27.895	-0.001096
27.9	-0.001074
27.905	-0.001048
27.91	-0.001049
27.915	-0.001101
27.92	-0.001216

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
33.83789063	0.000918
33.84399414	0.000922
33.85009766	0.000936
33.85620117	0.000968
33.86230469	0.000984
33.8684082	0.00096
33.87451172	0.000935
33.88061523	0.000929
33.88671875	0.000922
33.89282227	0.000928
33.89892578	0.000937
33.9050293	0.000916
33.91113281	0.00089
33.91723633	0.000868
33.92333984	0.000835
33.92944336	0.000819
33.93554688	0.000827
33.94165039	0.000838
33.94775391	0.000833
33.95385742	0.000799
33.95996094	0.000771
33.96606445	0.00077
33.97216797	0.000762
33.97827148	0.00076
33.984375	0.000768
33.99047852	0.00074
33.99658203	0.000706
34.00268555	0.000688
34.00878906	0.000666
34.01489258	0.000667
34.02099609	0.000682
34.02709961	0.00067
34.03320313	0.00066
34.03930664	0.000658
34.04541016	0.000645
34.05151367	0.000657
34.05761719	0.000696
34.0637207	0.000716
34.06982422	0.000712
34.07592773	0.000707
34.08203125	0.000709
34.08813477	0.000714

Time (s)	Acceleration (g)
27.925	-0.00139
27.93	-0.001594
27.935	-0.001781
27.94	-0.001909
27.945	-0.001938
27.95	-0.001829
27.955	-0.001561
27.96	-0.001157
27.965	-0.000659
27.97	-0.000118
27.975	0.000408
27.98	0.000875
27.985	0.001253
27.99	0.001522
27.995	0.001681
28	0.00175
28.005	0.001755
28.01	0.001735
28.015	0.001727
28.02	0.001737
28.025	0.001767
28.03	0.001826
28.035	0.001915
28.04	0.002034
28.045	0.002184
28.05	0.002338
28.055	0.002468
28.06	0.002563
28.065	0.002611
28.07	0.002593
28.075	0.002497
28.08	0.002308
28.085	0.002017
28.09	0.001649
28.095	0.00124
28.1	0.00082
28.105	0.000429
28.11	0.000111
28.115	-0.000104
28.12	-0.000187
28.125	-0.000126
28.13	0.000041

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
34.09423828	0.000735
34.1003418	0.000758
34.10644531	0.000752
34.11254883	0.000735
34.11865234	0.000747
34.12475586	0.000772
34.13085938	0.000794
34.13696289	0.000827
34.14306641	0.000852
34.14916992	0.000856
34.15527344	0.000866
34.16137695	0.000872
34.16748047	0.000862
34.17358398	0.000885
34.1796875	0.000921
34.18579102	0.000906
34.19189453	0.000877
34.19799805	0.000876
34.20410156	0.000869
34.21020508	0.000865
34.21630859	0.000882
34.22241211	0.00089
34.22851563	0.000888
34.23461914	0.000886
34.24072266	0.000868
34.24682617	0.000861
34.25292969	0.000873
34.2590332	0.000867
34.26513672	0.000851
34.27124023	0.000837
34.27734375	0.000811
34.28344727	0.000787
34.28955078	0.000783
34.2956543	0.000789
34.30175781	0.000798
34.30786133	0.000791
34.31396484	0.000774
34.32006836	0.000767
34.32617188	0.000764
34.33227539	0.00076
34.33837891	0.00076
34.34448242	0.000752

Time (s)	Acceleration (g)
28.135	0.000268
28.14	0.000516
28.145	0.000745
28.15	0.000924
28.155	0.001038
28.16	0.001068
28.165	0.00101
28.17	0.000875
28.175	0.000684
28.18	0.000458
28.185	0.000215
28.19	-0.000027
28.195	-0.00026
28.2	-0.000497
28.205	-0.000748
28.21	-0.001012
28.215	-0.001287
28.22	-0.001545
28.225	-0.00176
28.23	-0.001936
28.235	-0.002083
28.24	-0.002224
28.245	-0.002379
28.25	-0.002568
28.255	-0.0028
28.26	-0.003035
28.265	-0.003221
28.27	-0.00334
28.275	-0.003372
28.28	-0.003303
28.285	-0.003136
28.29	-0.002885
28.295	-0.002579
28.3	-0.002263
28.305	-0.001978
28.31	-0.001771
28.315	-0.001676
28.32	-0.00168
28.325	-0.001754
28.33	-0.001861
28.335	-0.001958
28.34	-0.002015

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
34.35058594	0.000738
34.35668945	0.000721
34.36279297	0.000699
34.36889648	0.000692
34.375	0.000699
34.38110352	0.000696
34.38720703	0.000688
34.39331055	0.000679
34.39941406	0.000654
34.40551758	0.000632
34.41162109	0.000631
34.41772461	0.000646
34.42382813	0.000659
34.42993164	0.000665
34.43603516	0.000662
34.44213867	0.000657
34.44824219	0.000662
34.4543457	0.000685
34.46044922	0.000708
34.46655273	0.00072
34.47265625	0.000733
34.47875977	0.000755
34.48486328	0.00077
34.4909668	0.000771
34.49707031	0.000781
34.50317383	0.000804
34.50927734	0.000814
34.51538086	0.000806
34.52148438	0.000791
34.52758789	0.000786
34.53369141	0.000799
34.53979492	0.00082
34.54589844	0.000844
34.55200195	0.000842
34.55810547	0.000801
34.56420898	0.000774
34.5703125	0.000778
34.57641602	0.000783
34.58251953	0.000792
34.58862305	0.000793
34.59472656	0.000772
34.60083008	0.000762

Time (s)	Acceleration (g)
28.345	-0.002012
28.35	-0.001949
28.355	-0.001843
28.36	-0.001704
28.365	-0.001555
28.37	-0.001433
28.375	-0.001368
28.38	-0.001386
28.385	-0.0015
28.39	-0.001682
28.395	-0.001894
28.4	-0.002109
28.405	-0.002298
28.41	-0.002452
28.415	-0.002565
28.42	-0.002628
28.425	-0.002638
28.43	-0.002578
28.435	-0.00244
28.44	-0.002242
28.445	-0.002015
28.45	-0.001784
28.455	-0.001581
28.46	-0.001438
28.465	-0.00137
28.47	-0.001385
28.475	-0.001477
28.48	-0.001607
28.485	-0.001731
28.49	-0.001833
28.495	-0.001902
28.5	-0.001931
28.505	-0.001929
28.51	-0.001898
28.515	-0.001836
28.52	-0.001767
28.525	-0.001708
28.53	-0.001649
28.535	-0.001582
28.54	-0.001513
28.545	-0.001452
28.55	-0.001423

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
34.60693359	0.000756
34.61303711	0.000753
34.61914063	0.000782
34.62524414	0.000801
34.63134766	0.000773
34.63745117	0.000738
34.64355469	0.000709
34.6496582	0.000697
34.65576172	0.000713
34.66186523	0.000719
34.66796875	0.000694
34.67407227	0.00066
34.68017578	0.000629
34.6862793	0.000614
34.69238281	0.000626
34.69848633	0.000636
34.70458984	0.000623
34.71069336	0.000597
34.71679688	0.000575
34.72290039	0.000556
34.72900391	0.000542
34.73510742	0.000544
34.74121094	0.00055
34.74731445	0.000551
34.75341797	0.000536
34.75952148	0.000499
34.765625	0.00049
34.77172852	0.00052
34.77783203	0.000547
34.78393555	0.000572
34.79003906	0.000589
34.79614258	0.000571
34.80224609	0.000566
34.80834961	0.000594
34.81445313	0.000619
34.82055664	0.000637
34.82666016	0.000651
34.83276367	0.000655
34.83886719	0.000643
34.8449707	0.000622
34.85107422	0.000633
34.85717773	0.000679

Time (s)	Acceleration (g)
28.555	-0.00145
28.56	-0.00156
28.565	-0.001768
28.57	-0.002048
28.575	-0.002372
28.58	-0.002683
28.585	-0.002927
28.59	-0.003103
28.595	-0.003223
28.6	-0.003282
28.605	-0.003287
28.61	-0.003248
28.615	-0.003171
28.62	-0.003054
28.625	-0.002898
28.63	-0.002707
28.635	-0.002488
28.64	-0.002259
28.645	-0.002039
28.65	-0.00182
28.655	-0.001598
28.66	-0.001366
28.665	-0.001121
28.67	-0.000876
28.675	-0.000652
28.68	-0.000464
28.685	-0.000325
28.69	-0.000238
28.695	-0.000193
28.7	-0.000165
28.705	-0.000127
28.71	-0.000052
28.715	0.000077
28.72	0.000246
28.725	0.000437
28.73	0.000623
28.735	0.000781
28.74	0.000923
28.745	0.001063
28.75	0.001216
28.755	0.001391
28.76	0.001576

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
34.86328125	0.000707
34.86938477	0.000706
34.87548828	0.0007
34.8815918	0.000684
34.88769531	0.00068
34.89379883	0.000717
34.89990234	0.000758
34.90600586	0.000765
34.91210938	0.000759
34.91821289	0.000747
34.92431641	0.000725
34.93041992	0.000716
34.93652344	0.000729
34.94262695	0.000745
34.94873047	0.000759
34.95483398	0.000758
34.9609375	0.000733
34.96704102	0.000713
34.97314453	0.000716
34.97924805	0.000732
34.98535156	0.000744
34.99145508	0.000729
34.99755859	0.000691
35.00366211	0.000662
35.00976563	0.000647
35.01586914	0.000648
35.02197266	0.000657
35.02807617	0.000634
35.03417969	0.000587
35.0402832	0.000571
35.04638672	0.000573
35.05249023	0.00056
35.05859375	0.000552
35.06469727	0.000546
35.07080078	0.000531
35.0769043	0.000519
35.08300781	0.000499
35.08911133	0.000475
35.09521484	0.000489
35.10131836	0.000522
35.10742188	0.000525
35.11352539	0.000507

Input Motion

Time (s)	Acceleration (g)
28.765	0.001751
28.77	0.001898
28.775	0.001994
28.78	0.002046
28.785	0.002067
28.79	0.002047
28.795	0.001981
28.8	0.001864
28.805	0.001689
28.81	0.001452
28.815	0.001155
28.82	0.000804
28.825	0.000409
28.83	-0.000019
28.835	-0.000462
28.84	-0.000921
28.845	-0.001389
28.85	-0.001841
28.855	-0.002255
28.86	-0.002598
28.865	-0.002845
28.87	-0.003006
28.875	-0.003088
28.88	-0.003102
28.885	-0.003058
28.89	-0.002917
28.895	-0.002646
28.9	-0.002249
28.905	-0.001744
28.91	-0.001201
28.915	-0.000699
28.92	-0.000292
28.925	-0.000017
28.93	0.000145
28.935	0.000236
28.94	0.000316
28.945	0.000438
28.95	0.000621
28.955	0.000857
28.96	0.001105
28.965	0.001316
28.97	0.001452

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
35.11962891	0.000472
35.12573242	0.000447
35.13183594	0.000466
35.13793945	0.000497
35.14404297	0.000505
35.15014648	0.000513
35.15625	0.000511
35.16235352	0.00049
35.16845703	0.000493
35.17456055	0.000515
35.18066406	0.000528
35.18676758	0.000554
35.19287109	0.000577
35.19897461	0.000565
35.20507813	0.000543
35.21118164	0.000539
35.21728516	0.000547
35.22338867	0.000573
35.22949219	0.000594
35.2355957	0.000577
35.24169922	0.000551
35.24780273	0.000552
35.25390625	0.000575
35.26000977	0.00061
35.26611328	0.00063
35.2722168	0.000619
35.27832031	0.000606
35.28442383	0.000606
35.29052734	0.00061
35.29663086	0.00062
35.30273438	0.000625
35.30883789	0.00062
35.31494141	0.000613
35.32104492	0.000594
35.32714844	0.000573
35.33325195	0.000578
35.33935547	0.000596
35.34545898	0.000603
35.3515625	0.000588
35.35766602	0.000557
35.36376953	0.000544
35.36987305	0.000549

Time (s)	Acceleration (g)
28.975	0.001493
28.98	0.001453
28.985	0.001364
28.99	0.001277
28.995	0.001239
29	0.001271
29.005	0.001373
29.01	0.001515
29.015	0.001654
29.02	0.001749
29.025	0.001768
29.03	0.00172
29.035	0.001623
29.04	0.001515
29.045	0.001438
29.05	0.001383
29.055	0.001339
29.06	0.001309
29.065	0.001282
29.07	0.001263
29.075	0.00126
29.08	0.001227
29.085	0.001117
29.09	0.000921
29.095	0.000631
29.1	0.000255
29.105	-0.000182
29.11	-0.000649
29.115	-0.001117
29.12	-0.001532
29.125	-0.001852
29.13	-0.002077
29.135	-0.002214
29.14	-0.002282
29.145	-0.002306
29.15	-0.002282
29.155	-0.002206
29.16	-0.00209
29.165	-0.001944
29.17	-0.001786
29.175	-0.001638
29.18	-0.001509

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
35.37597656	0.00055
35.38208008	0.000545
35.38818359	0.000529
35.39428711	0.000496
35.40039063	0.000461
35.40649414	0.000438
35.41259766	0.000432
35.41870117	0.000441
35.42480469	0.000448
35.4309082	0.00044
35.43701172	0.00042
35.44311523	0.000395
35.44921875	0.000385
35.45532227	0.000392
35.46142578	0.000409
35.4675293	0.000419
35.47363281	0.0004
35.47973633	0.000378
35.48583984	0.000379
35.49194336	0.000388
35.49804688	0.000402
35.50415039	0.000414
35.51025391	0.000414
35.51635742	0.000416
35.52246094	0.000422
35.52856445	0.000422
35.53466797	0.000434
35.54077148	0.000459
35.546875	0.000478
35.55297852	0.000487
35.55908203	0.000479
35.56518555	0.000467
35.57128906	0.000473
35.57739258	0.000483
35.58349609	0.0005
35.58959961	0.000524
35.59570313	0.000517
35.60180664	0.000493
35.60791016	0.000486
35.61401367	0.000498
35.62011719	0.000522
35.6262207	0.000538

Input Motion

Time (s)	Acceleration (g)
29.185	-0.001408
29.19	-0.00133
29.195	-0.001266
29.2	-0.001217
29.205	-0.001176
29.21	-0.00113
29.215	-0.00107
29.22	-0.000992
29.225	-0.0009
29.23	-0.000826
29.235	-0.000801
29.24	-0.00085
29.245	-0.000986
29.25	-0.001194
29.255	-0.001443
29.26	-0.001689
29.265	-0.001892
29.27	-0.002032
29.275	-0.002106
29.28	-0.002134
29.285	-0.002144
29.29	-0.002153
29.295	-0.002169
29.3	-0.002171
29.305	-0.002128
29.31	-0.001994
29.315	-0.001731
29.32	-0.001332
29.325	-0.000807
29.33	-0.000206
29.335	0.000415
29.34	0.00101
29.345	0.001535
29.35	0.00197
29.355	0.002302
29.36	0.002497
29.365	0.002527
29.37	0.002361
29.375	0.001982
29.38	0.001409
29.385	0.000681
29.39	-0.000131

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
35.63232422	0.000531
35.63842773	0.000524
35.64453125	0.000523
35.65063477	0.000522
35.65673828	0.000531
35.6628418	0.000538
35.66894531	0.000536
35.67504883	0.000541
35.68115234	0.000522
35.68725586	0.000491
35.69335938	0.000503
35.69946289	0.000525
35.70556641	0.000518
35.71166992	0.000512
35.71777344	0.000504
35.72387695	0.000488
35.72998047	0.000497
35.73608398	0.000502
35.7421875	0.000486
35.74829102	0.000477
35.75439453	0.000461
35.76049805	0.000438
35.76660156	0.000429
35.77270508	0.000414
35.77880859	0.000394
35.78491211	0.000388
35.79101563	0.00037
35.79711914	0.000343
35.80322266	0.000332
35.80932617	0.000327
35.81542969	0.000336
35.8215332	0.000354
35.82763672	0.000348
35.83374023	0.000327
35.83984375	0.000305
35.84594727	0.000295
35.85205078	0.000314
35.8581543	0.000342
35.86425781	0.000345
35.87036133	0.000343
35.87646484	0.000349
35.88256836	0.000349

Time (s)	Acceleration (g)
29.395	-0.000947
29.4	-0.001699
29.405	-0.002329
29.41	-0.002808
29.415	-0.003131
29.42	-0.003316
29.425	-0.003388
29.43	-0.003379
29.435	-0.003322
29.44	-0.003217
29.445	-0.00306
29.45	-0.002867
29.455	-0.00265
29.46	-0.002424
29.465	-0.002198
29.47	-0.001975
29.475	-0.001752
29.48	-0.001499
29.485	-0.001201
29.49	-0.000854
29.495	-0.000468
29.5	-0.000104
29.505	0.00018
29.51	0.000369
29.515	0.000462
29.52	0.000499
29.525	0.000529
29.53	0.000585
29.535	0.000687
29.54	0.000806
29.545	0.000896
29.55	0.000902
29.555	0.000768
29.56	0.000474
29.565	0.000019
29.57	-0.000581
29.575	-0.001295
29.58	-0.002096
29.585	-0.002949
29.59	-0.003822
29.595	-0.004692
29.6	-0.005509

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
35.88867188	0.000352
35.89477539	0.000368
35.90087891	0.000401
35.90698242	0.000445
35.91308594	0.000466
35.91918945	0.000452
35.92529297	0.000438
35.93139648	0.000443
35.9375	0.000463
35.94360352	0.000491
35.94970703	0.000513
35.95581055	0.000507
35.96191406	0.000484
35.96801758	0.00048
35.97412109	0.000504
35.98022461	0.000516
35.98632813	0.000507
35.99243164	0.000515
35.99853516	0.000525
36.00463867	0.0005
36.01074219	0.000486
36.0168457	0.000509
36.02294922	0.000527
36.02905273	0.000528
36.03515625	0.000518
36.04125977	0.000491
36.04736328	0.000483
36.0534668	0.000504
36.05957031	0.000511
36.06567383	0.000505
36.07177734	0.000503
36.07788086	0.000487
36.08398438	0.000469
36.09008789	0.000473
36.09619141	0.000483
36.10229492	0.000487
36.10839844	0.000484
36.11450195	0.00047
36.12060547	0.000445
36.12670898	0.000414
36.1328125	0.000386
36.13891602	0.000381

Time (s)	Acceleration (g)
29.605	-0.006235
29.61	-0.00687
29.615	-0.007411
29.62	-0.007856
29.625	-0.008193
29.63	-0.008372
29.635	-0.00835
29.64	-0.008068
29.645	-0.007501
29.65	-0.006719
29.655	-0.005817
29.66	-0.004929
29.665	-0.004186
29.67	-0.003636
29.675	-0.003293
29.68	-0.003131
29.685	-0.003096
29.69	-0.00316
29.695	-0.003292
29.7	-0.003481
29.705	-0.00372
29.71	-0.003968
29.715	-0.004188
29.72	-0.004342
29.725	-0.004395
29.73	-0.004357
29.735	-0.004241
29.74	-0.004058
29.745	-0.003823
29.75	-0.003529
29.755	-0.003172
29.76	-0.002777
29.765	-0.002362
29.77	-0.001964
29.775	-0.001614
29.78	-0.001289
29.785	-0.000961
29.79	-0.000598
29.795	-0.000173
29.8	0.000303
29.805	0.000796
29.81	0.001256

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
36.14501953	0.000385
36.15112305	0.000371
36.15722656	0.000342
36.16333008	0.000313
36.16943359	0.000297
36.17553711	0.000309
36.18164063	0.000332
36.18774414	0.000329
36.19384766	0.000322
36.19995117	0.000331
36.20605469	0.000338
36.2121582	0.000331
36.21826172	0.000326
36.22436523	0.000342
36.23046875	0.000359
36.23657227	0.000358
36.24267578	0.000355
36.2487793	0.000359
36.25488281	0.000367
36.26098633	0.000383
36.26708984	0.000406
36.27319336	0.000431
36.27929688	0.00043
36.28540039	0.000412
36.29150391	0.000424
36.29760742	0.000455
36.30371094	0.000466
36.30981445	0.000467
36.31591797	0.000467
36.32202148	0.000458
36.328125	0.000445
36.33422852	0.000439
36.34033203	0.000447
36.34643555	0.000463
36.35253906	0.000469
36.35864258	0.000474
36.36474609	0.000478
36.37084961	0.000477
36.37695313	0.000496
36.38305664	0.000527
36.38916016	0.000534
36.39526367	0.000536

Input Motion

Time (s)	Acceleration (g)
29.815	0.001625
29.82	0.001847
29.825	0.001889
29.83	0.001751
29.835	0.001459
29.84	0.001071
29.845	0.000653
29.85	0.00025
29.855	-0.000106
29.86	-0.000402
29.865	-0.00064
29.87	-0.000829
29.875	-0.000979
29.88	-0.001095
29.885	-0.001188
29.89	-0.00127
29.895	-0.00136
29.9	-0.0015
29.905	-0.001723
29.91	-0.002033
29.915	-0.002421
29.92	-0.002831
29.925	-0.003198
29.93	-0.003488
29.935	-0.003673
29.94	-0.003741
29.945	-0.003695
29.95	-0.003541
29.955	-0.003295
29.96	-0.002977
29.965	-0.002616
29.97	-0.002254
29.975	-0.001936
29.98	-0.001704
29.985	-0.001582
29.99	-0.001579
29.995	-0.001689
30	-0.001859
30.005	-0.002038
30.01	-0.002219
30.015	-0.002404
30.02	-0.002623

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
36.40136719	0.000531
36.4074707	0.000508
36.41357422	0.000506
36.41967773	0.000518
36.42578125	0.000509
36.43188477	0.000496
36.43798828	0.00049
36.4440918	0.000474
36.45019531	0.00046
36.45629883	0.000453
36.46240234	0.000447
36.46850586	0.000447
36.47460938	0.000452
36.48071289	0.00044
36.48681641	0.000399
36.49291992	0.000379
36.49902344	0.000401
36.50512695	0.000406
36.51123047	0.000389
36.51733398	0.00038
36.5234375	0.000365
36.52954102	0.000362
36.53564453	0.000385
36.54174805	0.000397
36.54785156	0.000393
36.55395508	0.000394
36.56005859	0.000391
36.56616211	0.000389
36.57226563	0.000394
36.57836914	0.000396
36.58447266	0.000398
36.59057617	0.000416
36.59667969	0.00043
36.6027832	0.00041
36.60888672	0.000385
36.61499023	0.000388
36.62109375	0.0004
36.62719727	0.00041
36.63330078	0.000421
36.6394043	0.000416
36.64550781	0.000404
36.65161133	0.000402

Input Motion

Time (s)	Acceleration (g)
30.025	-0.002914
30.03	-0.003287
30.035	-0.003747
30.04	-0.004287
30.045	-0.004876
30.05	-0.005501
30.055	-0.006137
30.06	-0.006719
30.065	-0.007197
30.07	-0.007548
30.075	-0.00776
30.08	-0.007871
30.085	-0.007924
30.09	-0.007924
30.095	-0.007868
30.1	-0.007753
30.105	-0.007564
30.11	-0.007271
30.115	-0.006851
30.12	-0.00631
30.125	-0.005661
30.13	-0.004924
30.135	-0.004126
30.14	-0.003288
30.145	-0.002431
30.15	-0.001578
30.155	-0.000748
30.16	0.000021
30.165	0.000701
30.17	0.001281
30.175	0.001746
30.18	0.002111
30.185	0.002393
30.19	0.002562
30.195	0.002589
30.2	0.002478
30.205	0.002246
30.21	0.001923
30.215	0.001554
30.22	0.001213
30.225	0.000958
30.23	0.000789

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
36.65771484	0.000409
36.66381836	0.000428
36.66992188	0.000444
36.67602539	0.000445
36.68212891	0.000443
36.68823242	0.000443
36.69433594	0.000441
36.70043945	0.000457
36.70654297	0.000484
36.71264648	0.000497
36.71875	0.0005
36.72485352	0.000499
36.73095703	0.000487
36.73706055	0.00048
36.74316406	0.000493
36.74926758	0.000513
36.75537109	0.000513
36.76147461	0.000494
36.76757813	0.000481
36.77368164	0.000482
36.77978516	0.000485
36.78588867	0.000484
36.79199219	0.00048
36.7980957	0.000477
36.80419922	0.000465
36.81030273	0.000441
36.81640625	0.000428
36.82250977	0.000437
36.82861328	0.000457
36.8347168	0.00047
36.84082031	0.000461
36.84692383	0.000438
36.85302734	0.00043
36.85913086	0.000439
36.86523438	0.000446
36.87133789	0.000449
36.87744141	0.000438
36.88354492	0.000411
36.88964844	0.000393
36.89575195	0.000391
36.90185547	0.000393
36.90795898	0.000395

Time (s)	Acceleration (g)
30.235	0.000684
30.24	0.00058
30.245	0.000395
30.25	0.000106
30.255	-0.000296
30.26	-0.000809
30.265	-0.001401
30.27	-0.002019
30.275	-0.002603
30.28	-0.003087
30.285	-0.003417
30.29	-0.003561
30.295	-0.003517
30.3	-0.003331
30.305	-0.003077
30.31	-0.002843
30.315	-0.002712
30.32	-0.002736
30.325	-0.002931
30.33	-0.003273
30.335	-0.003707
30.34	-0.004152
30.345	-0.004527
30.35	-0.004793
30.355	-0.004935
30.36	-0.004967
30.365	-0.004924
30.37	-0.00485
30.375	-0.004785
30.38	-0.004737
30.385	-0.004698
30.39	-0.004639
30.395	-0.004519
30.4	-0.004293
30.405	-0.003933
30.41	-0.003406
30.415	-0.002709
30.42	-0.001905
30.425	-0.001072
30.43	-0.000295
30.435	0.000339
30.44	0.000782

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
36.9140625	0.000405
36.92016602	0.000417
36.92626953	0.000419
36.93237305	0.00041
36.93847656	0.000412
36.94458008	0.000437
36.95068359	0.000464
36.95678711	0.000474
36.96289063	0.000466
36.96899414	0.000452
36.97509766	0.000453
36.98120117	0.000464
36.98730469	0.000472
36.9934082	0.000477
36.99951172	0.000483
37.00561523	0.000484
37.01171875	0.000489
37.01782227	0.000508
37.02392578	0.000525
37.0300293	0.000532
37.03613281	0.000548
37.04223633	0.00057
37.04833984	0.000568
37.05444336	0.000548
37.06054688	0.000542
37.06665039	0.000557
37.07275391	0.000573
37.07885742	0.000577
37.08496094	0.000563
37.09106445	0.000556
37.09716797	0.000568
37.10327148	0.000577
37.109375	0.000584
37.11547852	0.000595
37.12158203	0.000582
37.12768555	0.000565
37.13378906	0.000564
37.13989258	0.000548
37.14599609	0.000536
37.15209961	0.000553
37.15820313	0.000555
37.16430664	0.000536

Time (s)	Acceleration (g)
30.445	0.000995
30.45	0.000951
30.455	0.000638
30.46	0.000029
30.465	-0.000881
30.47	-0.002054
30.475	-0.003434
30.48	-0.004919
30.485	-0.006393
30.49	-0.007765
30.495	-0.008959
30.5	-0.009923
30.505	-0.010631
30.51	-0.011085
30.515	-0.0113
30.52	-0.011301
30.525	-0.01112
30.53	-0.010792
30.535	-0.01036
30.54	-0.009868
30.545	-0.009367
30.55	-0.008921
30.555	-0.008583
30.56	-0.008378
30.565	-0.008307
30.57	-0.008329
30.575	-0.008386
30.58	-0.008395
30.585	-0.008275
30.59	-0.007988
30.595	-0.007523
30.6	-0.006881
30.605	-0.006094
30.61	-0.005224
30.615	-0.004341
30.62	-0.003517
30.625	-0.002813
30.63	-0.00226
30.635	-0.001869
30.64	-0.001641
30.645	-0.001553
30.65	-0.001576

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
37.17041016	0.000511
37.17651367	0.000478
37.18261719	0.000469
37.1887207	0.000481
37.19482422	0.000476
37.20092773	0.000462
37.20703125	0.000445
37.21313477	0.000414
37.21923828	0.000401
37.2253418	0.000406
37.23144531	0.000406
37.23754883	0.000405
37.24365234	0.000398
37.24975586	0.000383
37.25585938	0.000375
37.26196289	0.000376
37.26806641	0.000381
37.27416992	0.000394
37.28027344	0.000412
37.28637695	0.000411
37.29248047	0.000393
37.29858398	0.00039
37.3046875	0.00041
37.31079102	0.000424
37.31689453	0.000434
37.32299805	0.000449
37.32910156	0.000444
37.33520508	0.000421
37.34130859	0.00042
37.34741211	0.000442
37.35351563	0.000459
37.35961914	0.000469
37.36572266	0.000474
37.37182617	0.000471
37.37792969	0.000473
37.3840332	0.000484
37.39013672	0.000502
37.39624023	0.000529
37.40234375	0.000546
37.40844727	0.000539
37.41455078	0.000536
37.4206543	0.000546

Input Motion

Time (s)	Acceleration (g)
30.655	-0.001675
30.66	-0.001777
30.665	-0.001813
30.67	-0.001751
30.675	-0.001572
30.68	-0.001262
30.685	-0.000831
30.69	-0.00031
30.695	0.000264
30.7	0.000854
30.705	0.001421
30.71	0.001949
30.715	0.00242
30.72	0.002825
30.725	0.00317
30.73	0.003427
30.735	0.00359
30.74	0.003706
30.745	0.003826
30.75	0.00402
30.755	0.00434
30.76	0.004773
30.765	0.005267
30.77	0.00574
30.775	0.006092
30.78	0.00623
30.785	0.006084
30.79	0.005642
30.795	0.004922
30.8	0.003975
30.805	0.002875
30.81	0.00168
30.815	0.000457
30.82	-0.000726
30.825	-0.001796
30.83	-0.002681
30.835	-0.003323
30.84	-0.003669
30.845	-0.003699
30.85	-0.003473
30.855	-0.003074
30.86	-0.002603

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
37.42675781	0.000562
37.43286133	0.000582
37.43896484	0.000594
37.44506836	0.000585
37.45117188	0.000573
37.45727539	0.000569
37.46337891	0.000569
37.46948242	0.000585
37.47558594	0.000605
37.48168945	0.000609
37.48779297	0.000615
37.49389648	0.000623
37.5	0.000609
37.50610352	0.000596
37.51220703	0.000609
37.51831055	0.000615
37.52441406	0.000596
37.53051758	0.00057
37.53662109	0.00054
37.54272461	0.000522
37.54882813	0.000529
37.55493164	0.000527
37.56103516	0.000508
37.56713867	0.000496
37.57324219	0.00048
37.5793457	0.000465
37.58544922	0.000479
37.59155273	0.000494
37.59765625	0.000494
37.60375977	0.0005
37.60986328	0.000505
37.6159668	0.000492
37.62207031	0.000481
37.62817383	0.000486
37.63427734	0.000503
37.64038086	0.000513
37.64648438	0.000506
37.65258789	0.0005
37.65869141	0.000495
37.66479492	0.000501
37.67089844	0.000535
37.67700195	0.000563

Time (s)	Acceleration (g)
30.865	-0.002162
30.87	-0.001804
30.875	-0.001556
30.88	-0.001421
30.885	-0.001381
30.89	-0.001412
30.895	-0.001487
30.9	-0.001578
30.905	-0.001665
30.91	-0.001715
30.915	-0.001702
30.92	-0.00163
30.925	-0.001508
30.93	-0.001362
30.935	-0.001228
30.94	-0.00112
30.945	-0.001041
30.95	-0.001012
30.955	-0.001032
30.96	-0.001067
30.965	-0.001079
30.97	-0.001016
30.975	-0.000835
30.98	-0.000543
30.985	-0.000166
30.99	0.000234
30.995	0.000578
31	0.000816
31.005	0.000904
31.01	0.000791
31.015	0.00046
31.02	-0.000086
31.025	-0.000812
31.03	-0.001626
31.035	-0.002428
31.04	-0.003107
31.045	-0.003563
31.05	-0.003773
31.055	-0.003753
31.06	-0.003513
31.065	-0.003097
31.07	-0.002593

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
37.68310547	0.000554
37.68920898	0.000543
37.6953125	0.000541
37.70141602	0.00054
37.70751953	0.000552
37.71362305	0.000566
37.71972656	0.000567
37.72583008	0.00057
37.73193359	0.000565
37.73803711	0.000543
37.74414063	0.000527
37.75024414	0.000538
37.75634766	0.000571
37.76245117	0.000592
37.76855469	0.000576
37.7746582	0.000552
37.78076172	0.000557
37.78686523	0.000581
37.79296875	0.000602
37.79907227	0.00061
37.80517578	0.000608
37.8112793	0.000595
37.81738281	0.000577
37.82348633	0.000577
37.82958984	0.000586
37.83569336	0.000588
37.84179688	0.000591
37.84790039	0.000581
37.85400391	0.000545
37.86010742	0.000524
37.86621094	0.000533
37.87231445	0.000543
37.87841797	0.000545
37.88452148	0.000533
37.890625	0.000508
37.89672852	0.000492
37.90283203	0.000493
37.90893555	0.000504
37.91503906	0.000522
37.92114258	0.000524
37.92724609	0.000503
37.93334961	0.00049

Time (s)	Acceleration (g)
31.075	-0.002083
31.08	-0.001624
31.085	-0.001256
31.09	-0.000987
31.095	-0.000803
31.1	-0.000685
31.105	-0.000608
31.11	-0.000543
31.115	-0.000462
31.12	-0.000356
31.125	-0.000217
31.13	-0.000026
31.135	0.000235
31.14	0.000582
31.145	0.001033
31.15	0.001575
31.155	0.00219
31.16	0.002863
31.165	0.003571
31.17	0.004287
31.175	0.004991
31.18	0.005674
31.185	0.006333
31.19	0.006987
31.195	0.007652
31.2	0.008325
31.205	0.008997
31.21	0.009632
31.215	0.010188
31.22	0.010658
31.225	0.011044
31.23	0.011344
31.235	0.011561
31.24	0.011715
31.245	0.011827
31.25	0.011881
31.255	0.01186
31.26	0.011758
31.265	0.011573
31.27	0.011331
31.275	0.01107
31.28	0.010841

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
37.93945313	0.000497
37.94555664	0.000507
37.95166016	0.00052
37.95776367	0.000544
37.96386719	0.00056
37.9699707	0.000553
37.97607422	0.000544
37.98217773	0.000552
37.98828125	0.000561
37.99438477	0.000573
38.00048828	0.000589
38.0065918	0.000582
38.01269531	0.000558
38.01879883	0.000551
38.02490234	0.000557
38.03100586	0.000572
38.03710938	0.000601
38.04321289	0.000611
38.04931641	0.000596
38.05541992	0.000589
38.06152344	0.000602
38.06762695	0.000623
38.07373047	0.000647
38.07983398	0.000666
38.0859375	0.000673
38.09204102	0.000662
38.09814453	0.000647
38.10424805	0.000651
38.11035156	0.000666
38.11645508	0.000682
38.12255859	0.000701
38.12866211	0.000701
38.13476563	0.000679
38.14086914	0.000668
38.14697266	0.000677
38.15307617	0.000692
38.15917969	0.000695
38.1652832	0.000673
38.17138672	0.000648
38.17749023	0.000642
38.18359375	0.000637
38.18969727	0.000626

Time (s)	Acceleration (g)
31.285	0.010695
31.29	0.010662
31.295	0.010759
31.3	0.010963
31.305	0.011234
31.31	0.011554
31.315	0.011893
31.32	0.012219
31.325	0.012506
31.33	0.012722
31.335	0.012841
31.34	0.012855
31.345	0.012763
31.35	0.012566
31.355	0.012271
31.36	0.01188
31.365	0.011401
31.37	0.010852
31.375	0.010259
31.38	0.009658
31.385	0.009086
31.39	0.008577
31.395	0.008149
31.4	0.00779
31.405	0.007481
31.41	0.007159
31.415	0.006766
31.42	0.006323
31.425	0.005864
31.43	0.005431
31.435	0.005078
31.44	0.004851
31.445	0.004782
31.45	0.004893
31.455	0.005194
31.46	0.005685
31.465	0.006351
31.47	0.007178
31.475	0.008146
31.48	0.009194
31.485	0.010259
31.49	0.011301

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
38.19580078	0.000628
38.2019043	0.000633
38.20800781	0.000628
38.21411133	0.000611
38.22021484	0.000588
38.22631836	0.000579
38.23242188	0.000594
38.23852539	0.00061
38.24462891	0.000607
38.25073242	0.000587
38.25683594	0.00057
38.26293945	0.000567
38.26904297	0.00057
38.27514648	0.000571
38.28125	0.000571
38.28735352	0.000558
38.29345703	0.000537
38.29956055	0.000527
38.30566406	0.000524
38.31176758	0.000519
38.31787109	0.00053
38.32397461	0.000548
38.33007813	0.000543
38.33618164	0.000524
38.34228516	0.00052
38.34838867	0.000524
38.35449219	0.000541
38.3605957	0.000571
38.36669922	0.00058
38.37280273	0.000564
38.37890625	0.000556
38.38500977	0.000562
38.39111328	0.000579
38.3972168	0.000606
38.40332031	0.00062
38.40942383	0.000611
38.41552734	0.000603
38.42163086	0.000612
38.42773438	0.000623
38.43383789	0.000636
38.43994141	0.000655
38.44604492	0.000663

Time (s)	Acceleration (g)
31.495	0.012279
31.5	0.013139
31.505	0.013838
31.51	0.014323
31.515	0.014549
31.52	0.0145
31.525	0.014166
31.53	0.013541
31.535	0.012629
31.54	0.01144
31.545	0.009995
31.55	0.008334
31.555	0.006511
31.56	0.004587
31.565	0.002625
31.57	0.000688
31.575	-0.00117
31.58	-0.00293
31.585	-0.004577
31.59	-0.006093
31.595	-0.007463
31.6	-0.008665
31.605	-0.00968
31.61	-0.010507
31.615	-0.011152
31.62	-0.011648
31.625	-0.012026
31.63	-0.012309
31.635	-0.012508
31.64	-0.01261
31.645	-0.012596
31.65	-0.012442
31.655	-0.01214
31.66	-0.011715
31.665	-0.011212
31.67	-0.010702
31.675	-0.010257
31.68	-0.009906
31.685	-0.009656
31.69	-0.009478
31.695	-0.009325
31.7	-0.009148

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
38.45214844	0.000654
38.45825195	0.000636
38.46435547	0.000615
38.47045898	0.000615
38.4765625	0.00064
38.48266602	0.000653
38.48876953	0.000639
38.49487305	0.000631
38.50097656	0.000638
38.50708008	0.00066
38.51318359	0.000688
38.51928711	0.000708
38.52539063	0.000714
38.53149414	0.000709
38.53759766	0.000695
38.54370117	0.000695
38.54980469	0.000703
38.5559082	0.0007
38.56201172	0.000695
38.56811523	0.00069
38.57421875	0.000669
38.58032227	0.000643
38.58642578	0.000635
38.5925293	0.000648
38.59863281	0.000669
38.60473633	0.000671
38.61083984	0.00065
38.61694336	0.000636
38.62304688	0.000641
38.62915039	0.000651
38.63525391	0.000657
38.64135742	0.000663
38.64746094	0.000662
38.65356445	0.000649
38.65966797	0.000637
38.66577148	0.000633
38.671875	0.000636
38.67797852	0.00065
38.68408203	0.000665
38.69018555	0.000662
38.69628906	0.00065
38.70239258	0.000642

Input Motion

Time (s)	Acceleration (g)
31.705	-0.008912
31.71	-0.008613
31.715	-0.008278
31.72	-0.007978
31.725	-0.007804
31.73	-0.007832
31.735	-0.008134
31.74	-0.008753
31.745	-0.00971
31.75	-0.011008
31.755	-0.012616
31.76	-0.01448
31.765	-0.01652
31.77	-0.0186
31.775	-0.020592
31.78	-0.022364
31.785	-0.023803
31.79	-0.024873
31.795	-0.025564
31.8	-0.025849
31.805	-0.025728
31.81	-0.025189
31.815	-0.024233
31.82	-0.022927
31.825	-0.021355
31.83	-0.019589
31.835	-0.017709
31.84	-0.015793
31.845	-0.013906
31.85	-0.012099
31.855	-0.010411
31.86	-0.008858
31.865	-0.007439
31.87	-0.006139
31.875	-0.004936
31.88	-0.003801
31.885	-0.002715
31.89	-0.001671
31.895	-0.000667
31.9	0.000288
31.905	0.001188
31.91	0.002058

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
38.70849609	0.000642
38.71459961	0.000655
38.72070313	0.000667
38.72680664	0.000663
38.73291016	0.000648
38.73901367	0.000631
38.74511719	0.00063
38.7512207	0.000646
38.75732422	0.00065
38.76342773	0.000638
38.76953125	0.00063
38.77563477	0.000633
38.78173828	0.000636
38.7878418	0.000642
38.79394531	0.000654
38.80004883	0.000667
38.80615234	0.000686
38.81225586	0.000703
38.81835938	0.000698
38.82446289	0.000686
38.83056641	0.000704
38.83666992	0.000741
38.84277344	0.000759
38.84887695	0.000747
38.85498047	0.000726
38.86108398	0.000718
38.8671875	0.000721
38.87329102	0.000725
38.87939453	0.000727
38.88549805	0.000726
38.89160156	0.000716
38.89770508	0.000698
38.90380859	0.000687
38.90991211	0.000686
38.91601563	0.000692
38.92211914	0.000708
38.92822266	0.000723
38.93432617	0.000709
38.94042969	0.000687
38.9465332	0.000694
38.95263672	0.000709
38.95874023	0.00071

Time (s)	Acceleration (g)
31.915	0.002933
31.92	0.003833
31.925	0.004783
31.93	0.005812
31.935	0.006937
31.94	0.008164
31.945	0.009494
31.95	0.010885
31.955	0.012285
31.96	0.013668
31.965	0.015003
31.97	0.016231
31.975	0.017304
31.98	0.018163
31.985	0.018749
31.99	0.01905
31.995	0.019065
32	0.018779
32.005	0.018208
32.01	0.01739
32.015	0.016388
32.02	0.015321
32.025	0.014317
32.03	0.013498
32.035	0.012968
32.04	0.012781
32.045	0.01294
32.05	0.013412
32.055	0.014121
32.06	0.014977
32.065	0.015881
32.07	0.016738
32.075	0.017466
32.08	0.017989
32.085	0.018258
32.09	0.018245
32.095	0.017948
32.1	0.017405
32.105	0.016674
32.11	0.015821
32.115	0.014924
32.12	0.014054

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
38.96484375	0.000711
38.97094727	0.000711
38.97705078	0.000704
38.9831543	0.000702
38.98925781	0.000709
38.99536133	0.00072
39.00146484	0.000728
39.00756836	0.000725
39.01367188	0.000719
39.01977539	0.000714
39.02587891	0.000704
39.03198242	0.000702
39.03808594	0.000716
39.04418945	0.000729
39.05029297	0.000718
39.05639648	0.000698
39.0625	0.000696
39.06860352	0.000712
39.07470703	0.000733
39.08081055	0.000749
39.08691406	0.000748
39.09301758	0.000734
39.09912109	0.000724
39.10522461	0.00072
39.11132813	0.00072
39.11743164	0.000722
39.12353516	0.000717
39.12963867	0.000706
39.13574219	0.000699
39.1418457	0.000691
39.14794922	0.00069
39.15405273	0.000711
39.16015625	0.000727
39.16625977	0.00073
39.17236328	0.000742
39.1784668	0.000749
39.18457031	0.000743
39.19067383	0.000757
39.19677734	0.000781
39.20288086	0.000784
39.20898438	0.000777
39.21508789	0.000768

Input Motion

Time (s)	Acceleration (g)
32.125	0.013276
32.13	0.012647
32.135	0.012207
32.14	0.011957
32.145	0.011877
32.15	0.011912
32.155	0.011997
32.16	0.012076
32.165	0.012092
32.17	0.012024
32.175	0.011859
32.18	0.011579
32.185	0.011176
32.19	0.010635
32.195	0.009951
32.2	0.009129
32.205	0.008178
32.21	0.007141
32.215	0.006059
32.22	0.00495
32.225	0.003841
32.23	0.002739
32.235	0.001651
32.24	0.000646
32.245	-0.000213
32.25	-0.000887
32.255	-0.001345
32.26	-0.001612
32.265	-0.001729
32.27	-0.001724
32.275	-0.001628
32.28	-0.001466
32.285	-0.001253
32.29	-0.001005
32.295	-0.000738
32.3	-0.000478
32.305	-0.000255
32.31	-0.000097
32.315	-0.000028
32.32	-0.000074
32.325	-0.000248
32.33	-0.000553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
39.22119141	0.000766
39.22729492	0.000779
39.23339844	0.00079
39.23950195	0.000788
39.24560547	0.000786
39.25170898	0.000787
39.2578125	0.00079
39.26391602	0.000789
39.27001953	0.000782
39.27612305	0.000781
39.28222656	0.000784
39.28833008	0.000776
39.29443359	0.000758
39.30053711	0.000738
39.30664063	0.00072
39.31274414	0.00072
39.31884766	0.000736
39.32495117	0.000737
39.33105469	0.000722
39.3371582	0.000717
39.34326172	0.000724
39.34936523	0.00073
39.35546875	0.00074
39.36157227	0.000758
39.36767578	0.000773
39.3737793	0.000776
39.37988281	0.000779
39.38598633	0.000783
39.39208984	0.000778
39.39819336	0.000777
39.40429688	0.000791
39.41040039	0.000795
39.41650391	0.00078
39.42260742	0.000759
39.42871094	0.000743
39.43481445	0.000745
39.44091797	0.000754
39.44702148	0.000745
39.453125	0.000733
39.45922852	0.000735
39.46533203	0.000738
39.47143555	0.000745

Input Motion

Time (s)	Acceleration (g)
32.335	-0.000986
32.34	-0.001528
32.345	-0.002155
32.35	-0.002859
32.355	-0.003633
32.36	-0.004463
32.365	-0.005333
32.37	-0.006229
32.375	-0.007138
32.38	-0.008014
32.385	-0.008818
32.39	-0.009531
32.395	-0.010134
32.4	-0.010619
32.405	-0.010978
32.41	-0.011176
32.415	-0.011182
32.42	-0.010968
32.425	-0.010514
32.43	-0.009838
32.435	-0.008967
32.44	-0.007935
32.445	-0.006782
32.45	-0.00553
32.455	-0.004208
32.46	-0.002854
32.465	-0.001518
32.47	-0.000274
32.475	0.000797
32.48	0.001604
32.485	0.002071
32.49	0.002155
32.495	0.001842
32.5	0.001165
32.505	0.000186
32.51	-0.001032
32.515	-0.002414
32.52	-0.003874
32.525	-0.005334
32.53	-0.006729
32.535	-0.008008
32.54	-0.009152

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
39.47753906	0.000763
39.48364258	0.000777
39.48974609	0.000788
39.49584961	0.000799
39.50195313	0.000798
39.50805664	0.000797
39.51416016	0.000811
39.52026367	0.000832
39.52636719	0.000853
39.5324707	0.000861
39.53857422	0.000847
39.54467773	0.000837
39.55078125	0.000852
39.55688477	0.00087
39.56298828	0.000882
39.5690918	0.000882
39.57519531	0.000863
39.58129883	0.000844
39.58740234	0.000837
39.59350586	0.000825
39.59960938	0.000818
39.60571289	0.000822
39.61181641	0.000823
39.61791992	0.000813
39.62402344	0.000797
39.63012695	0.000786
39.63623047	0.000801
39.64233398	0.000826
39.6484375	0.000832
39.65454102	0.000823
39.66064453	0.000811
39.66674805	0.000806
39.67285156	0.000812
39.67895508	0.000816
39.68505859	0.000814
39.69116211	0.000812
39.69726563	0.000805
39.70336914	0.000801
39.70947266	0.000805
39.71557617	0.000809
39.72167969	0.000816
39.7277832	0.000829

Input Motion

Time (s)	Acceleration (g)
32.545	-0.010159
32.55	-0.011036
32.555	-0.011802
32.56	-0.012478
32.565	-0.013078
32.57	-0.013618
32.575	-0.014097
32.58	-0.014519
32.585	-0.014882
32.59	-0.015174
32.595	-0.015376
32.6	-0.015487
32.605	-0.015504
32.61	-0.015403
32.615	-0.015168
32.62	-0.014785
32.625	-0.014245
32.63	-0.013573
32.635	-0.012808
32.64	-0.01197
32.645	-0.011085
32.65	-0.010181
32.655	-0.00928
32.66	-0.008398
32.665	-0.00755
32.67	-0.006755
32.675	-0.006019
32.68	-0.00535
32.685	-0.004746
32.69	-0.004164
32.695	-0.003565
32.7	-0.00292
32.705	-0.002206
32.71	-0.001442
32.715	-0.000658
32.72	0.000142
32.725	0.000951
32.73	0.001767
32.735	0.002593
32.74	0.003419
32.745	0.004228
32.75	0.004996

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
39.73388672	0.00083
39.73999023	0.000821
39.74609375	0.00082
39.75219727	0.00082
39.75830078	0.000823
39.7644043	0.00084
39.77050781	0.000842
39.77661133	0.000814
39.78271484	0.000805
39.78881836	0.000818
39.79492188	0.000823
39.80102539	0.000833
39.80712891	0.000843
39.81323242	0.000843
39.81933594	0.00085
39.82543945	0.000856
39.83154297	0.000855
39.83764648	0.000862
39.84375	0.00087
39.84985352	0.000876
39.85595703	0.000886
39.86206055	0.00088
39.86816406	0.000864
39.87426758	0.000863
39.88037109	0.000867
39.88647461	0.000879
39.89257813	0.000896
39.89868164	0.000891
39.90478516	0.000884
39.91088867	0.000905
39.91699219	0.000923
39.9230957	0.000928
39.92919922	0.000939
39.93530273	0.000937
39.94140625	0.000929
39.94750977	0.000933
39.95361328	0.000924
39.9597168	0.000904
39.96582031	0.000902
39.97192383	0.000904
39.97802734	0.000889
39.98413086	0.000867

Input Motion

Time (s)	Acceleration (g)
32.755	0.0057
32.76	0.006315
32.765	0.006827
32.77	0.007236
32.775	0.007552
32.78	0.007796
32.785	0.008
32.79	0.008179
32.795	0.008356
32.8	0.008567
32.805	0.008838
32.81	0.009196
32.815	0.009659
32.82	0.010192
32.825	0.010762
32.83	0.011342
32.835	0.011906
32.84	0.012457
32.845	0.013004
32.85	0.013507
32.855	0.013931
32.86	0.014232
32.865	0.014356
32.87	0.01429
32.875	0.014022
32.88	0.013529
32.885	0.012807
32.89	0.011867
32.895	0.010742
32.9	0.009535
32.905	0.008359
32.91	0.007331
32.915	0.006555
32.92	0.006072
32.925	0.005889
32.93	0.005963
32.935	0.006228
32.94	0.006631
32.945	0.007117
32.95	0.007636
32.955	0.008143
32.96	0.008603

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
39.99023438	0.000849
39.99633789	0.000846
40.00244141	0.00085
40.00854492	0.000842
40.01464844	0.000826
40.02075195	0.000811
40.02685547	0.000801
40.03295898	0.000799
40.0390625	0.000803
40.04516602	0.000807
40.05126953	0.000812
40.05737305	0.000818
40.06347656	0.000824
40.06958008	0.000824
40.07568359	0.00082
40.08178711	0.000833
40.08789063	0.000861
40.09399414	0.000876
40.10009766	0.000877
40.10620117	0.000876
40.11230469	0.000875
40.1184082	0.000883
40.12451172	0.0009
40.13061523	0.000907
40.13671875	0.000903
40.14282227	0.0009
40.14892578	0.000898
40.1550293	0.000898
40.16113281	0.000904
40.16723633	0.000909
40.17333984	0.000908
40.17944336	0.000916
40.18554688	0.000929
40.19165039	0.00092
40.19775391	0.000911
40.20385742	0.000938
40.20996094	0.000972
40.21606445	0.000977
40.22216797	0.00097
40.22827148	0.000965
40.234375	0.000965
40.24047852	0.000975

Input Motion

Time (s)	Acceleration (g)
32.965	0.008978
32.97	0.009221
32.975	0.009291
32.98	0.009157
32.985	0.008812
32.99	0.008274
32.995	0.007584
33	0.006828
33.005	0.006101
33.01	0.005453
33.015	0.00492
33.02	0.004535
33.025	0.004308
33.03	0.004227
33.035	0.004267
33.04	0.004397
33.045	0.004567
33.05	0.004716
33.055	0.004781
33.06	0.004697
33.065	0.004413
33.07	0.00393
33.075	0.003274
33.08	0.002492
33.085	0.001641
33.09	0.000782
33.095	-0.000033
33.1	-0.000794
33.105	-0.001491
33.11	-0.002107
33.115	-0.002637
33.12	-0.003038
33.125	-0.003279
33.13	-0.003408
33.135	-0.003478
33.14	-0.003556
33.145	-0.003715
33.15	-0.003963
33.155	-0.004294
33.16	-0.004712
33.165	-0.005214
33.17	-0.005798

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
40.24658203	0.000984
40.25268555	0.000981
40.25878906	0.000968
40.26489258	0.000949
40.27099609	0.000939
40.27709961	0.000938
40.28320313	0.000936
40.28930664	0.000935
40.29541016	0.000937
40.30151367	0.000936
40.30761719	0.000926
40.3137207	0.000904
40.31982422	0.000892
40.32592773	0.000903
40.33203125	0.000905
40.33813477	0.000886
40.34423828	0.000866
40.3503418	0.000849
40.35644531	0.000842
40.36254883	0.000853
40.36865234	0.000862
40.37475586	0.000862
40.38085938	0.000867
40.38696289	0.000878
40.39306641	0.000884
40.39916992	0.000882
40.40527344	0.000879
40.41137695	0.000885
40.41748047	0.000889
40.42358398	0.000884
40.4296875	0.000873
40.43579102	0.000862
40.44189453	0.00086
40.44799805	0.000867
40.45410156	0.000876
40.46020508	0.000881
40.46630859	0.000882
40.47241211	0.000884
40.47851563	0.000895
40.48461914	0.00091
40.49072266	0.000913
40.49682617	0.000921

Time (s)	Acceleration (g)
33.175	-0.006475
33.18	-0.007273
33.185	-0.008218
33.19	-0.009337
33.195	-0.010632
33.2	-0.012066
33.205	-0.013574
33.21	-0.015049
33.215	-0.016375
33.22	-0.017461
33.225	-0.018224
33.23	-0.018615
33.235	-0.01861
33.24	-0.018187
33.245	-0.017354
33.25	-0.016142
33.255	-0.014602
33.26	-0.012817
33.265	-0.010877
33.27	-0.008858
33.275	-0.006838
33.28	-0.004873
33.285	-0.003013
33.29	-0.001312
33.295	0.00019
33.3	0.001459
33.305	0.002472
33.31	0.003237
33.315	0.003771
33.32	0.004103
33.325	0.004263
33.33	0.004277
33.335	0.004168
33.34	0.003939
33.345	0.003585
33.35	0.003121
33.355	0.002552
33.36	0.001881
33.365	0.001117
33.37	0.000253
33.375	-0.000707
33.38	-0.00172

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
40.50292969	0.000933
40.5090332	0.000928
40.51513672	0.000918
40.52124023	0.000922
40.52734375	0.000922
40.53344727	0.000926
40.53955078	0.000938
40.5456543	0.000936
40.55175781	0.000918
40.55786133	0.000902
40.56396484	0.000898
40.57006836	0.000907
40.57617188	0.000919
40.58227539	0.000919
40.58837891	0.000914
40.59448242	0.000913
40.60058594	0.000919
40.60668945	0.000931
40.61279297	0.000944
40.61889648	0.00095
40.625	0.000952
40.63110352	0.000948
40.63720703	0.000943
40.64331055	0.000941
40.64941406	0.000943
40.65551758	0.000947
40.66162109	0.000949
40.66772461	0.00094
40.67382813	0.000924
40.67993164	0.000913
40.68603516	0.000911
40.69213867	0.000918
40.69824219	0.000919
40.7043457	0.000899
40.71044922	0.000876
40.71655273	0.000866
40.72265625	0.000865
40.72875977	0.000867
40.73486328	0.000873
40.7409668	0.000878
40.74707031	0.000877
40.75317383	0.000879

Time (s)	Acceleration (g)
33.385	-0.002741
33.39	-0.003704
33.395	-0.004543
33.4	-0.005244
33.405	-0.005803
33.41	-0.006222
33.415	-0.006519
33.42	-0.006687
33.425	-0.006717
33.43	-0.006625
33.435	-0.006431
33.44	-0.006142
33.445	-0.00577
33.45	-0.005347
33.455	-0.004903
33.46	-0.00445
33.465	-0.004005
33.47	-0.003575
33.475	-0.00317
33.48	-0.002812
33.485	-0.002518
33.49	-0.0023
33.495	-0.002164
33.5	-0.002078
33.505	-0.001998
33.51	-0.001906
33.515	-0.001785
33.52	-0.001619
33.525	-0.001414
33.53	-0.001194
33.535	-0.000996
33.54	-0.00086
33.545	-0.00083
33.55	-0.000928
33.555	-0.001161
33.56	-0.001517
33.565	-0.001957
33.57	-0.002421
33.575	-0.002837
33.58	-0.003108
33.585	-0.003142
33.59	-0.00288

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
40.75927734	0.000889
40.76538086	0.000898
40.77148438	0.000914
40.77758789	0.000937
40.78369141	0.000943
40.78979492	0.000933
40.79589844	0.000934
40.80200195	0.000943
40.80810547	0.00095
40.81420898	0.000965
40.8203125	0.000971
40.82641602	0.000958
40.83251953	0.00095
40.83862305	0.000956
40.84472656	0.000959
40.85083008	0.000958
40.85693359	0.000963
40.86303711	0.00096
40.86914063	0.000946
40.87524414	0.000932
40.88134766	0.000927
40.88745117	0.000923
40.89355469	0.000927
40.8996582	0.000938
40.90576172	0.000935
40.91186523	0.000921
40.91796875	0.00092
40.92407227	0.000929
40.93017578	0.000941
40.9362793	0.000954
40.94238281	0.000954
40.94848633	0.000944
40.95458984	0.000944
40.96069336	0.000949
40.96679688	0.000951
40.97290039	0.000946
40.97900391	0.000936
40.98510742	0.000928
40.99121094	0.000913
40.99731445	0.000889
41.00341797	0.000871
41.00952148	0.000864

Input Motion

Time (s)	Acceleration (g)
33.595	-0.002288
33.6	-0.001366
33.605	-0.00014
33.61	0.001345
33.615	0.003039
33.62	0.004887
33.625	0.006828
33.63	0.008823
33.635	0.010828
33.64	0.012757
33.645	0.014539
33.65	0.01613
33.655	0.017508
33.66	0.018709
33.665	0.019778
33.67	0.020763
33.675	0.021702
33.68	0.022571
33.685	0.023329
33.69	0.023929
33.695	0.024321
33.7	0.024478
33.705	0.024387
33.71	0.024047
33.715	0.02347
33.72	0.022638
33.725	0.021547
33.73	0.020197
33.735	0.018602
33.74	0.016835
33.745	0.014987
33.75	0.013134
33.755	0.011351
33.76	0.009706
33.765	0.008233
33.77	0.00694
33.775	0.005803
33.78	0.004761
33.785	0.003744
33.79	0.002676
33.795	0.001502
33.8	0.000228

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
41.015625	0.000858
41.02172852	0.000855
41.02783203	0.000851
41.03393555	0.000843
41.04003906	0.000842
41.04614258	0.000848
41.05224609	0.000856
41.05834961	0.00087
41.06445313	0.00088
41.07055664	0.000874
41.07666016	0.000873
41.08276367	0.000882
41.08886719	0.000882
41.0949707	0.000877
41.10107422	0.000882
41.10717773	0.000882
41.11328125	0.000874
41.11938477	0.000876
41.12548828	0.000877
41.1315918	0.000879
41.13769531	0.000893
41.14379883	0.000899
41.14990234	0.000893
41.15600586	0.000886
41.16210938	0.000874
41.16821289	0.000868
41.17431641	0.000876
41.18041992	0.000876
41.18652344	0.000866
41.19262695	0.000859
41.19873047	0.000852
41.20483398	0.000852
41.2109375	0.000862
41.21704102	0.000874
41.22314453	0.000887
41.22924805	0.00089
41.23535156	0.000883
41.24145508	0.00088
41.24755859	0.00088
41.25366211	0.000884
41.25976563	0.000893
41.26586914	0.000896

Time (s)	Acceleration (g)
33.805	-0.001102
33.81	-0.002398
33.815	-0.003554
33.82	-0.004479
33.825	-0.005095
33.83	-0.005374
33.835	-0.005323
33.84	-0.00495
33.845	-0.004302
33.85	-0.003468
33.855	-0.002553
33.86	-0.001686
33.865	-0.000987
33.87	-0.000532
33.875	-0.000361
33.88	-0.000448
33.885	-0.000737
33.89	-0.001153
33.895	-0.001617
33.9	-0.002094
33.905	-0.002551
33.91	-0.002962
33.915	-0.003301
33.92	-0.003499
33.925	-0.003502
33.93	-0.003275
33.935	-0.002804
33.94	-0.002162
33.945	-0.001439
33.95	-0.000687
33.955	0.000045
33.96	0.000754
33.965	0.001456
33.97	0.002147
33.975	0.002825
33.98	0.003454
33.985	0.003987
33.99	0.004401
33.995	0.004668
34	0.004778
34.005	0.004742
34.01	0.004545

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
41.27197266	0.000889
41.27807617	0.000879
41.28417969	0.000871
41.2902832	0.000876
41.29638672	0.000883
41.30249023	0.000875
41.30859375	0.000861
41.31469727	0.000851
41.32080078	0.000839
41.3269043	0.000839
41.33300781	0.000851
41.33911133	0.00085
41.34521484	0.000838
41.35131836	0.000831
41.35742188	0.000822
41.36352539	0.000807
41.36962891	0.000801
41.37573242	0.000806
41.38183594	0.00081
41.38793945	0.000803
41.39404297	0.00078
41.40014648	0.000762
41.40625	0.00077
41.41235352	0.000784
41.41845703	0.000789
41.42456055	0.000794
41.43066406	0.000795
41.43676758	0.00079
41.44287109	0.000794
41.44897461	0.000801
41.45507813	0.000807
41.46118164	0.00082
41.46728516	0.000823
41.47338867	0.000814
41.47949219	0.000812
41.4855957	0.000815
41.49169922	0.000828
41.49780273	0.000851
41.50390625	0.00086
41.51000977	0.000856
41.51611328	0.000856
41.5222168	0.000861

Input Motion

Time (s)	Acceleration (g)
34.015	0.004191
34.02	0.003732
34.025	0.003223
34.03	0.002725
34.035	0.002299
34.04	0.001953
34.045	0.00168
34.05	0.001476
34.055	0.001326
34.06	0.001225
34.065	0.001169
34.07	0.001168
34.075	0.001228
34.08	0.001327
34.085	0.001441
34.09	0.001527
34.095	0.001541
34.1	0.001461
34.105	0.001274
34.11	0.000986
34.115	0.000616
34.12	0.000172
34.125	-0.000329
34.13	-0.000868
34.135	-0.001419
34.14	-0.001945
34.145	-0.002415
34.15	-0.002795
34.155	-0.003078
34.16	-0.003307
34.165	-0.003546
34.17	-0.003909
34.175	-0.004502
34.18	-0.005378
34.185	-0.006556
34.19	-0.007994
34.195	-0.009617
34.2	-0.011343
34.205	-0.013076
34.21	-0.014751
34.215	-0.016299
34.22	-0.017631

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
41.52832031	0.000869
41.53442383	0.000876
41.54052734	0.000873
41.54663086	0.000865
41.55273438	0.000855
41.55883789	0.000839
41.56494141	0.00083
41.57104492	0.000833
41.57714844	0.00083
41.58325195	0.000821
41.58935547	0.000815
41.59545898	0.000809
41.6015625	0.000802
41.60766602	0.000804
41.61376953	0.000811
41.61987305	0.000813
41.62597656	0.000809
41.63208008	0.000798
41.63818359	0.000782
41.64428711	0.000773
41.65039063	0.000771
41.65649414	0.00077
41.66259766	0.000766
41.66870117	0.000752
41.67480469	0.000733
41.6809082	0.000722
41.68701172	0.000716
41.69311523	0.000707
41.69921875	0.000701
41.70532227	0.000699
41.71142578	0.000694
41.7175293	0.000683
41.72363281	0.000675
41.72973633	0.000668
41.73583984	0.00066
41.74194336	0.000661
41.74804688	0.000665
41.75415039	0.000657
41.76025391	0.000648
41.76635742	0.000649
41.77246094	0.000658
41.77856445	0.000671

Time (s)	Acceleration (g)
34.225	-0.018663
34.23	-0.019308
34.235	-0.019494
34.24	-0.019215
34.245	-0.018499
34.25	-0.017406
34.255	-0.016039
34.26	-0.01451
34.265	-0.012938
34.27	-0.011462
34.275	-0.010202
34.28	-0.00921
34.285	-0.008513
34.29	-0.00811
34.295	-0.007957
34.3	-0.008006
34.305	-0.008197
34.31	-0.008419
34.315	-0.008579
34.32	-0.008627
34.325	-0.00855
34.33	-0.008387
34.335	-0.008214
34.34	-0.008123
34.345	-0.008208
34.35	-0.008545
34.355	-0.009177
34.36	-0.010102
34.365	-0.011274
34.37	-0.012607
34.375	-0.013984
34.38	-0.015264
34.385	-0.016303
34.39	-0.016998
34.395	-0.017274
34.4	-0.017101
34.405	-0.016492
34.41	-0.015473
34.415	-0.014096
34.42	-0.012428
34.425	-0.010539
34.43	-0.008505

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
41.78466797	0.000679
41.79077148	0.000678
41.796875	0.000678
41.80297852	0.000686
41.80908203	0.000694
41.81518555	0.000701
41.82128906	0.000709
41.82739258	0.000707
41.83349609	0.000698
41.83959961	0.000695
41.84570313	0.000694
41.85180664	0.000697
41.85791016	0.000708
41.86401367	0.000712
41.87011719	0.000711
41.8762207	0.000713
41.88232422	0.000708
41.88842773	0.000708
41.89453125	0.000723
41.90063477	0.000732
41.90673828	0.000727
41.9128418	0.000719
41.91894531	0.000716
41.92504883	0.000716
41.93115234	0.000713
41.93725586	0.000711
41.94335938	0.000717
41.94946289	0.000724
41.95556641	0.000726
41.96166992	0.000723
41.96777344	0.000718
41.97387695	0.000722
41.97998047	0.000728
41.98608398	0.000723
41.9921875	0.000711
41.99829102	0.000697
42.00439453	0.000683
42.01049805	0.000681
42.01660156	0.000682
42.02270508	0.000673
42.02880859	0.000659
42.03491211	0.000646

Input Motion

Time (s)	Acceleration (g)
34.435	-0.006394
34.44	-0.00425
34.445	-0.002109
34.45	-0.000008
34.455	0.00202
34.46	0.003944
34.465	0.005732
34.47	0.007342
34.475	0.008727
34.48	0.009867
34.485	0.010744
34.49	0.011331
34.495	0.011617
34.5	0.01162
34.505	0.011384
34.51	0.010978
34.515	0.010491
34.52	0.010035
34.525	0.009716
34.53	0.009601
34.535	0.009731
34.54	0.010104
34.545	0.01069
34.55	0.011457
34.555	0.012364
34.56	0.013369
34.565	0.014443
34.57	0.015564
34.575	0.016718
34.58	0.017884
34.585	0.019055
34.59	0.020189
34.595	0.021255
34.6	0.022262
34.605	0.023224
34.61	0.024154
34.615	0.025071
34.62	0.025972
34.625	0.026848
34.63	0.027692
34.635	0.028488
34.64	0.029213

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
42.04101563	0.000635
42.04711914	0.000626
42.05322266	0.000618
42.05932617	0.000608
42.06542969	0.0006
42.0715332	0.000591
42.07763672	0.000576
42.08374023	0.000565
42.08984375	0.000565
42.09594727	0.000571
42.10205078	0.000577
42.1081543	0.000571
42.11425781	0.000555
42.12036133	0.000546
42.12646484	0.000544
42.13256836	0.000543
42.13867188	0.000551
42.14477539	0.000559
42.15087891	0.000553
42.15698242	0.000553
42.16308594	0.000562
42.16918945	0.000563
42.17529297	0.000576
42.18139648	0.000604
42.1875	0.000611
42.19360352	0.000604
42.19970703	0.000605
42.20581055	0.000599
42.21191406	0.000588
42.21801758	0.000589
42.22412109	0.000587
42.23022461	0.000578
42.23632813	0.000573
42.24243164	0.000562
42.24853516	0.000557
42.25463867	0.000568
42.26074219	0.000569
42.2668457	0.000556
42.27294922	0.00055
42.27905273	0.000549
42.28515625	0.00055
42.29125977	0.000549

Time (s)	Acceleration (g)
34.645	0.029837
34.65	0.030324
34.655	0.030641
34.66	0.030745
34.665	0.030598
34.67	0.030186
34.675	0.029506
34.68	0.028584
34.685	0.027445
34.69	0.026137
34.695	0.024704
34.7	0.023134
34.705	0.021419
34.71	0.019558
34.715	0.017549
34.72	0.015454
34.725	0.013346
34.73	0.011276
34.735	0.009296
34.74	0.007451
34.745	0.005765
34.75	0.004266
34.755	0.002965
34.76	0.001828
34.765	0.000816
34.77	-0.000101
34.775	-0.000952
34.78	-0.001742
34.785	-0.002479
34.79	-0.003181
34.795	-0.003876
34.8	-0.004622
34.805	-0.005474
34.81	-0.006463
34.815	-0.007598
34.82	-0.008859
34.825	-0.010209
34.83	-0.011596
34.835	-0.012964
34.84	-0.014297
34.845	-0.015566
34.85	-0.016758

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
42.29736328	0.000542
42.3034668	0.000536
42.30957031	0.000534
42.31567383	0.000536
42.32177734	0.00054
42.32788086	0.000543
42.33398438	0.000551
42.34008789	0.000568
42.34619141	0.000577
42.35229492	0.000572
42.35839844	0.000564
42.36450195	0.00056
42.37060547	0.000561
42.37670898	0.000558
42.3828125	0.000545
42.38891602	0.00053
42.39501953	0.000519
42.40112305	0.000511
42.40722656	0.000499
42.41333008	0.000479
42.41943359	0.000469
42.42553711	0.000476
42.43164063	0.000472
42.43774414	0.000456
42.44384766	0.000447
42.44995117	0.000442
42.45605469	0.000439
42.4621582	0.000443
42.46826172	0.000447
42.47436523	0.000441
42.48046875	0.000436
42.48657227	0.000438
42.49267578	0.000444
42.4987793	0.000447
42.50488281	0.000446
42.51098633	0.000449
42.51708984	0.000461
42.52319336	0.000475
42.52929688	0.00048
42.53540039	0.000484
42.54150391	0.000495
42.54760742	0.000504

Time (s)	Acceleration (g)
34.855	-0.017856
34.86	-0.018797
34.865	-0.019524
34.87	-0.020017
34.875	-0.020272
34.88	-0.020325
34.885	-0.020236
34.89	-0.020062
34.895	-0.019861
34.9	-0.019657
34.905	-0.01946
34.91	-0.019288
34.915	-0.019152
34.92	-0.01907
34.925	-0.019055
34.93	-0.019122
34.935	-0.019272
34.94	-0.019468
34.945	-0.019654
34.95	-0.019758
34.955	-0.019701
34.96	-0.019403
34.965	-0.018809
34.97	-0.01792
34.975	-0.016778
34.98	-0.015472
34.985	-0.014119
34.99	-0.012834
34.995	-0.011727
35	-0.01089
35.005	-0.010384
35.01	-0.010242
35.015	-0.010466
35.02	-0.011017
35.025	-0.011836
35.03	-0.01283
35.035	-0.013897
35.04	-0.014943
35.045	-0.015893
35.05	-0.016691
35.055	-0.017314
35.06	-0.01779

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
42.55371094	0.000509
42.55981445	0.000509
42.56591797	0.000501
42.57202148	0.000499
42.578125	0.000504
42.58422852	0.000499
42.59033203	0.000489
42.59643555	0.000478
42.60253906	0.000475
42.60864258	0.000486
42.61474609	0.000499
42.62084961	0.000502
42.62695313	0.00051
42.63305664	0.000519
42.63916016	0.000516
42.64526367	0.000515
42.65136719	0.000521
42.6574707	0.000525
42.66357422	0.000527
42.66967773	0.000528
42.67578125	0.000521
42.68188477	0.000511
42.68798828	0.00051
42.6940918	0.000511
42.70019531	0.000507
42.70629883	0.000505
42.71240234	0.000501
42.71850586	0.000491
42.72460938	0.000485
42.73071289	0.000484
42.73681641	0.000479
42.74291992	0.000476
42.74902344	0.000475
42.75512695	0.000469
42.76123047	0.000463
42.76733398	0.000457
42.7734375	0.000444
42.77954102	0.000435
42.78564453	0.000431
42.79174805	0.000417
42.79785156	0.000404
42.80395508	0.000399

Input Motion

Time (s)	Acceleration (g)
35.065	-0.018162
35.07	-0.018476
35.075	-0.018775
35.08	-0.019041
35.085	-0.019231
35.09	-0.019297
35.095	-0.01917
35.1	-0.018777
35.105	-0.018056
35.11	-0.016961
35.115	-0.015471
35.12	-0.013583
35.125	-0.011322
35.13	-0.00874
35.135	-0.005908
35.14	-0.002918
35.145	0.000127
35.15	0.003121
35.155	0.005963
35.16	0.008543
35.165	0.010779
35.17	0.01263
35.175	0.01409
35.18	0.015217
35.185	0.016096
35.19	0.016823
35.195	0.017487
35.2	0.018153
35.205	0.018858
35.21	0.019614
35.215	0.020406
35.22	0.021205
35.225	0.021969
35.23	0.022632
35.235	0.023142
35.24	0.023467
35.245	0.023602
35.25	0.023598
35.255	0.023525
35.26	0.02346
35.265	0.023468
35.27	0.023568

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
42.81005859	0.000391
42.81616211	0.00039
42.82226563	0.000398
42.82836914	0.000396
42.83447266	0.000389
42.84057617	0.00039
42.84667969	0.000395
42.8527832	0.000402
42.85888672	0.000409
42.86499023	0.000411
42.87109375	0.000409
42.87719727	0.000413
42.88330078	0.00042
42.8894043	0.000422
42.89550781	0.000421
42.90161133	0.000426
42.90771484	0.00044
42.91381836	0.000454
42.91992188	0.000461
42.92602539	0.000463
42.93212891	0.000464
42.93823242	0.000466
42.94433594	0.000472
42.95043945	0.000475
42.95654297	0.00047
42.96264648	0.000467
42.96875	0.000472
42.97485352	0.000476
42.98095703	0.000473
42.98706055	0.000472
42.99316406	0.000477
42.99926758	0.000487
43.00537109	0.000496
43.01147461	0.000493
43.01757813	0.000484
43.02368164	0.000485
43.02978516	0.000494
43.03588867	0.000494
43.04199219	0.000489
43.0480957	0.000494
43.05419922	0.000504
43.06030273	0.00051

Input Motion

Time (s)	Acceleration (g)
35.275	0.02375
35.28	0.023968
35.285	0.024155
35.29	0.02424
35.295	0.024144
35.3	0.023818
35.305	0.023217
35.31	0.022277
35.315	0.020953
35.32	0.019233
35.325	0.017139
35.33	0.014734
35.335	0.012118
35.34	0.009436
35.345	0.006849
35.35	0.004508
35.355	0.002555
35.36	0.001096
35.365	0.0002
35.37	-0.00009
35.375	0.000226
35.38	0.001104
35.385	0.00246
35.39	0.004175
35.395	0.00611
35.4	0.008094
35.405	0.009964
35.41	0.011595
35.415	0.012874
35.42	0.013734
35.425	0.014131
35.43	0.013994
35.435	0.013294
35.44	0.012049
35.445	0.010324
35.45	0.00828
35.455	0.006107
35.46	0.003992
35.465	0.002101
35.47	0.000538
35.475	-0.000645
35.48	-0.001462

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
43.06640625	0.000512
43.07250977	0.00051
43.07861328	0.000507
43.0847168	0.000512
43.09082031	0.000516
43.09692383	0.000508
43.10302734	0.000498
43.10913086	0.000493
43.11523438	0.000491
43.12133789	0.000483
43.12744141	0.000466
43.13354492	0.000448
43.13964844	0.000438
43.14575195	0.000437
43.15185547	0.000435
43.15795898	0.00042
43.1640625	0.000406
43.17016602	0.00041
43.17626953	0.000414
43.18237305	0.000405
43.18847656	0.000399
43.19458008	0.000401
43.20068359	0.000407
43.20678711	0.000415
43.21289063	0.000421
43.21899414	0.000417
43.22509766	0.000414
43.23120117	0.000418
43.23730469	0.000422
43.2434082	0.000418
43.24951172	0.000416
43.25561523	0.000418
43.26171875	0.000426
43.26782227	0.000439
43.27392578	0.000448
43.2800293	0.000451
43.28613281	0.000457
43.29223633	0.000462
43.29833984	0.000463
43.30444336	0.000466
43.31054688	0.000469
43.31665039	0.000469

Time (s)	Acceleration (g)
35.485	-0.00196
35.49	-0.00217
35.495	-0.002125
35.5	-0.001829
35.505	-0.001284
35.51	-0.000508
35.515	0.000459
35.52	0.001556
35.525	0.002714
35.53	0.003823
35.535	0.004793
35.54	0.005599
35.545	0.006234
35.55	0.006746
35.555	0.00719
35.56	0.007557
35.565	0.007837
35.57	0.008008
35.575	0.008047
35.58	0.007997
35.585	0.007919
35.59	0.00787
35.595	0.007904
35.6	0.008065
35.605	0.008356
35.61	0.00871
35.615	0.009029
35.62	0.00919
35.625	0.009068
35.63	0.008594
35.635	0.007729
35.64	0.006483
35.645	0.004911
35.65	0.003079
35.655	0.001085
35.66	-0.00095
35.665	-0.002901
35.67	-0.004628
35.675	-0.006011
35.68	-0.006975
35.685	-0.007491
35.69	-0.007586

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
43.32275391	0.000467
43.32885742	0.000466
43.33496094	0.000467
43.34106445	0.000472
43.34716797	0.000484
43.35327148	0.0005
43.359375	0.000513
43.36547852	0.000524
43.37158203	0.000538
43.37768555	0.000544
43.38378906	0.000552
43.38989258	0.000567
43.39599609	0.000577
43.40209961	0.000576
43.40820313	0.000574
43.41430664	0.000577
43.42041016	0.000582
43.42651367	0.000586
43.43261719	0.000587
43.4387207	0.000583
43.44482422	0.00058
43.45092773	0.000584
43.45703125	0.000587
43.46313477	0.000576
43.46923828	0.000564
43.4753418	0.00056
43.48144531	0.000551
43.48754883	0.000532
43.49365234	0.000515
43.49975586	0.000505
43.50585938	0.000496
43.51196289	0.000489
43.51806641	0.000481
43.52416992	0.000464
43.53027344	0.000452
43.53637695	0.000457
43.54248047	0.000462
43.54858398	0.00046
43.5546875	0.000458
43.56079102	0.000454
43.56689453	0.000455
43.57299805	0.000461

Input Motion

Time (s)	Acceleration (g)
35.695	-0.00733
35.7	-0.006829
35.705	-0.006197
35.71	-0.005519
35.715	-0.004857
35.72	-0.004238
35.725	-0.003649
35.73	-0.003074
35.735	-0.002484
35.74	-0.00181
35.745	-0.001013
35.75	-0.000088
35.755	0.000931
35.76	0.001923
35.765	0.002756
35.77	0.003338
35.775	0.003616
35.78	0.003626
35.785	0.003465
35.79	0.003288
35.795	0.003257
35.8	0.003487
35.805	0.00405
35.81	0.004923
35.815	0.006026
35.82	0.00727
35.825	0.008543
35.83	0.009731
35.835	0.010747
35.84	0.011542
35.845	0.012111
35.85	0.012511
35.855	0.012822
35.86	0.013117
35.865	0.013461
35.87	0.01388
35.875	0.014368
35.88	0.01489
35.885	0.01538
35.89	0.015796
35.895	0.016076
35.9	0.016161

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
43.57910156	0.000456
43.58520508	0.000453
43.59130859	0.000462
43.59741211	0.000467
43.60351563	0.000464
43.60961914	0.000459
43.61572266	0.000454
43.62182617	0.000455
43.62792969	0.000464
43.6340332	0.00047
43.64013672	0.000469
43.64624023	0.000468
43.65234375	0.000481
43.65844727	0.000498
43.66455078	0.000503
43.6706543	0.0005
43.67675781	0.000506
43.68286133	0.000514
43.68896484	0.000518
43.69506836	0.000522
43.70117188	0.000521
43.70727539	0.000522
43.71337891	0.00053
43.71948242	0.000534
43.72558594	0.000533
43.73168945	0.000539
43.73779297	0.000551
43.74389648	0.000565
43.75	0.000577
43.75610352	0.000586
43.76220703	0.000593
43.76831055	0.0006
43.77441406	0.000608
43.78051758	0.00062
43.78662109	0.000622
43.79272461	0.000618
43.79882813	0.000623
43.80493164	0.000629
43.81103516	0.000624
43.81713867	0.00062
43.82324219	0.000623
43.8293457	0.000627

Time (s)	Acceleration (g)
35.905	0.015992
35.91	0.015513
35.915	0.014676
35.92	0.013482
35.925	0.011947
35.93	0.010109
35.935	0.008026
35.94	0.005759
35.945	0.003393
35.95	0.001013
35.955	-0.001284
35.96	-0.003358
35.965	-0.005081
35.97	-0.006364
35.975	-0.007152
35.98	-0.007455
35.985	-0.007327
35.99	-0.006848
35.995	-0.006119
36	-0.005242
36.005	-0.004315
36.01	-0.003428
36.015	-0.002659
36.02	-0.002083
36.025	-0.001757
36.03	-0.001713
36.035	-0.001952
36.04	-0.002466
36.045	-0.003217
36.05	-0.004117
36.055	-0.005066
36.06	-0.005961
36.065	-0.006712
36.07	-0.007274
36.075	-0.007622
36.08	-0.007763
36.085	-0.007715
36.09	-0.007472
36.095	-0.007032
36.1	-0.006373
36.105	-0.005479
36.11	-0.004373

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
43.83544922	0.000631
43.84155273	0.000628
43.84765625	0.000617
43.85375977	0.00061
43.85986328	0.000606
43.8659668	0.000596
43.87207031	0.000584
43.87817383	0.000576
43.88427734	0.000568
43.89038086	0.000555
43.89648438	0.000543
43.90258789	0.000529
43.90869141	0.000515
43.91479492	0.000505
43.92089844	0.0005
43.92700195	0.000494
43.93310547	0.00049
43.93920898	0.000488
43.9453125	0.000486
43.95141602	0.000488
43.95751953	0.000491
43.96362305	0.000492
43.96972656	0.000494
43.97583008	0.000498
43.98193359	0.000503
43.98803711	0.000509
43.99414063	0.000514
44.00024414	0.000515
44.00634766	0.000516
44.01245117	0.000523
44.01855469	0.000531
44.0246582	0.000537
44.03076172	0.000542
44.03686523	0.00055
44.04296875	0.000558
44.04907227	0.000562
44.05517578	0.000561
44.0612793	0.000563
44.06738281	0.000567
44.07348633	0.000573
44.07958984	0.000586
44.08569336	0.000599

Time (s)	Acceleration (g)
36.115	-0.003088
36.12	-0.001663
36.125	-0.000131
36.13	0.001494
36.135	0.003217
36.14	0.005069
36.145	0.007087
36.15	0.009285
36.155	0.011659
36.16	0.014173
36.165	0.016763
36.17	0.019337
36.175	0.021796
36.18	0.024037
36.185	0.025974
36.19	0.02759
36.195	0.028895
36.2	0.029913
36.205	0.030685
36.21	0.031252
36.215	0.031646
36.22	0.031878
36.225	0.031935
36.23	0.031813
36.235	0.03149
36.24	0.030923
36.245	0.030073
36.25	0.028885
36.255	0.027316
36.26	0.025372
36.265	0.023088
36.27	0.020503
36.275	0.017688
36.28	0.014736
36.285	0.011733
36.29	0.008763
36.295	0.005894
36.3	0.003144
36.305	0.000521
36.31	-0.001963
36.315	-0.004306
36.32	-0.0065

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
44.09179688	0.000604
44.09790039	0.000611
44.10400391	0.000627
44.11010742	0.000642
44.11621094	0.000647
44.12231445	0.000647
44.12841797	0.000651
44.13452148	0.000655
44.140625	0.000656
44.14672852	0.000653
44.15283203	0.00064
44.15893555	0.000628
44.16503906	0.00063
44.17114258	0.000632
44.17724609	0.00062
44.18334961	0.000609
44.18945313	0.000609
44.19555664	0.000609
44.20166016	0.000597
44.20776367	0.00058
44.21386719	0.000563
44.2199707	0.000555
44.22607422	0.000558
44.23217773	0.000551
44.23828125	0.000527
44.24438477	0.000512
44.25048828	0.000512
44.2565918	0.000504
44.26269531	0.000494
44.26879883	0.000489
44.27490234	0.000477
44.28100586	0.000474
44.28710938	0.000479
44.29321289	0.000468
44.29931641	0.000453
44.30541992	0.000456
44.31152344	0.000463
44.31762695	0.000469
44.32373047	0.000475
44.32983398	0.000472
44.3359375	0.000464
44.34204102	0.000468

Time (s)	Acceleration (g)
36.325	-0.008546
36.33	-0.010462
36.335	-0.012273
36.34	-0.014029
36.345	-0.015771
36.35	-0.017545
36.355	-0.019377
36.36	-0.021256
36.365	-0.023146
36.37	-0.024992
36.375	-0.026734
36.38	-0.028304
36.385	-0.029651
36.39	-0.030762
36.395	-0.031631
36.4	-0.032263
36.405	-0.032669
36.41	-0.032825
36.415	-0.032711
36.42	-0.032323
36.425	-0.031658
36.43	-0.03072
36.435	-0.029514
36.44	-0.028031
36.445	-0.026273
36.45	-0.024246
36.455	-0.021976
36.46	-0.019518
36.465	-0.016958
36.47	-0.014385
36.475	-0.011905
36.48	-0.009632
36.485	-0.007668
36.49	-0.006075
36.495	-0.004886
36.5	-0.004088
36.505	-0.003627
36.51	-0.00344
36.515	-0.003445
36.52	-0.003543
36.525	-0.003634
36.53	-0.003654

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
44.34814453	0.000477
44.35424805	0.000472
44.36035156	0.000464
44.36645508	0.000471
44.37255859	0.000486
44.37866211	0.000499
44.38476563	0.000513
44.39086914	0.000526
44.39697266	0.000544
44.40307617	0.000568
44.40917969	0.000587
44.4152832	0.000597
44.42138672	0.000604
44.42749023	0.000619
44.43359375	0.000633
44.43969727	0.000637
44.44580078	0.000635
44.4519043	0.000639
44.45800781	0.000647
44.46411133	0.000657
44.47021484	0.000665
44.47631836	0.000672
44.48242188	0.000678
44.48852539	0.000679
44.49462891	0.000677
44.50073242	0.000674
44.50683594	0.000668
44.51293945	0.000663
44.51904297	0.000657
44.52514648	0.000647
44.53125	0.000633
44.53735352	0.000621
44.54345703	0.000614
44.54956055	0.000604
44.55566406	0.000595
44.56176758	0.000586
44.56787109	0.000571
44.57397461	0.000557
44.58007813	0.000548
44.58618164	0.000537
44.59228516	0.000524
44.59838867	0.000511

Time (s)	Acceleration (g)
36.535	-0.00355
36.54	-0.003278
36.545	-0.002817
36.55	-0.002169
36.555	-0.001366
36.56	-0.000465
36.565	0.000463
36.57	0.001312
36.575	0.001992
36.58	0.002461
36.585	0.002699
36.59	0.002734
36.595	0.00261
36.6	0.002349
36.605	0.001979
36.61	0.001513
36.615	0.000965
36.62	0.000369
36.625	-0.000237
36.63	-0.000815
36.635	-0.001326
36.64	-0.001756
36.645	-0.002093
36.65	-0.002334
36.655	-0.002473
36.66	-0.00247
36.665	-0.002286
36.67	-0.001888
36.675	-0.001251
36.68	-0.000406
36.685	0.000597
36.69	0.001702
36.695	0.002843
36.7	0.003979
36.705	0.005077
36.71	0.0061
36.715	0.00701
36.72	0.007762
36.725	0.00831
36.73	0.008586
36.735	0.008533
36.74	0.008145

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
44.60449219	0.0005
44.6105957	0.000498
44.61669922	0.000498
44.62280273	0.000494
44.62890625	0.000492
44.63500977	0.000491
44.64111328	0.00049
44.6472168	0.000489
44.65332031	0.000483
44.65942383	0.000478
44.66552734	0.000484
44.67163086	0.000495
44.67773438	0.000498
44.68383789	0.000496
44.68994141	0.000499
44.69604492	0.000508
44.70214844	0.000517
44.70825195	0.000522
44.71435547	0.000529
44.72045898	0.000533
44.7265625	0.000533
44.73266602	0.000532
44.73876953	0.000536
44.74487305	0.000541
44.75097656	0.000546
44.75708008	0.000554
44.76318359	0.000562
44.76928711	0.000571
44.77539063	0.000586
44.78149414	0.0006
44.78759766	0.00061
44.79370117	0.000619
44.79980469	0.000627
44.8059082	0.000633
44.81201172	0.000636
44.81811523	0.000637
44.82421875	0.000644
44.83032227	0.000648
44.83642578	0.000638
44.8425293	0.000626
44.84863281	0.000622
44.85473633	0.000625

Time (s)	Acceleration (g)
36.745	0.007427
36.75	0.006415
36.755	0.005151
36.76	0.003655
36.765	0.001944
36.77	0.000027
36.775	-0.00208
36.78	-0.004341
36.785	-0.006709
36.79	-0.009114
36.795	-0.01148
36.8	-0.013756
36.805	-0.015892
36.81	-0.017822
36.815	-0.019479
36.82	-0.020789
36.825	-0.021681
36.83	-0.02209
36.835	-0.021975
36.84	-0.021335
36.845	-0.020193
36.85	-0.018648
36.855	-0.016813
36.86	-0.014778
36.865	-0.012633
36.87	-0.010442
36.875	-0.008255
36.88	-0.006135
36.885	-0.004139
36.89	-0.002336
36.895	-0.000795
36.9	0.000424
36.905	0.001264
36.91	0.001682
36.915	0.001646
36.92	0.001148
36.925	0.000202
36.93	-0.001154
36.935	-0.002852
36.94	-0.004793
36.945	-0.006856
36.95	-0.008892

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
44.86083984	0.000627
44.86694336	0.000618
44.87304688	0.000603
44.87915039	0.000592
44.88525391	0.00058
44.89135742	0.000568
44.89746094	0.000557
44.90356445	0.000541
44.90966797	0.000527
44.91577148	0.00052
44.921875	0.000504
44.92797852	0.000484
44.93408203	0.000477
44.94018555	0.000475
44.94628906	0.000468
44.95239258	0.000457
44.95849609	0.000448
44.96459961	0.000444
44.97070313	0.000445
44.97680664	0.000447
44.98291016	0.000442
44.98901367	0.00043
44.99511719	0.000425
45.0012207	0.000427
45.00732422	0.000427
45.01342773	0.000422
45.01953125	0.000418
45.02563477	0.000419
45.03173828	0.000422
45.0378418	0.000424
45.04394531	0.000424
45.05004883	0.000431
45.05615234	0.000447
45.06225586	0.000464
45.06835938	0.000474
45.07446289	0.000478
45.08056641	0.000485
45.08666992	0.000499
45.09277344	0.000518
45.09887695	0.00053
45.10498047	0.000536
45.11108398	0.000545

Input Motion

Time (s)	Acceleration (g)
36.955	-0.010757
36.96	-0.012331
36.965	-0.013524
36.97	-0.014312
36.975	-0.014708
36.98	-0.014765
36.985	-0.014548
36.99	-0.014104
36.995	-0.013463
37	-0.012625
37.005	-0.011568
37.01	-0.010274
37.015	-0.008727
37.02	-0.006943
37.025	-0.004954
37.03	-0.002823
37.035	-0.000626
37.04	0.001565
37.045	0.003672
37.05	0.005618
37.055	0.007336
37.06	0.008755
37.065	0.009823
37.07	0.010517
37.075	0.010841
37.08	0.010826
37.085	0.01053
37.09	0.010028
37.095	0.0094
37.1	0.008717
37.105	0.008035
37.11	0.007393
37.115	0.00681
37.12	0.006287
37.125	0.005811
37.13	0.00535
37.135	0.00487
37.14	0.004351
37.145	0.003775
37.15	0.003126
37.155	0.002387
37.16	0.001539

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
45.1171875	0.00056
45.12329102	0.000573
45.12939453	0.000581
45.13549805	0.000588
45.14160156	0.000595
45.14770508	0.000607
45.15380859	0.00061
45.15991211	0.000599
45.16601563	0.000592
45.17211914	0.000589
45.17822266	0.00058
45.18432617	0.000571
45.19042969	0.000565
45.1965332	0.000556
45.20263672	0.000554
45.20874023	0.000553
45.21484375	0.000548
45.22094727	0.000543
45.22705078	0.000536
45.2331543	0.000527
45.23925781	0.000521
45.24536133	0.000512
45.25146484	0.000498
45.25756836	0.000487
45.26367188	0.000477
45.26977539	0.000464
45.27587891	0.000455
45.28198242	0.000443
45.28808594	0.000428
45.29418945	0.000422
45.30029297	0.000419
45.30639648	0.00041
45.3125	0.000399
45.31860352	0.000387
45.32470703	0.000378
45.33081055	0.000376
45.33691406	0.000375
45.34301758	0.000373
45.34912109	0.000373
45.35522461	0.000372
45.36132813	0.000369
45.36743164	0.00037

Input Motion

Time (s)	Acceleration (g)
37.165	0.000566
37.17	-0.000576
37.175	-0.001929
37.18	-0.003509
37.185	-0.005337
37.19	-0.00743
37.195	-0.009793
37.2	-0.01244
37.205	-0.015359
37.21	-0.018492
37.215	-0.021756
37.22	-0.025003
37.225	-0.028076
37.23	-0.03083
37.235	-0.033139
37.24	-0.034924
37.245	-0.036145
37.25	-0.036787
37.255	-0.036874
37.26	-0.03645
37.265	-0.035584
37.27	-0.034374
37.275	-0.03293
37.28	-0.031371
37.285	-0.029812
37.29	-0.028343
37.295	-0.027025
37.3	-0.0259
37.305	-0.024973
37.31	-0.02419
37.315	-0.023472
37.32	-0.022739
37.325	-0.021904
37.33	-0.020872
37.335	-0.019569
37.34	-0.017955
37.345	-0.016032
37.35	-0.01384
37.355	-0.011465
37.36	-0.009045
37.365	-0.006734
37.37	-0.00468

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
45.37353516	0.000369
45.37963867	0.000366
45.38574219	0.000368
45.3918457	0.000369
45.39794922	0.000367
45.40405273	0.000367
45.41015625	0.000368
45.41625977	0.000371
45.42236328	0.000382
45.4284668	0.000395
45.43457031	0.000408
45.44067383	0.00042
45.44677734	0.000432
45.45288086	0.000445
45.45898438	0.000462
45.46508789	0.000473
45.47119141	0.00048
45.47729492	0.000483
45.48339844	0.000486
45.48950195	0.000495
45.49560547	0.000505
45.50170898	0.000512
45.5078125	0.000524
45.51391602	0.000538
45.52001953	0.000543
45.52612305	0.000548
45.53222656	0.000555
45.53833008	0.000558
45.54443359	0.000563
45.55053711	0.000559
45.55664063	0.000536
45.56274414	0.000513
45.56884766	0.0005
45.57495117	0.000488
45.58105469	0.000476
45.5871582	0.000458
45.59326172	0.000436
45.59936523	0.00042
45.60546875	0.000403
45.61157227	0.00039
45.61767578	0.000385
45.6237793	0.000377

Time (s)	Acceleration (g)
37.375	-0.003001
37.38	-0.001768
37.385	-0.001
37.39	-0.000604
37.395	-0.000458
37.4	-0.000444
37.405	-0.000448
37.41	-0.000403
37.415	-0.000278
37.42	-0.000061
37.425	0.000242
37.43	0.000611
37.435	0.001036
37.44	0.00153
37.445	0.002102
37.45	0.002765
37.455	0.003525
37.46	0.004331
37.465	0.00512
37.47	0.005845
37.475	0.00645
37.48	0.00687
37.485	0.007044
37.49	0.00691
37.495	0.006419
37.5	0.005525
37.505	0.004217
37.51	0.002545
37.515	0.000606
37.52	-0.001451
37.525	-0.003449
37.53	-0.005185
37.535	-0.006478
37.54	-0.007191
37.545	-0.007238
37.55	-0.006629
37.555	-0.005432
37.56	-0.003735
37.565	-0.001663
37.57	0.000635
37.575	0.003022
37.58	0.005357

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
45.62988281	0.00037
45.63598633	0.000365
45.64208984	0.000351
45.64819336	0.000342
45.65429688	0.000348
45.66040039	0.000354
45.66650391	0.000357
45.67260742	0.000359
45.67871094	0.000355
45.68481445	0.000355
45.69091797	0.000366
45.69702148	0.00037
45.703125	0.000364
45.70922852	0.000358
45.71533203	0.000351
45.72143555	0.000342
45.72753906	0.000337
45.73364258	0.000331
45.73974609	0.000326
45.74584961	0.000333
45.75195313	0.00034
45.75805664	0.000333
45.76416016	0.000326
45.77026367	0.000333
45.77636719	0.000346
45.7824707	0.000359
45.78857422	0.000366
45.79467773	0.000371
45.80078125	0.000381
45.80688477	0.000397
45.81298828	0.000413
45.8190918	0.000428
45.82519531	0.000444
45.83129883	0.000462
45.83740234	0.000475
45.84350586	0.000478
45.84960938	0.000482
45.85571289	0.000488
45.86181641	0.000495
45.86791992	0.0005
45.87402344	0.000497
45.88012695	0.00049

Time (s)	Acceleration (g)
37.585	0.00753
37.59	0.0095
37.595	0.011249
37.6	0.012755
37.605	0.014006
37.61	0.014958
37.615	0.015569
37.62	0.015816
37.625	0.015688
37.63	0.015215
37.635	0.014454
37.64	0.013466
37.645	0.012329
37.65	0.011131
37.655	0.009956
37.66	0.008905
37.665	0.008052
37.67	0.007431
37.675	0.007041
37.68	0.006794
37.685	0.006583
37.69	0.006322
37.695	0.005937
37.7	0.005398
37.705	0.004705
37.71	0.003882
37.715	0.002963
37.72	0.001978
37.725	0.000963
37.73	-0.000042
37.735	-0.000992
37.74	-0.001807
37.745	-0.002408
37.75	-0.002738
37.755	-0.00277
37.76	-0.002514
37.765	-0.002008
37.77	-0.001345
37.775	-0.000618
37.78	0.000134
37.785	0.000889
37.79	0.001656

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
45.88623047	0.00049
45.89233398	0.000493
45.8984375	0.00049
45.90454102	0.000487
45.91064453	0.000479
45.91674805	0.000467
45.92285156	0.000459
45.92895508	0.000446
45.93505859	0.000431
45.94116211	0.000424
45.94726563	0.000412
45.95336914	0.00039
45.95947266	0.000374
45.96557617	0.000362
45.97167969	0.000355
45.9777832	0.000355
45.98388672	0.000348
45.98999023	0.000332
45.99609375	0.000322
46.00219727	0.000311
46.00830078	0.000297
46.0144043	0.000286
46.02050781	0.000274
46.02661133	0.000265
46.03271484	0.000263
46.03881836	0.00025
46.04492188	0.000231
46.05102539	0.000229
46.05712891	0.000235
46.06323242	0.00024
46.06933594	0.000247
46.07543945	0.000248
46.08154297	0.000246
46.08764648	0.000255
46.09375	0.000265
46.09985352	0.000272
46.10595703	0.000281
46.11206055	0.000286
46.11816406	0.000289
46.12426758	0.000296
46.13037109	0.000299
46.13647461	0.000301

Time (s)	Acceleration (g)
37.795	0.002454
37.8	0.003293
37.805	0.004167
37.81	0.005024
37.815	0.005804
37.82	0.006452
37.825	0.006923
37.83	0.007226
37.835	0.007394
37.84	0.00745
37.845	0.007435
37.85	0.00738
37.855	0.007307
37.86	0.007243
37.865	0.007203
37.87	0.007177
37.875	0.007147
37.88	0.00709
37.885	0.006971
37.89	0.006758
37.895	0.006418
37.9	0.005906
37.905	0.005185
37.91	0.004248
37.915	0.003103
37.92	0.001752
37.925	0.000222
37.93	-0.001429
37.935	-0.003123
37.94	-0.004763
37.945	-0.006257
37.95	-0.007498
37.955	-0.008416
37.96	-0.009008
37.965	-0.009312
37.97	-0.009424
37.975	-0.009461
37.98	-0.009534
37.985	-0.009738
37.99	-0.010121
37.995	-0.010702
38	-0.011474

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
46.14257813	0.000306
46.14868164	0.000312
46.15478516	0.000316
46.16088867	0.000314
46.16699219	0.000316
46.1730957	0.00033
46.17919922	0.000346
46.18530273	0.000352
46.19140625	0.000358
46.19750977	0.000367
46.20361328	0.000375
46.2097168	0.000386
46.21582031	0.000396
46.22192383	0.000402
46.22802734	0.00041
46.23413086	0.000416
46.24023438	0.000415
46.24633789	0.000415
46.25244141	0.000417
46.25854492	0.000424
46.26464844	0.000431
46.27075195	0.00043
46.27685547	0.000419
46.28295898	0.000408
46.2890625	0.000397
46.29516602	0.000389
46.30126953	0.000381
46.30737305	0.000367
46.31347656	0.000355
46.31958008	0.000345
46.32568359	0.000329
46.33178711	0.000316
46.33789063	0.000313
46.34399414	0.000309
46.35009766	0.000299
46.35620117	0.000287
46.36230469	0.000271
46.3684082	0.00026
46.37451172	0.000258
46.38061523	0.000254
46.38671875	0.000245
46.39282227	0.000238

Time (s)	Acceleration (g)
38.005	-0.012406
38.01	-0.013478
38.015	-0.014658
38.02	-0.015883
38.025	-0.017084
38.03	-0.018179
38.035	-0.019082
38.04	-0.019722
38.045	-0.020045
38.05	-0.020029
38.055	-0.019684
38.06	-0.019059
38.065	-0.018225
38.07	-0.017271
38.075	-0.01629
38.08	-0.015357
38.085	-0.014535
38.09	-0.013883
38.095	-0.013436
38.1	-0.013196
38.105	-0.01314
38.11	-0.013203
38.115	-0.013301
38.12	-0.013335
38.125	-0.013213
38.13	-0.012879
38.135	-0.012305
38.14	-0.011508
38.145	-0.010535
38.15	-0.009421
38.155	-0.008211
38.16	-0.006944
38.165	-0.005649
38.17	-0.004361
38.175	-0.003117
38.18	-0.001921
38.185	-0.000786
38.19	0.000244
38.195	0.001134
38.2	0.001843
38.205	0.002343
38.21	0.002661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
46.39892578	0.00023
46.4050293	0.000229
46.41113281	0.000231
46.41723633	0.000228
46.42333984	0.000227
46.42944336	0.000227
46.43554688	0.000219
46.44165039	0.00021
46.44775391	0.000206
46.45385742	0.000206
46.45996094	0.000215
46.46606445	0.000225
46.47216797	0.000227
46.47827148	0.00023
46.484375	0.000242
46.49047852	0.000255
46.49658203	0.00027
46.50268555	0.000285
46.50878906	0.000297
46.51489258	0.00031
46.52099609	0.000321
46.52709961	0.000323
46.53320313	0.000328
46.53930664	0.000346
46.54541016	0.000364
46.55151367	0.000378
46.55761719	0.000386
46.5637207	0.000389
46.56982422	0.000401
46.57592773	0.000416
46.58203125	0.00042
46.58813477	0.000416
46.59423828	0.000408
46.6003418	0.000402
46.60644531	0.000399
46.61254883	0.000394
46.61865234	0.000393
46.62475586	0.0004
46.63085938	0.000406
46.63696289	0.000406
46.64306641	0.000405
46.64916992	0.000402

Input Motion

Time (s)	Acceleration (g)
38.215	0.00283
38.22	0.002877
38.225	0.002824
38.23	0.00267
38.235	0.002407
38.24	0.00203
38.245	0.001541
38.25	0.000994
38.255	0.000461
38.26	0.000025
38.265	-0.000228
38.27	-0.000238
38.275	0.000024
38.28	0.000539
38.285	0.001255
38.29	0.002085
38.295	0.002928
38.3	0.003722
38.305	0.004416
38.31	0.004971
38.315	0.005364
38.32	0.005584
38.325	0.005623
38.33	0.005478
38.335	0.005157
38.34	0.004667
38.345	0.004023
38.35	0.003284
38.355	0.002515
38.36	0.001761
38.365	0.001071
38.37	0.000485
38.375	0.000045
38.38	-0.000186
38.385	-0.000137
38.39	0.00028
38.395	0.00115
38.4	0.002544
38.405	0.004502
38.41	0.007017
38.415	0.010031
38.42	0.013418

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
46.65527344	0.000407
46.66137695	0.000412
46.66748047	0.000399
46.67358398	0.000378
46.6796875	0.000365
46.68579102	0.000357
46.69189453	0.000351
46.69799805	0.000346
46.70410156	0.000336
46.71020508	0.000327
46.71630859	0.000327
46.72241211	0.000323
46.72851563	0.000308
46.73461914	0.000292
46.74072266	0.000288
46.74682617	0.000286
46.75292969	0.00027
46.7590332	0.000246
46.76513672	0.000232
46.77124023	0.00023
46.77734375	0.000234
46.78344727	0.000232
46.78955078	0.000221
46.7956543	0.000215
46.80175781	0.000221
46.80786133	0.000224
46.81396484	0.000218
46.82006836	0.000217
46.82617188	0.000224
46.83227539	0.000231
46.83837891	0.000241
46.84448242	0.000249
46.85058594	0.000254
46.85668945	0.000266
46.86279297	0.000289
46.86889648	0.000307
46.875	0.00032
46.88110352	0.000334
46.88720703	0.000348
46.89331055	0.000364
46.89941406	0.000378
46.90551758	0.00039

Input Motion

Time (s)	Acceleration (g)
38.425	0.017013
38.43	0.020623
38.435	0.024069
38.44	0.027206
38.445	0.02993
38.45	0.032223
38.455	0.034105
38.46	0.035596
38.465	0.036734
38.47	0.037526
38.475	0.037973
38.48	0.038104
38.485	0.037936
38.49	0.037495
38.495	0.036805
38.5	0.035868
38.505	0.034694
38.51	0.033289
38.515	0.031656
38.52	0.029827
38.525	0.027829
38.53	0.025657
38.535	0.023319
38.54	0.020813
38.545	0.018148
38.55	0.01538
38.555	0.012557
38.56	0.009713
38.565	0.006871
38.57	0.003976
38.575	0.000977
38.58	-0.002118
38.585	-0.005267
38.59	-0.008356
38.595	-0.011231
38.6	-0.013739
38.605	-0.015736
38.61	-0.017113
38.615	-0.017809
38.62	-0.017829
38.625	-0.017233
38.63	-0.016113

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
46.91162109	0.000401
46.91772461	0.000411
46.92382813	0.000422
46.92993164	0.000436
46.93603516	0.000447
46.94213867	0.000455
46.94824219	0.000468
46.9543457	0.000474
46.96044922	0.000469
46.96655273	0.000463
46.97265625	0.000459
46.97875977	0.000455
46.98486328	0.000458
46.9909668	0.000459
46.99707031	0.000449
47.00317383	0.000436
47.00927734	0.000431
47.01538086	0.00043
47.02148438	0.000432
47.02758789	0.00043
47.03369141	0.000422
47.03979492	0.000411
47.04589844	0.000403
47.05200195	0.000394
47.05810547	0.000389
47.06420898	0.000386
47.0703125	0.000385
47.07641602	0.000382
47.08251953	0.000374
47.08862305	0.000365
47.09472656	0.000358
47.10083008	0.000354
47.10693359	0.000357
47.11303711	0.000352
47.11914063	0.000336
47.12524414	0.000323
47.13134766	0.000314
47.13745117	0.000304
47.14355469	0.000299
47.1496582	0.000289
47.15576172	0.000269
47.16186523	0.000261

Time (s)	Acceleration (g)
38.635	-0.014594
38.64	-0.012843
38.645	-0.011021
38.65	-0.009268
38.655	-0.007693
38.66	-0.006339
38.665	-0.005218
38.67	-0.004306
38.675	-0.003559
38.68	-0.002966
38.685	-0.002507
38.69	-0.002142
38.695	-0.001839
38.7	-0.001529
38.705	-0.001149
38.71	-0.000688
38.715	-0.000154
38.72	0.000435
38.725	0.001023
38.73	0.001533
38.735	0.001865
38.74	0.001886
38.745	0.001461
38.75	0.000481
38.755	-0.001125
38.76	-0.003391
38.765	-0.006277
38.77	-0.009654
38.775	-0.013337
38.78	-0.017071
38.785	-0.020595
38.79	-0.023703
38.795	-0.026234
38.8	-0.028106
38.805	-0.029309
38.81	-0.02988
38.815	-0.029894
38.82	-0.029464
38.825	-0.02869
38.83	-0.027642
38.835	-0.02637
38.84	-0.024874

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
47.16796875	0.000266
47.17407227	0.000268
47.18017578	0.000269
47.1862793	0.000273
47.19238281	0.000278
47.19848633	0.000287
47.20458984	0.000298
47.21069336	0.000312
47.21679688	0.000331
47.22290039	0.000355
47.22900391	0.000378
47.23510742	0.000397
47.24121094	0.000405
47.24731445	0.00041
47.25341797	0.00043
47.25952148	0.000458
47.265625	0.000477
47.27172852	0.000481
47.27783203	0.000483
47.28393555	0.000497
47.29003906	0.000516
47.29614258	0.000525
47.30224609	0.000528
47.30834961	0.000539
47.31445313	0.000551
47.32055664	0.000553
47.32666016	0.000545
47.33276367	0.00054
47.33886719	0.000545
47.3449707	0.000554
47.35107422	0.000554
47.35717773	0.000544
47.36328125	0.000538
47.36938477	0.00054
47.37548828	0.000541
47.3815918	0.000535
47.38769531	0.000524
47.39379883	0.000515
47.39990234	0.000513
47.40600586	0.000509
47.41210938	0.000496
47.41821289	0.000477

Time (s)	Acceleration (g)
38.845	-0.023149
38.85	-0.021226
38.855	-0.019147
38.86	-0.01698
38.865	-0.014807
38.87	-0.012711
38.875	-0.010766
38.88	-0.009044
38.885	-0.007596
38.89	-0.006458
38.895	-0.00564
38.9	-0.005131
38.905	-0.004897
38.91	-0.004874
38.915	-0.004991
38.92	-0.005168
38.925	-0.00533
38.93	-0.005447
38.935	-0.0055
38.94	-0.005478
38.945	-0.005385
38.95	-0.005217
38.955	-0.004979
38.96	-0.004705
38.965	-0.004435
38.97	-0.004206
38.975	-0.004056
38.98	-0.003994
38.985	-0.004021
38.99	-0.004125
38.995	-0.004285
39	-0.004478
39.005	-0.004663
39.01	-0.004798
39.015	-0.004832
39.02	-0.004662
39.025	-0.004194
39.03	-0.003384
39.035	-0.002215
39.04	-0.000707
39.045	0.001086
39.05	0.003094

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
47.42431641	0.000463
47.43041992	0.000456
47.43652344	0.000446
47.44262695	0.00043
47.44873047	0.000417
47.45483398	0.000411
47.4609375	0.000406
47.46704102	0.000398
47.47314453	0.000383
47.47924805	0.000367
47.48535156	0.000365
47.49145508	0.000369
47.49755859	0.000365
47.50366211	0.000356
47.50976563	0.000354
47.51586914	0.000357
47.52197266	0.000363
47.52807617	0.000369
47.53417969	0.000369
47.5402832	0.000374
47.54638672	0.000392
47.55249023	0.000412
47.55859375	0.000424
47.56469727	0.000432
47.57080078	0.000441
47.5769043	0.000454
47.58300781	0.000472
47.58911133	0.000491
47.59521484	0.000512
47.60131836	0.000533
47.60742188	0.000549
47.61352539	0.000564
47.61962891	0.000575
47.62573242	0.000582
47.63183594	0.000596
47.63793945	0.000612
47.64404297	0.000621
47.65014648	0.000626
47.65625	0.00063
47.66235352	0.000634
47.66845703	0.000642
47.67456055	0.000653

Time (s)	Acceleration (g)
39.055	0.005253
39.06	0.007493
39.065	0.009776
39.07	0.01214
39.075	0.014633
39.08	0.017309
39.085	0.020197
39.09	0.023255
39.095	0.026392
39.1	0.029487
39.105	0.032393
39.11	0.034973
39.115	0.037109
39.12	0.038714
39.125	0.039735
39.13	0.040153
39.135	0.039971
39.14	0.039207
39.145	0.037887
39.15	0.036027
39.155	0.033634
39.16	0.030744
39.165	0.027397
39.17	0.023622
39.175	0.019479
39.18	0.015073
39.185	0.010535
39.19	0.006036
39.195	0.001755
39.2	-0.002126
39.205	-0.005453
39.21	-0.008139
39.215	-0.010143
39.22	-0.011473
39.225	-0.012179
39.23	-0.012302
39.235	-0.011891
39.24	-0.011033
39.245	-0.009804
39.25	-0.008273
39.255	-0.006497
39.26	-0.004523

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
47.68066406	0.00066
47.68676758	0.000663
47.69287109	0.000661
47.69897461	0.000659
47.70507813	0.000661
47.71118164	0.000658
47.71728516	0.000649
47.72338867	0.00064
47.72949219	0.000629
47.7355957	0.000623
47.74169922	0.000622
47.74780273	0.00062
47.75390625	0.000618
47.76000977	0.000616
47.76611328	0.000609
47.7722168	0.0006
47.77832031	0.000592
47.78442383	0.000584
47.79052734	0.00058
47.79663086	0.000577
47.80273438	0.000561
47.80883789	0.000539
47.81494141	0.000526
47.82104492	0.000526
47.82714844	0.000529
47.83325195	0.000526
47.83935547	0.000515
47.84545898	0.000505
47.8515625	0.000501
47.85766602	0.000499
47.86376953	0.000492
47.86987305	0.000481
47.87597656	0.000476
47.88208008	0.000481
47.88818359	0.000487
47.89428711	0.000489
47.90039063	0.000492
47.90649414	0.000507
47.91259766	0.000531
47.91870117	0.000556
47.92480469	0.000571
47.9309082	0.000585

Input Motion

Time (s)	Acceleration (g)
39.265	-0.002386
39.27	-0.000102
39.275	0.002302
39.28	0.004781
39.285	0.007286
39.29	0.00973
39.295	0.012041
39.3	0.014218
39.305	0.016285
39.31	0.018293
39.315	0.020311
39.32	0.022355
39.325	0.024411
39.33	0.026457
39.335	0.028437
39.34	0.030252
39.345	0.0318
39.35	0.033004
39.355	0.033795
39.36	0.034136
39.365	0.034019
39.37	0.033431
39.375	0.032393
39.38	0.030942
39.385	0.029141
39.39	0.027111
39.395	0.024979
39.4	0.022883
39.405	0.020946
39.41	0.019232
39.415	0.01777
39.42	0.016561
39.425	0.015583
39.43	0.014786
39.435	0.014115
39.44	0.01354
39.445	0.013025
39.45	0.012504
39.455	0.011912
39.46	0.011165
39.465	0.010179
39.47	0.008912

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
47.93701172	0.00061
47.94311523	0.00064
47.94921875	0.00066
47.95532227	0.000671
47.96142578	0.000677
47.9675293	0.000689
47.97363281	0.000708
47.97973633	0.000724
47.98583984	0.000732
47.99194336	0.000738
47.99804688	0.000748
48.00415039	0.000759
48.01025391	0.000759
48.01635742	0.000751
48.02246094	0.00075
48.02856445	0.000754
48.03466797	0.000754
48.04077148	0.000748
48.046875	0.000736
48.05297852	0.000725
48.05908203	0.000726
48.06518555	0.000728
48.07128906	0.000719
48.07739258	0.00071
48.08349609	0.000708
48.08959961	0.000704
48.09570313	0.000693
48.10180664	0.000676
48.10791016	0.000658
48.11401367	0.000651
48.12011719	0.000655
48.1262207	0.000654
48.13232422	0.000642
48.13842773	0.000632
48.14453125	0.000627
48.15063477	0.000623
48.15673828	0.000617
48.1628418	0.000612
48.16894531	0.000603
48.17504883	0.000595
48.18115234	0.000589
48.18725586	0.000577

Time (s)	Acceleration (g)
39.475	0.007353
39.48	0.005511
39.485	0.003433
39.49	0.001227
39.495	-0.000993
39.5	-0.003123
39.505	-0.005077
39.51	-0.006837
39.515	-0.008421
39.52	-0.009859
39.525	-0.011199
39.53	-0.012495
39.535	-0.013805
39.54	-0.015158
39.545	-0.016581
39.55	-0.018112
39.555	-0.019776
39.56	-0.021607
39.565	-0.023605
39.57	-0.025715
39.575	-0.027846
39.58	-0.029832
39.585	-0.031501
39.59	-0.032715
39.595	-0.033365
39.6	-0.033414
39.605	-0.032869
39.61	-0.03176
39.615	-0.030141
39.62	-0.028098
39.625	-0.025718
39.63	-0.023081
39.635	-0.02027
39.64	-0.017363
39.645	-0.014436
39.65	-0.011594
39.655	-0.008929
39.66	-0.006528
39.665	-0.004461
39.67	-0.002749
39.675	-0.001405
39.68	-0.000441

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
48.19335938	0.000565
48.19946289	0.00056
48.20556641	0.000559
48.21166992	0.000558
48.21777344	0.000558
48.22387695	0.00056
48.22998047	0.000566
48.23608398	0.00058
48.2421875	0.000597
48.24829102	0.000609
48.25439453	0.000617
48.26049805	0.000624
48.26660156	0.000641
48.27270508	0.000664
48.27880859	0.00068
48.28491211	0.000694
48.29101563	0.000708
48.29711914	0.000719
48.30322266	0.00073
48.30932617	0.000743
48.31542969	0.000754
48.3215332	0.000768
48.32763672	0.000785
48.33374023	0.000794
48.33984375	0.000794
48.34594727	0.000795
48.35205078	0.000802
48.3581543	0.000813
48.36425781	0.000822
48.37036133	0.000827
48.37646484	0.000824
48.38256836	0.00082
48.38867188	0.00082
48.39477539	0.000821
48.40087891	0.000821
48.40698242	0.00082
48.41308594	0.000815
48.41918945	0.000808
48.42529297	0.000804
48.43139648	0.0008
48.4375	0.000788
48.44360352	0.000777

Time (s)	Acceleration (g)
39.685	0.000139
39.69	0.000296
39.695	0.000001
39.7	-0.000728
39.705	-0.001853
39.71	-0.003301
39.715	-0.004983
39.72	-0.006808
39.725	-0.008683
39.73	-0.010529
39.735	-0.012274
39.74	-0.01384
39.745	-0.01516
39.75	-0.016167
39.755	-0.016812
39.76	-0.017083
39.765	-0.016987
39.77	-0.016551
39.775	-0.015813
39.78	-0.014831
39.785	-0.013658
39.79	-0.012341
39.795	-0.010921
39.8	-0.009444
39.805	-0.007952
39.81	-0.006495
39.815	-0.005123
39.82	-0.00388
39.825	-0.002807
39.83	-0.001935
39.835	-0.00128
39.84	-0.000849
39.845	-0.000633
39.85	-0.000616
39.855	-0.000774
39.86	-0.001073
39.865	-0.00147
39.87	-0.001929
39.875	-0.002409
39.88	-0.00285
39.885	-0.0032
39.89	-0.003415

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
48.44970703	0.00077
48.45581055	0.00076
48.46191406	0.000745
48.46801758	0.00073
48.47412109	0.000721
48.48022461	0.000718
48.48632813	0.000715
48.49243164	0.000699
48.49853516	0.000679
48.50463867	0.00067
48.51074219	0.00067
48.5168457	0.000669
48.52294922	0.000664
48.52905273	0.000655
48.53515625	0.000645
48.54125977	0.00064
48.54736328	0.000636
48.5534668	0.000636
48.55957031	0.000642
48.56567383	0.000651
48.57177734	0.000662
48.57788086	0.000669
48.58398438	0.000671
48.59008789	0.000678
48.59619141	0.000696
48.60229492	0.000717
48.60839844	0.000736
48.61450195	0.000746
48.62060547	0.000752
48.62670898	0.000764
48.6328125	0.000782
48.63891602	0.000796
48.64501953	0.000807
48.65112305	0.000819
48.65722656	0.000831
48.66333008	0.000844
48.66943359	0.000854
48.67553711	0.000857
48.68164063	0.000864
48.68774414	0.000879
48.69384766	0.000887
48.69995117	0.000886

Time (s)	Acceleration (g)
39.895	-0.003458
39.9	-0.003344
39.905	-0.003092
39.91	-0.002694
39.915	-0.002149
39.92	-0.001439
39.925	-0.000556
39.93	0.000489
39.935	0.001674
39.94	0.00294
39.945	0.004224
39.95	0.005499
39.955	0.006735
39.96	0.007915
39.965	0.009031
39.97	0.010048
39.975	0.01093
39.98	0.011649
39.985	0.01217
39.99	0.012472
39.995	0.012536
40	0.012336
40.005	0.011853
40.01	0.011086
40.015	0.010049
40.02	0.008773
40.025	0.007317
40.03	0.005759
40.035	0.00419
40.04	0.002706
40.045	0.001392
40.05	0.000289
40.055	-0.000595
40.06	-0.001298
40.065	-0.001883
40.07	-0.002444
40.075	-0.003071
40.08	-0.003827
40.085	-0.004746
40.09	-0.005822
40.095	-0.007004
40.1	-0.008223

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
48.70605469	0.000883
48.7121582	0.000884
48.71826172	0.000892
48.72436523	0.000899
48.73046875	0.000893
48.73657227	0.000884
48.74267578	0.000877
48.7487793	0.000869
48.75488281	0.000861
48.76098633	0.000853
48.76708984	0.000844
48.77319336	0.000835
48.77929688	0.00082
48.78540039	0.000803
48.79150391	0.000793
48.79760742	0.000792
48.80371094	0.000795
48.80981445	0.000795
48.81591797	0.000787
48.82202148	0.000772
48.828125	0.00076
48.83422852	0.00075
48.84033203	0.000745
48.84643555	0.000744
48.85253906	0.000735
48.85864258	0.000718
48.86474609	0.000705
48.87084961	0.0007
48.87695313	0.000698
48.88305664	0.000698
48.88916016	0.000694
48.89526367	0.000694
48.90136719	0.000695
48.9074707	0.000693
48.91357422	0.000692
48.91967773	0.0007
48.92578125	0.000712
48.93188477	0.000725
48.93798828	0.000734
48.9440918	0.000738
48.95019531	0.000751
48.95629883	0.000775

Time (s)	Acceleration (g)
40.105	-0.009382
40.11	-0.010349
40.115	-0.010994
40.12	-0.011219
40.125	-0.010955
40.13	-0.010174
40.135	-0.008895
40.14	-0.00717
40.145	-0.005082
40.15	-0.002747
40.155	-0.000285
40.16	0.002205
40.165	0.004637
40.17	0.006948
40.175	0.009109
40.18	0.011108
40.185	0.012955
40.19	0.014698
40.195	0.016388
40.2	0.018029
40.205	0.019615
40.21	0.021123
40.215	0.022511
40.22	0.023768
40.225	0.024873
40.23	0.025791
40.235	0.026487
40.24	0.026925
40.245	0.027061
40.25	0.026848
40.255	0.026241
40.26	0.025202
40.265	0.023717
40.27	0.021809
40.275	0.01954
40.28	0.017024
40.285	0.014409
40.29	0.011858
40.295	0.009534
40.3	0.007568
40.305	0.006049
40.31	0.005016

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
48.96240234	0.000795
48.96850586	0.000814
48.97460938	0.000834
48.98071289	0.000844
48.98681641	0.000852
48.99291992	0.000867
48.99902344	0.000883
49.00512695	0.000901
49.01123047	0.000914
49.01733398	0.000915
49.0234375	0.000918
49.02954102	0.000926
49.03564453	0.000928
49.04174805	0.000934
49.04785156	0.000945
49.05395508	0.00095
49.06005859	0.000946
49.06616211	0.000934
49.07226563	0.000922
49.07836914	0.000923
49.08447266	0.000929
49.09057617	0.000925
49.09667969	0.000914
49.1027832	0.000908
49.10888672	0.000904
49.11499023	0.000902
49.12109375	0.000899
49.12719727	0.000896
49.13330078	0.000898
49.1394043	0.000893
49.14550781	0.000877
49.15161133	0.000864
49.15771484	0.000859
49.16381836	0.000852
49.16992188	0.00084
49.17602539	0.000826
49.18212891	0.000812
49.18823242	0.000797
49.19433594	0.000781
49.20043945	0.00077
49.20654297	0.000768
49.21264648	0.000763

Input Motion

Time (s)	Acceleration (g)
40.315	0.004456
40.32	0.004289
40.325	0.00441
40.33	0.004692
40.335	0.005011
40.34	0.005279
40.345	0.005439
40.35	0.005451
40.355	0.005308
40.36	0.005033
40.365	0.004657
40.37	0.00424
40.375	0.003828
40.38	0.003429
40.385	0.003031
40.39	0.002576
40.395	0.001995
40.4	0.001252
40.405	0.000321
40.41	-0.000811
40.415	-0.002141
40.42	-0.003665
40.425	-0.005376
40.43	-0.007277
40.435	-0.009359
40.44	-0.011604
40.445	-0.013976
40.45	-0.016381
40.455	-0.018717
40.46	-0.020909
40.465	-0.022881
40.47	-0.024599
40.475	-0.026044
40.48	-0.027179
40.485	-0.027974
40.49	-0.028407
40.495	-0.028462
40.5	-0.028132
40.505	-0.027425
40.51	-0.026382
40.515	-0.025066
40.52	-0.023562

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
49.21875	0.000747
49.22485352	0.00073
49.23095703	0.000719
49.23706055	0.000719
49.24316406	0.000725
49.24926758	0.000721
49.25537109	0.000723
49.26147461	0.000738
49.26757813	0.00074
49.27368164	0.000738
49.27978516	0.000756
49.28588867	0.000783
49.29199219	0.000802
49.2980957	0.000816
49.30419922	0.000825
49.31030273	0.000834
49.31640625	0.000845
49.32250977	0.000853
49.32861328	0.000864
49.3347168	0.000882
49.34082031	0.000892
49.34692383	0.000891
49.35302734	0.000893
49.35913086	0.000903
49.36523438	0.000918
49.37133789	0.000929
49.37744141	0.000932
49.38354492	0.000934
49.38964844	0.000935
49.39575195	0.00093
49.40185547	0.000927
49.40795898	0.000933
49.4140625	0.000937
49.42016602	0.000931
49.42626953	0.00092
49.43237305	0.000911
49.43847656	0.000908
49.44458008	0.000908
49.45068359	0.000904
49.45678711	0.000897
49.46289063	0.00089
49.46899414	0.000875

Input Motion

Time (s)	Acceleration (g)
40.525	-0.021967
40.53	-0.02038
40.535	-0.018899
40.54	-0.017582
40.545	-0.016472
40.55	-0.015612
40.555	-0.015022
40.56	-0.014708
40.565	-0.014649
40.57	-0.014797
40.575	-0.015096
40.58	-0.015445
40.585	-0.015754
40.59	-0.015985
40.595	-0.016115
40.6	-0.016161
40.605	-0.016152
40.61	-0.016083
40.615	-0.015949
40.62	-0.015732
40.625	-0.015404
40.63	-0.014957
40.635	-0.014386
40.64	-0.013673
40.645	-0.012808
40.65	-0.011823
40.655	-0.010753
40.66	-0.009637
40.665	-0.008513
40.67	-0.007415
40.675	-0.006367
40.68	-0.005389
40.685	-0.004494
40.69	-0.003694
40.695	-0.003002
40.7	-0.002431
40.705	-0.001996
40.71	-0.001705
40.715	-0.00156
40.72	-0.001552
40.725	-0.001672
40.73	-0.001892

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
49.47509766	0.000859
49.48120117	0.000849
49.48730469	0.000843
49.4934082	0.000835
49.49951172	0.000823
49.50561523	0.000804
49.51171875	0.000789
49.51782227	0.000781
49.52392578	0.000774
49.5300293	0.000769
49.53613281	0.000768
49.54223633	0.000766
49.54833984	0.000754
49.55444336	0.000735
49.56054688	0.000728
49.56665039	0.000737
49.57275391	0.000739
49.57885742	0.000727
49.58496094	0.000721
49.59106445	0.000722
49.59716797	0.000717
49.60327148	0.000715
49.609375	0.000729
49.61547852	0.000744
49.62158203	0.000752
49.62768555	0.000753
49.63378906	0.00076
49.63989258	0.000778
49.64599609	0.000788
49.65209961	0.000793
49.65820313	0.000825
49.66430664	0.000852
49.67041016	0.000847
49.67651367	0.000849
49.68261719	0.000881
49.6887207	0.000907
49.69482422	0.000909
49.70092773	0.000918
49.70703125	0.000944
49.71313477	0.000949
49.71923828	0.000942
49.7253418	0.000953

Time (s)	Acceleration (g)
40.735	-0.002197
40.74	-0.002603
40.745	-0.003137
40.75	-0.003842
40.755	-0.004755
40.76	-0.005875
40.765	-0.007175
40.77	-0.008602
40.775	-0.010074
40.78	-0.011493
40.785	-0.012756
40.79	-0.013762
40.795	-0.014443
40.8	-0.014774
40.805	-0.01477
40.81	-0.014508
40.815	-0.014082
40.82	-0.013559
40.825	-0.012986
40.83	-0.012357
40.835	-0.011633
40.84	-0.010769
40.845	-0.009728
40.85	-0.008501
40.855	-0.007107
40.86	-0.005626
40.865	-0.004146
40.87	-0.002724
40.875	-0.001406
40.88	-0.000187
40.885	0.000971
40.89	0.002089
40.895	0.003194
40.9	0.004343
40.905	0.005564
40.91	0.006833
40.915	0.008098
40.92	0.009258
40.925	0.010205
40.93	0.010862
40.935	0.011177
40.94	0.011152

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
49.73144531	0.000969
49.73754883	0.000972
49.74365234	0.00096
49.74975586	0.000954
49.75585938	0.000963
49.76196289	0.000947
49.76806641	0.000929
49.77416992	0.000954
49.78027344	0.000948
49.78637695	0.00091
49.79248047	0.000913
49.79858398	0.000904
49.8046875	0.000876
49.81079102	0.000889
49.81689453	0.000887
49.82299805	0.000868
49.82910156	0.000868
49.83520508	0.000849
49.84130859	0.00084
49.84741211	0.000852
49.85351563	0.00084
49.85961914	0.000842
49.86572266	0.000842
49.87182617	0.000802
49.87792969	0.000792
49.8840332	0.000798
49.89013672	0.000765
49.89624023	0.000754
49.90234375	0.000767
49.90844727	0.000738
49.91455078	0.000707
49.9206543	0.000709
49.92675781	0.000703
49.93286133	0.000691
49.93896484	0.000709
49.94506836	0.000718
49.95117188	0.000699
49.95727539	0.000711
49.96337891	0.000742
49.96948242	0.000743
49.97558594	0.00076
49.98168945	0.0008

Time (s)	Acceleration (g)
40.945	0.010828
40.95	0.010267
40.955	0.009555
40.96	0.008802
40.965	0.008111
40.97	0.007563
40.975	0.007213
40.98	0.007068
40.985	0.007093
40.99	0.007227
40.995	0.007383
41	0.007451
41.005	0.007335
41.01	0.006962
41.015	0.006304
41.02	0.005412
41.025	0.004389
41.03	0.003381
41.035	0.002559
41.04	0.002081
41.045	0.002071
41.05	0.002623
41.055	0.003768
41.06	0.005438
41.065	0.007516
41.07	0.009849
41.075	0.012266
41.08	0.01461
41.085	0.016756
41.09	0.018625
41.095	0.020188
41.1	0.021471
41.105	0.02253
41.11	0.023445
41.115	0.024302
41.12	0.025142
41.125	0.025988
41.13	0.026835
41.135	0.027651
41.14	0.028379
41.145	0.028957
41.15	0.029288

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
49.98779297	0.0008
49.99389648	0.000803
50	0.000848
50.00610352	0.000862
50.01220703	0.000861
50.01831055	0.000902
50.02441406	0.000923
50.03051758	0.000904
50.03662109	0.00092
50.04272461	0.000939
50.04882813	0.000925
50.05493164	0.000936
50.06103516	0.000958
50.06713867	0.000935
50.07324219	0.000918
50.0793457	0.000935
50.08544922	0.000929
50.09155273	0.000908
50.09765625	0.000923
50.10375977	0.000929
50.10986328	0.000896
50.1159668	0.000893
50.12207031	0.000904
50.12817383	0.000876
50.13427734	0.000874
50.14038086	0.000896
50.14648438	0.000876
50.15258789	0.000863
50.15869141	0.000864
50.16479492	0.000847
50.17089844	0.000849
50.17700195	0.000847
50.18310547	0.000826
50.18920898	0.000826
50.1953125	0.00081
50.20141602	0.000788
50.20751953	0.000794
50.21362305	0.000768
50.21972656	0.000742
50.22583008	0.000754
50.23193359	0.000737
50.23803711	0.000707

Input Motion

Time (s)	Acceleration (g)
41.155	0.029299
41.16	0.028962
41.165	0.028275
41.17	0.027287
41.175	0.026061
41.18	0.024623
41.185	0.022998
41.19	0.021185
41.195	0.019156
41.2	0.016908
41.205	0.014434
41.21	0.01169
41.215	0.008647
41.22	0.005314
41.225	0.001717
41.23	-0.002088
41.235	-0.006014
41.24	-0.009976
41.245	-0.013872
41.25	-0.017563
41.255	-0.020912
41.26	-0.023789
41.265	-0.026077
41.27	-0.027681
41.275	-0.028534
41.28	-0.02858
41.285	-0.027795
41.29	-0.02623
41.295	-0.023968
41.3	-0.021134
41.305	-0.017885
41.31	-0.014385
41.315	-0.010811
41.32	-0.007356
41.325	-0.004202
41.33	-0.00151
41.335	0.000598
41.34	0.002073
41.345	0.002907
41.35	0.003172
41.355	0.00297
41.36	0.002365

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
50.24414063	0.000709
50.25024414	0.000709
50.25634766	0.000705
50.26245117	0.000706
50.26855469	0.000711
50.2746582	0.000719
50.28076172	0.00071
50.28686523	0.000712
50.29296875	0.000747
50.29907227	0.000757
50.30517578	0.00075
50.3112793	0.000776
50.31738281	0.000802
50.32348633	0.000801
50.32958984	0.000801
50.33569336	0.000823
50.34179688	0.00085
50.34790039	0.000854
50.35400391	0.00085
50.36010742	0.00086
50.36621094	0.000868
50.37231445	0.000862
50.37841797	0.000869
50.38452148	0.000891
50.390625	0.000896
50.39672852	0.000886
50.40283203	0.00089
50.40893555	0.000903
50.41503906	0.000906
50.42114258	0.000903
50.42724609	0.000906
50.43334961	0.000911
50.43945313	0.000909
50.44555664	0.000896
50.45166016	0.000886
50.45776367	0.000885
50.46386719	0.000882
50.4699707	0.00087
50.47607422	0.000854
50.48217773	0.000839
50.48828125	0.00083
50.49438477	0.000818

Input Motion

Time (s)	Acceleration (g)
41.365	0.001431
41.37	0.000253
41.375	-0.001097
41.38	-0.002515
41.385	-0.003901
41.39	-0.005211
41.395	-0.006416
41.4	-0.0075
41.405	-0.008486
41.41	-0.009414
41.415	-0.010335
41.42	-0.011351
41.425	-0.012544
41.43	-0.013923
41.435	-0.015463
41.44	-0.01707
41.445	-0.018607
41.45	-0.019952
41.455	-0.020988
41.46	-0.021599
41.465	-0.021712
41.47	-0.021332
41.475	-0.020507
41.48	-0.019327
41.485	-0.017903
41.49	-0.016327
41.495	-0.014685
41.5	-0.013016
41.505	-0.011351
41.51	-0.00973
41.515	-0.008186
41.52	-0.006771
41.525	-0.005524
41.53	-0.004433
41.535	-0.003466
41.54	-0.002552
41.545	-0.001614
41.55	-0.000595
41.555	0.000538
41.56	0.001769
41.565	0.003059
41.57	0.004343

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
50.50048828	0.000808
50.5065918	0.000802
50.51269531	0.000787
50.51879883	0.000765
50.52490234	0.000748
50.53100586	0.000736
50.53710938	0.00073
50.54321289	0.000727
50.54931641	0.000714
50.55541992	0.000698
50.56152344	0.000694
50.56762695	0.000692
50.57373047	0.000686
50.57983398	0.000691
50.5859375	0.0007
50.59204102	0.000704
50.59814453	0.000704
50.60424805	0.000701
50.61035156	0.000701
50.61645508	0.000711
50.62255859	0.000721
50.62866211	0.00073
50.63476563	0.000739
50.64086914	0.00074
50.64697266	0.00074
50.65307617	0.00075
50.65917969	0.000764
50.6652832	0.000777
50.67138672	0.000788
50.67749023	0.000796
50.68359375	0.000812
50.68969727	0.000828
50.69580078	0.00083
50.7019043	0.000835
50.70800781	0.000852
50.71411133	0.000867
50.72021484	0.000871
50.72631836	0.000871
50.73242188	0.000878
50.73852539	0.000896
50.74462891	0.000904
50.75073242	0.000897

Input Motion

Time (s)	Acceleration (g)
41.575	0.005554
41.58	0.006661
41.585	0.007647
41.59	0.008502
41.595	0.009229
41.6	0.009825
41.605	0.010278
41.61	0.010564
41.615	0.010644
41.62	0.010458
41.625	0.009946
41.63	0.009064
41.635	0.00779
41.64	0.006149
41.645	0.004198
41.65	0.002026
41.655	-0.000259
41.66	-0.002559
41.665	-0.004777
41.67	-0.006844
41.675	-0.008699
41.68	-0.010289
41.685	-0.011578
41.69	-0.01252
41.695	-0.013083
41.7	-0.013285
41.705	-0.013143
41.71	-0.012686
41.715	-0.011951
41.72	-0.01092
41.725	-0.009581
41.73	-0.007948
41.735	-0.006046
41.74	-0.003941
41.745	-0.001719
41.75	0.000539
41.755	0.002754
41.76	0.004859
41.765	0.006803
41.77	0.008573
41.775	0.010171
41.78	0.011596

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
50.75683594	0.000891
50.76293945	0.00089
50.76904297	0.000886
50.77514648	0.000877
50.78125	0.000864
50.78735352	0.000853
50.79345703	0.000845
50.79956055	0.000831
50.80566406	0.000814
50.81176758	0.000806
50.81787109	0.000801
50.82397461	0.000793
50.83007813	0.000785
50.83618164	0.000778
50.84228516	0.000766
50.84838867	0.000752
50.85449219	0.00074
50.8605957	0.000733
50.86669922	0.00073
50.87280273	0.000719
50.87890625	0.000703
50.88500977	0.000697
50.89111328	0.000697
50.8972168	0.000689
50.90332031	0.000676
50.90942383	0.00067
50.91552734	0.000672
50.92163086	0.000671
50.92773438	0.00066
50.93383789	0.000648
50.93994141	0.000648
50.94604492	0.000651
50.95214844	0.000651
50.95825195	0.000651
50.96435547	0.000656
50.97045898	0.000668
50.9765625	0.000684
50.98266602	0.000698
50.98876953	0.000716
50.99487305	0.000741
51.00097656	0.00076
51.00708008	0.000775

Input Motion

Time (s)	Acceleration (g)
41.785	0.012861
41.79	0.01399
41.795	0.015012
41.8	0.015976
41.805	0.016922
41.81	0.017881
41.815	0.018869
41.82	0.019873
41.825	0.020862
41.83	0.021812
41.835	0.022696
41.84	0.023491
41.845	0.024182
41.85	0.024773
41.855	0.02527
41.86	0.025665
41.865	0.025939
41.87	0.02605
41.875	0.025943
41.88	0.025561
41.885	0.024851
41.89	0.023784
41.895	0.022362
41.9	0.020619
41.905	0.018626
41.91	0.016487
41.915	0.014334
41.92	0.012301
41.925	0.010512
41.93	0.00911
41.935	0.008198
41.94	0.007804
41.945	0.007909
41.95	0.008434
41.955	0.009266
41.96	0.01029
41.965	0.011393
41.97	0.012473
41.975	0.013447
41.98	0.014231
41.985	0.014759
41.99	0.01497

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
51.01318359	0.000793
51.01928711	0.00081
51.02539063	0.000825
51.03149414	0.000841
51.03759766	0.000855
51.04370117	0.000866
51.04980469	0.000871
51.0559082	0.00087
51.06201172	0.000869
51.06811523	0.000874
51.07421875	0.000876
51.08032227	0.00087
51.08642578	0.000859
51.0925293	0.000847
51.09863281	0.000836
51.10473633	0.000827
51.11083984	0.000819
51.11694336	0.000813
51.12304688	0.000811
51.12915039	0.000806
51.13525391	0.000795
51.14135742	0.000786
51.14746094	0.000784
51.15356445	0.000787
51.15966797	0.000787
51.16577148	0.00078
51.171875	0.000774
51.17797852	0.000768
51.18408203	0.00076
51.19018555	0.00075
51.19628906	0.000742
51.20239258	0.000735
51.20849609	0.000727
51.21459961	0.000714
51.22070313	0.000701
51.22680664	0.000693
51.23291016	0.000684
51.23901367	0.00067
51.24511719	0.000655
51.2512207	0.000642
51.25732422	0.000632
51.26342773	0.000622

Input Motion

Time (s)	Acceleration (g)
41.995	0.014814
42	0.014255
42.005	0.01326
42.01	0.011803
42.015	0.00988
42.02	0.007492
42.025	0.004669
42.03	0.001503
42.035	-0.0019
42.04	-0.005419
42.045	-0.008925
42.05	-0.012329
42.055	-0.015542
42.06	-0.018468
42.065	-0.021011
42.07	-0.02306
42.075	-0.024523
42.08	-0.025339
42.085	-0.025487
42.09	-0.02503
42.095	-0.02408
42.1	-0.02278
42.105	-0.021297
42.11	-0.019778
42.115	-0.018354
42.12	-0.017133
42.125	-0.016179
42.13	-0.015511
42.135	-0.015117
42.14	-0.014926
42.145	-0.014858
42.15	-0.014864
42.155	-0.014905
42.16	-0.014957
42.165	-0.015009
42.17	-0.015032
42.175	-0.014993
42.18	-0.014869
42.185	-0.014622
42.19	-0.01421
42.195	-0.013595
42.2	-0.012739

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
51.26953125	0.000616
51.27563477	0.000616
51.28173828	0.00062
51.2878418	0.000624
51.29394531	0.000625
51.30004883	0.000631
51.30615234	0.000646
51.31225586	0.000668
51.31835938	0.000692
51.32446289	0.000713
51.33056641	0.000729
51.33666992	0.000747
51.34277344	0.000768
51.34887695	0.000781
51.35498047	0.000797
51.36108398	0.000816
51.3671875	0.000828
51.37329102	0.000837
51.37939453	0.000842
51.38549805	0.000839
51.39160156	0.000839
51.39770508	0.000847
51.40380859	0.000851
51.40991211	0.000852
51.41601563	0.00085
51.42211914	0.000847
51.42822266	0.000847
51.43432617	0.000849
51.44042969	0.000847
51.4465332	0.000843
51.45263672	0.000841
51.45874023	0.00084
51.46484375	0.000836
51.47094727	0.000826
51.47705078	0.000816
51.4831543	0.000811
51.48925781	0.000807
51.49536133	0.000798
51.50146484	0.000784
51.50756836	0.000771
51.51367188	0.000765
51.51977539	0.000761

Input Motion

Time (s)	Acceleration (g)
42.205	-0.011629
42.21	-0.010301
42.215	-0.008813
42.22	-0.00726
42.225	-0.005737
42.23	-0.004288
42.235	-0.002935
42.24	-0.001683
42.245	-0.00052
42.25	0.000561
42.255	0.001555
42.26	0.002442
42.265	0.003205
42.27	0.003812
42.275	0.004252
42.28	0.004585
42.285	0.004892
42.29	0.005269
42.295	0.005817
42.3	0.006592
42.305	0.00763
42.31	0.008929
42.315	0.010457
42.32	0.012179
42.325	0.014041
42.33	0.015959
42.335	0.017849
42.34	0.019627
42.345	0.02121
42.35	0.022555
42.355	0.023629
42.36	0.024387
42.365	0.024805
42.37	0.024862
42.375	0.024555
42.38	0.023928
42.385	0.023043
42.39	0.021991
42.395	0.020867
42.4	0.019763
42.405	0.018752
42.41	0.017868

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
51.52587891	0.000749
51.53198242	0.000731
51.53808594	0.000716
51.54418945	0.000706
51.55029297	0.000695
51.55639648	0.000685
51.5625	0.000678
51.56860352	0.000673
51.57470703	0.000668
51.58081055	0.000661
51.58691406	0.00065
51.59301758	0.000644
51.59912109	0.000649
51.60522461	0.000659
51.61132813	0.000664
51.61743164	0.000663
51.62353516	0.000663
51.62963867	0.000666
51.63574219	0.000672
51.6418457	0.000688
51.64794922	0.000705
51.65405273	0.000713
51.66015625	0.000723
51.66625977	0.000736
51.67236328	0.000741
51.6784668	0.000749
51.68457031	0.000764
51.69067383	0.000775
51.69677734	0.000782
51.70288086	0.000787
51.70898438	0.000784
51.71508789	0.000786
51.72119141	0.000802
51.72729492	0.000816
51.73339844	0.000819
51.73950195	0.000819
51.74560547	0.000818
51.75170898	0.000819
51.7578125	0.000822
51.76391602	0.000824
51.77001953	0.000821
51.77612305	0.000815

Time (s)	Acceleration (g)
42.415	0.017131
42.42	0.016545
42.425	0.016104
42.43	0.015861
42.435	0.015852
42.44	0.016077
42.445	0.016514
42.45	0.017083
42.455	0.01768
42.46	0.018217
42.465	0.018613
42.47	0.018823
42.475	0.018828
42.48	0.018611
42.485	0.018179
42.49	0.017549
42.495	0.016759
42.5	0.015865
42.505	0.014933
42.51	0.014029
42.515	0.013203
42.52	0.012478
42.525	0.011846
42.53	0.011279
42.535	0.010732
42.54	0.010139
42.545	0.009451
42.55	0.008636
42.555	0.007699
42.56	0.006703
42.565	0.005741
42.57	0.004916
42.575	0.004325
42.58	0.004011
42.585	0.003964
42.59	0.004128
42.595	0.004399
42.6	0.004625
42.605	0.004663
42.61	0.004401
42.615	0.003774
42.62	0.002818

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
51.78222656	0.000802
51.78833008	0.000787
51.79443359	0.000778
51.80053711	0.000774
51.80664063	0.000772
51.81274414	0.000766
51.81884766	0.000752
51.82495117	0.000735
51.83105469	0.000724
51.8371582	0.000717
51.84326172	0.000713
51.84936523	0.000713
51.85546875	0.000711
51.86157227	0.000705
51.86767578	0.000698
51.8737793	0.000695
51.87988281	0.000697
51.88598633	0.000701
51.89208984	0.000702
51.89819336	0.000701
51.90429688	0.000698
51.91040039	0.000693
51.91650391	0.000689
51.92260742	0.000687
51.92871094	0.000686
51.93481445	0.000684
51.94091797	0.000678
51.94702148	0.000672
51.953125	0.000673
51.95922852	0.000674
51.96533203	0.000679
51.97143555	0.00069
51.97753906	0.000694
51.98364258	0.000691
51.98974609	0.000697
51.99584961	0.000706
52.00195313	0.000717
52.00805664	0.000736
52.01416016	0.000755
52.02026367	0.000768
52.02636719	0.000784
52.0324707	0.000799

Input Motion

Time (s)	Acceleration (g)
42.625	0.001619
42.63	0.000268
42.635	-0.001137
42.64	-0.002509
42.645	-0.003797
42.65	-0.005008
42.655	-0.006185
42.66	-0.007384
42.665	-0.008668
42.67	-0.010082
42.675	-0.011648
42.68	-0.013338
42.685	-0.015094
42.69	-0.016852
42.695	-0.018534
42.7	-0.020064
42.705	-0.021378
42.71	-0.022425
42.715	-0.023181
42.72	-0.023643
42.725	-0.023833
42.73	-0.023801
42.735	-0.023599
42.74	-0.023278
42.745	-0.022884
42.75	-0.022438
42.755	-0.021954
42.76	-0.021464
42.765	-0.020996
42.77	-0.020596
42.775	-0.020302
42.78	-0.020134
42.785	-0.020095
42.79	-0.020147
42.795	-0.020241
42.8	-0.020355
42.805	-0.020468
42.81	-0.020586
42.815	-0.020728
42.82	-0.020879
42.825	-0.021021
42.83	-0.021155

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
52.03857422	0.000812
52.04467773	0.000832
52.05078125	0.000854
52.05688477	0.00087
52.06298828	0.000879
52.0690918	0.00088
52.07519531	0.000877
52.08129883	0.000877
52.08740234	0.000878
52.09350586	0.000878
52.09960938	0.000874
52.10571289	0.000863
52.11181641	0.000847
52.11791992	0.000829
52.12402344	0.000811
52.13012695	0.000796
52.13623047	0.000785
52.14233398	0.000774
52.1484375	0.000761
52.15454102	0.000747
52.16064453	0.000731
52.16674805	0.000724
52.17285156	0.000728
52.17895508	0.000731
52.18505859	0.000726
52.19116211	0.000719
52.19726563	0.000715
52.20336914	0.000714
52.20947266	0.000716
52.21557617	0.000718
52.22167969	0.000713
52.2277832	0.000707
52.23388672	0.000702
52.23999023	0.000698
52.24609375	0.000694
52.25219727	0.000696
52.25830078	0.000703
52.2644043	0.000706
52.27050781	0.000701
52.27661133	0.000688
52.28271484	0.000679
52.28881836	0.000686

Time (s)	Acceleration (g)
42.835	-0.021271
42.84	-0.021336
42.845	-0.021322
42.85	-0.021209
42.855	-0.020985
42.86	-0.020663
42.865	-0.020261
42.87	-0.019801
42.875	-0.019314
42.88	-0.018795
42.885	-0.018235
42.89	-0.017659
42.895	-0.01708
42.9	-0.01649
42.905	-0.015889
42.91	-0.015262
42.915	-0.014591
42.92	-0.01389
42.925	-0.013174
42.93	-0.012438
42.935	-0.011681
42.94	-0.010902
42.945	-0.010091
42.95	-0.009254
42.955	-0.008394
42.96	-0.007499
42.965	-0.006555
42.97	-0.005562
42.975	-0.004521
42.98	-0.00343
42.985	-0.002296
42.99	-0.001152
42.995	-0.000031
43	0.001039
43.005	0.002033
43.01	0.002938
43.015	0.003742
43.02	0.004439
43.025	0.005024
43.03	0.005471
43.035	0.005763
43.04	0.005878

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
52.29492188	0.000699
52.30102539	0.000703
52.30712891	0.000697
52.31323242	0.000691
52.31933594	0.000689
52.32543945	0.000695
52.33154297	0.00071
52.33764648	0.000727
52.34375	0.000738
52.34985352	0.000746
52.35595703	0.000753
52.36206055	0.000757
52.36816406	0.000765
52.37426758	0.000784
52.38037109	0.000803
52.38647461	0.000811
52.39257813	0.000807
52.39868164	0.000801
52.40478516	0.000804
52.41088867	0.000817
52.41699219	0.000826
52.4230957	0.000827
52.42919922	0.000819
52.43530273	0.000809
52.44140625	0.000808
52.44750977	0.000813
52.45361328	0.000815
52.4597168	0.000816
52.46582031	0.000817
52.47192383	0.000808
52.47802734	0.000797
52.48413086	0.000795
52.49023438	0.000801
52.49633789	0.000809
52.50244141	0.000808
52.50854492	0.000792
52.51464844	0.000774
52.52075195	0.000765
52.52685547	0.000762
52.53295898	0.000761
52.5390625	0.000757
52.54516602	0.000745

Time (s)	Acceleration (g)
43.045	0.005807
43.05	0.005581
43.055	0.005244
43.06	0.004845
43.065	0.004437
43.07	0.00406
43.075	0.003743
43.08	0.003501
43.085	0.003334
43.09	0.00325
43.095	0.003255
43.1	0.003336
43.105	0.00349
43.11	0.00373
43.115	0.004073
43.12	0.004553
43.125	0.005193
43.13	0.005988
43.135	0.006909
43.14	0.007879
43.145	0.008813
43.15	0.009626
43.155	0.010247
43.16	0.010657
43.165	0.010858
43.17	0.010869
43.175	0.010719
43.18	0.010438
43.185	0.010055
43.19	0.009587
43.195	0.009053
43.2	0.00848
43.205	0.0079
43.21	0.007355
43.215	0.006881
43.22	0.006506
43.225	0.006244
43.23	0.00606
43.235	0.005904
43.24	0.005729
43.245	0.005489
43.25	0.005152

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
52.55126953	0.000729
52.55737305	0.000716
52.56347656	0.000706
52.56958008	0.000703
52.57568359	0.000706
52.58178711	0.000706
52.58789063	0.000703
52.59399414	0.000698
52.60009766	0.000694
52.60620117	0.000697
52.61230469	0.000707
52.6184082	0.000715
52.62451172	0.000721
52.63061523	0.000723
52.63671875	0.000724
52.64282227	0.000731
52.64892578	0.000744
52.6550293	0.000757
52.66113281	0.000769
52.66723633	0.000774
52.67333984	0.000774
52.67944336	0.00078
52.68554688	0.000792
52.69165039	0.000802
52.69775391	0.000812
52.70385742	0.000821
52.70996094	0.000827
52.71606445	0.000827
52.72216797	0.000825
52.72827148	0.000829
52.734375	0.00084
52.74047852	0.000848
52.74658203	0.000854
52.75268555	0.000856
52.75878906	0.000853
52.76489258	0.000851
52.77099609	0.000856
52.77709961	0.000862
52.78320313	0.000867
52.78930664	0.000866
52.79541016	0.000857
52.80151367	0.000849

Input Motion

Time (s)	Acceleration (g)
43.255	0.004705
43.26	0.004166
43.265	0.003574
43.27	0.00297
43.275	0.0024
43.28	0.001915
43.285	0.001545
43.29	0.001287
43.295	0.001122
43.3	0.000998
43.305	0.000853
43.31	0.000647
43.315	0.000337
43.32	-0.000116
43.325	-0.000736
43.33	-0.001555
43.335	-0.002574
43.34	-0.003776
43.345	-0.005122
43.35	-0.006508
43.355	-0.007822
43.36	-0.008994
43.365	-0.009967
43.37	-0.010704
43.375	-0.011198
43.38	-0.011461
43.385	-0.011518
43.39	-0.011405
43.395	-0.011158
43.4	-0.010806
43.405	-0.010371
43.41	-0.009854
43.415	-0.009254
43.42	-0.008568
43.425	-0.00779
43.43	-0.006952
43.435	-0.006086
43.44	-0.005208
43.445	-0.004338
43.45	-0.003481
43.455	-0.002638
43.46	-0.001825

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
52.80761719	0.000844
52.8137207	0.000835
52.81982422	0.00083
52.82592773	0.00083
52.83203125	0.000824
52.83813477	0.000808
52.84423828	0.000792
52.8503418	0.00078
52.85644531	0.000775
52.86254883	0.000776
52.86865234	0.000771
52.87475586	0.000755
52.88085938	0.000738
52.88696289	0.000729
52.89306641	0.000724
52.89916992	0.000724
52.90527344	0.000725
52.91137695	0.000721
52.91748047	0.000719
52.92358398	0.000719
52.9296875	0.000719
52.93579102	0.000725
52.94189453	0.000734
52.94799805	0.000746
52.95410156	0.000753
52.96020508	0.000744
52.96630859	0.000733
52.97241211	0.000734
52.97851563	0.000745
52.98461914	0.00076
52.99072266	0.000766
52.99682617	0.00076
53.00292969	0.000759
53.0090332	0.000767
53.01513672	0.000777
53.02124023	0.000793
53.02734375	0.000811
53.03344727	0.000821
53.03955078	0.000828
53.0456543	0.000831
53.05175781	0.000832
53.05786133	0.00084

Input Motion

Time (s)	Acceleration (g)
43.465	-0.001059
43.47	-0.000362
43.475	0.000239
43.48	0.000741
43.485	0.001144
43.49	0.001449
43.495	0.001669
43.5	0.001811
43.505	0.001884
43.51	0.00191
43.515	0.001909
43.52	0.001865
43.525	0.001761
43.53	0.001593
43.535	0.001355
43.54	0.001064
43.545	0.000751
43.55	0.000456
43.555	0.00023
43.56	0.000141
43.565	0.000257
43.57	0.000622
43.575	0.001251
43.58	0.002148
43.585	0.003271
43.59	0.004501
43.595	0.005701
43.6	0.006707
43.605	0.00738
43.61	0.007673
43.615	0.007587
43.62	0.00719
43.625	0.006584
43.63	0.005834
43.635	0.004999
43.64	0.004119
43.645	0.003219
43.65	0.002336
43.655	0.001493
43.66	0.000725
43.665	0.000055
43.67	-0.000542

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
53.06396484	0.000859
53.07006836	0.000875
53.07617188	0.00088
53.08227539	0.000872
53.08837891	0.000867
53.09448242	0.000875
53.10058594	0.000886
53.10668945	0.000891
53.11279297	0.000887
53.11889648	0.000872
53.125	0.000856
53.13110352	0.000852
53.13720703	0.000848
53.14331055	0.000839
53.14941406	0.000834
53.15551758	0.000824
53.16162109	0.000806
53.16772461	0.000793
53.17382813	0.000783
53.17993164	0.00078
53.18603516	0.000783
53.19213867	0.000779
53.19824219	0.000761
53.2043457	0.00074
53.21044922	0.00073
53.21655273	0.000735
53.22265625	0.000742
53.22875977	0.000738
53.23486328	0.000727
53.2409668	0.000719
53.24707031	0.000716
53.25317383	0.000714
53.25927734	0.000715
53.26538086	0.000716
53.27148438	0.000719
53.27758789	0.000718
53.28369141	0.000706
53.28979492	0.000695
53.29589844	0.000698
53.30200195	0.000708
53.30810547	0.000717
53.31420898	0.000728

Input Motion

Time (s)	Acceleration (g)
43.675	-0.001092
43.68	-0.001623
43.685	-0.002166
43.69	-0.002701
43.695	-0.003203
43.7	-0.003683
43.705	-0.004143
43.71	-0.004591
43.715	-0.005035
43.72	-0.005443
43.725	-0.005784
43.73	-0.006028
43.735	-0.006156
43.74	-0.006182
43.745	-0.006129
43.75	-0.00603
43.755	-0.005908
43.76	-0.005758
43.765	-0.00556
43.77	-0.005269
43.775	-0.004839
43.78	-0.004255
43.785	-0.003514
43.79	-0.002654
43.795	-0.001721
43.8	-0.000743
43.805	0.000244
43.81	0.001221
43.815	0.00216
43.82	0.002982
43.825	0.003606
43.83	0.003942
43.835	0.003916
43.84	0.003518
43.845	0.002776
43.85	0.001757
43.855	0.000566
43.86	-0.000687
43.865	-0.00189
43.87	-0.002952
43.875	-0.003816
43.88	-0.004454

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
53.3203125	0.000733
53.32641602	0.000735
53.33251953	0.000746
53.33862305	0.000764
53.34472656	0.000781
53.35083008	0.000796
53.35693359	0.000807
53.36303711	0.000815
53.36914063	0.000826
53.37524414	0.000839
53.38134766	0.000854
53.38745117	0.000863
53.39355469	0.00087
53.3996582	0.000878
53.40576172	0.000879
53.41186523	0.000877
53.41796875	0.00088
53.42407227	0.000883
53.43017578	0.00088
53.4362793	0.000876
53.44238281	0.000864
53.44848633	0.000847
53.45458984	0.000841
53.46069336	0.00084
53.46679688	0.000836
53.47290039	0.000835
53.47900391	0.000826
53.48510742	0.000809
53.49121094	0.0008
53.49731445	0.000798
53.50341797	0.000794
53.50952148	0.000793
53.515625	0.000791
53.52172852	0.000784
53.52783203	0.000774
53.53393555	0.000763
53.54003906	0.000756
53.54614258	0.000762
53.55224609	0.00077
53.55834961	0.000767
53.56445313	0.000755
53.57055664	0.000741

Input Motion

Time (s)	Acceleration (g)
43.885	-0.00487
43.89	-0.005127
43.895	-0.005305
43.9	-0.005454
43.905	-0.005628
43.91	-0.005863
43.915	-0.006184
43.92	-0.006611
43.925	-0.007157
43.93	-0.007818
43.935	-0.008573
43.94	-0.009389
43.945	-0.010216
43.95	-0.010971
43.955	-0.011555
43.96	-0.01189
43.965	-0.011902
43.97	-0.011518
43.975	-0.010701
43.98	-0.009448
43.985	-0.007789
43.99	-0.005833
43.995	-0.003712
44	-0.001542
44.005	0.000564
44.01	0.00251
44.015	0.004223
44.02	0.005656
44.025	0.006779
44.03	0.007572
44.035	0.008032
44.04	0.008168
44.045	0.008004
44.05	0.007592
44.055	0.007
44.06	0.006302
44.065	0.005566
44.07	0.004846
44.075	0.004172
44.08	0.003527
44.085	0.002879
44.09	0.002185

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
53.57666016	0.000734
53.58276367	0.000739
53.58886719	0.000741
53.5949707	0.000734
53.60107422	0.000729
53.60717773	0.000725
53.61328125	0.000721
53.61938477	0.00072
53.62548828	0.00072
53.6315918	0.000722
53.63769531	0.000728
53.64379883	0.000728
53.64990234	0.000722
53.65600586	0.000721
53.66210938	0.00073
53.66821289	0.000748
53.67431641	0.000767
53.68041992	0.000778
53.68652344	0.000782
53.69262695	0.000789
53.69873047	0.000804
53.70483398	0.000824
53.7109375	0.00084
53.71704102	0.000848
53.72314453	0.000853
53.72924805	0.000856
53.73535156	0.000855
53.74145508	0.000856
53.74755859	0.000863
53.75366211	0.000869
53.75976563	0.000873
53.76586914	0.000872
53.77197266	0.00086
53.77807617	0.000853
53.78417969	0.000859
53.7902832	0.000863
53.79638672	0.00086
53.80249023	0.000847
53.80859375	0.000829
53.81469727	0.00082
53.82080078	0.000817
53.8269043	0.000811

Input Motion

Time (s)	Acceleration (g)
44.095	0.00141
44.1	0.000572
44.105	-0.000294
44.11	-0.001138
44.115	-0.001905
44.12	-0.002564
44.125	-0.003102
44.13	-0.003539
44.135	-0.00391
44.14	-0.004244
44.145	-0.004564
44.15	-0.004877
44.155	-0.005178
44.16	-0.005423
44.165	-0.005561
44.17	-0.005562
44.175	-0.005394
44.18	-0.005034
44.185	-0.004474
44.19	-0.003698
44.195	-0.002697
44.2	-0.001493
44.205	-0.00013
44.21	0.001354
44.215	0.00289
44.22	0.004357
44.225	0.005638
44.23	0.006622
44.235	0.007218
44.24	0.007423
44.245	0.007261
44.25	0.006774
44.255	0.006021
44.26	0.00505
44.265	0.003915
44.27	0.002686
44.275	0.001441
44.28	0.000279
44.285	-0.0007
44.29	-0.001413
44.295	-0.001804
44.3	-0.001862

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
53.83300781	0.000804
53.83911133	0.000796
53.84521484	0.000785
53.85131836	0.000774
53.85742188	0.000764
53.86352539	0.000756
53.86962891	0.000755
53.87573242	0.000755
53.88183594	0.00075
53.88793945	0.000742
53.89404297	0.000733
53.90014648	0.00073
53.90625	0.000739
53.91235352	0.000746
53.91845703	0.000743
53.92456055	0.00074
53.93066406	0.000737
53.93676758	0.000732
53.94287109	0.000732
53.94897461	0.000735
53.95507813	0.000734
53.96118164	0.000732
53.96728516	0.000733
53.97338867	0.000731
53.97949219	0.00073
53.9855957	0.000733
53.99169922	0.000744
53.99780273	0.000757
54.00390625	0.000766
54.01000977	0.000772
54.01611328	0.000778
54.0222168	0.000782
54.02832031	0.000792
54.03442383	0.000802
54.04052734	0.000803
54.04663086	0.00081
54.05273438	0.000821
54.05883789	0.000825
54.06494141	0.000829
54.07104492	0.000841
54.07714844	0.000848
54.08325195	0.000851

Time (s)	Acceleration (g)
44.305	-0.001619
44.31	-0.001164
44.315	-0.000616
44.32	-0.0001
44.325	0.000272
44.33	0.000414
44.335	0.000279
44.34	-0.000122
44.345	-0.000748
44.35	-0.001536
44.355	-0.002403
44.36	-0.003281
44.365	-0.00411
44.37	-0.004812
44.375	-0.005335
44.38	-0.005662
44.385	-0.005808
44.39	-0.005823
44.395	-0.005779
44.4	-0.00577
44.405	-0.005878
44.41	-0.006146
44.415	-0.006592
44.42	-0.007175
44.425	-0.007835
44.43	-0.00852
44.435	-0.009169
44.44	-0.009738
44.445	-0.010193
44.45	-0.010481
44.455	-0.010563
44.46	-0.010417
44.465	-0.010028
44.47	-0.0094
44.475	-0.008548
44.48	-0.007462
44.485	-0.006138
44.49	-0.004589
44.495	-0.002828
44.5	-0.000877
44.505	0.001226
44.51	0.003454

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
54.08935547	0.000854
54.09545898	0.000854
54.1015625	0.000849
54.10766602	0.000847
54.11376953	0.000844
54.11987305	0.000837
54.12597656	0.000831
54.13208008	0.000821
54.13818359	0.000808
54.14428711	0.000798
54.15039063	0.000789
54.15649414	0.000785
54.16259766	0.000781
54.16870117	0.000769
54.17480469	0.000755
54.1809082	0.000746
54.18701172	0.00074
54.19311523	0.000736
54.19921875	0.000735
54.20532227	0.000736
54.21142578	0.000737
54.2175293	0.000735
54.22363281	0.000732
54.22973633	0.000731
54.23583984	0.000738
54.24194336	0.000747
54.24804688	0.000754
54.25415039	0.000752
54.26025391	0.000746
54.26635742	0.000747
54.27246094	0.00075
54.27856445	0.000752
54.28466797	0.000756
54.29077148	0.000756
54.296875	0.00075
54.30297852	0.000748
54.30908203	0.000747
54.31518555	0.000745
54.32128906	0.000752
54.32739258	0.000761
54.33349609	0.000762
54.33959961	0.000761

Time (s)	Acceleration (g)
44.515	0.005766
44.52	0.008087
44.525	0.01034
44.53	0.012448
44.535	0.014355
44.54	0.016032
44.545	0.017476
44.55	0.01874
44.555	0.01988
44.56	0.020916
44.565	0.02186
44.57	0.022656
44.575	0.023251
44.58	0.02364
44.585	0.023836
44.59	0.023927
44.595	0.024011
44.6	0.024164
44.605	0.024446
44.61	0.02485
44.615	0.025336
44.62	0.025866
44.625	0.026384
44.63	0.026829
44.635	0.027138
44.64	0.027251
44.645	0.02712
44.65	0.026682
44.655	0.025897
44.66	0.024787
44.665	0.023403
44.67	0.021842
44.675	0.020233
44.68	0.018684
44.685	0.017298
44.69	0.016189
44.695	0.015435
44.7	0.015052
44.705	0.015031
44.71	0.015307
44.715	0.015797
44.72	0.016441

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
54.34570313	0.000761
54.35180664	0.000767
54.35791016	0.000783
54.36401367	0.000797
54.37011719	0.000805
54.3762207	0.000811
54.38232422	0.000814
54.38842773	0.00082
54.39453125	0.000832
54.40063477	0.000839
54.40673828	0.000839
54.4128418	0.00084
54.41894531	0.00084
54.42504883	0.000839
54.43115234	0.000839
54.43725586	0.000839
54.44335938	0.000839
54.44946289	0.000841
54.45556641	0.000834
54.46166992	0.000818
54.46777344	0.000808
54.47387695	0.000805
54.47998047	0.000796
54.48608398	0.000783
54.4921875	0.00077
54.49829102	0.000754
54.50439453	0.000743
54.51049805	0.000737
54.51660156	0.00073
54.52270508	0.000724
54.52880859	0.000722
54.53491211	0.000717
54.54101563	0.000709
54.54711914	0.000702
54.55322266	0.000701
54.55932617	0.000705
54.56542969	0.000706
54.5715332	0.000706
54.57763672	0.000707
54.58374023	0.000705
54.58984375	0.000706
54.59594727	0.000713

Input Motion

Time (s)	Acceleration (g)
44.725	0.017166
44.73	0.017894
44.735	0.01855
44.74	0.019026
44.745	0.019229
44.75	0.019102
44.755	0.018611
44.76	0.017762
44.765	0.016589
44.77	0.015139
44.775	0.013471
44.78	0.011648
44.785	0.009733
44.79	0.007799
44.795	0.00591
44.8	0.004121
44.805	0.002474
44.81	0.000995
44.815	-0.000307
44.82	-0.001423
44.825	-0.002366
44.83	-0.003163
44.835	-0.003862
44.84	-0.004555
44.845	-0.005333
44.85	-0.006273
44.855	-0.007417
44.86	-0.008748
44.865	-0.01021
44.87	-0.011698
44.875	-0.013093
44.88	-0.014307
44.885	-0.015276
44.89	-0.015969
44.895	-0.016395
44.9	-0.016594
44.905	-0.016625
44.91	-0.016571
44.915	-0.016503
44.92	-0.016457
44.925	-0.016439
44.93	-0.016416

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
54.60205078	0.000716
54.6081543	0.00072
54.61425781	0.000725
54.62036133	0.000723
54.62646484	0.000716
54.63256836	0.000715
54.63867188	0.000718
54.64477539	0.000721
54.65087891	0.000727
54.65698242	0.000733
54.66308594	0.000737
54.66918945	0.00074
54.67529297	0.000744
54.68139648	0.000753
54.6875	0.000762
54.69360352	0.000767
54.69970703	0.000773
54.70581055	0.000773
54.71191406	0.000768
54.71801758	0.000768
54.72412109	0.00077
54.73022461	0.000772
54.73632813	0.000781
54.74243164	0.000788
54.74853516	0.000786
54.75463867	0.000786
54.76074219	0.000787
54.7668457	0.000784
54.77294922	0.000784
54.77905273	0.000783
54.78515625	0.000774
54.79125977	0.000767
54.79736328	0.000763
54.8034668	0.000754
54.80957031	0.000751
54.81567383	0.000756
54.82177734	0.000752
54.82788086	0.000744
54.83398438	0.000741
54.84008789	0.000737
54.84619141	0.000736
54.85229492	0.000738

Input Motion

Time (s)	Acceleration (g)
44.935	-0.016332
44.94	-0.016096
44.945	-0.015626
44.95	-0.014883
44.955	-0.013849
44.96	-0.01256
44.965	-0.011072
44.97	-0.009439
44.975	-0.007724
44.98	-0.005987
44.985	-0.004285
44.99	-0.002667
44.995	-0.001176
45	0.00015
45.005	0.001273
45.01	0.002168
45.015	0.002817
45.02	0.003198
45.025	0.003311
45.03	0.003165
45.035	0.002794
45.04	0.002284
45.045	0.001735
45.05	0.001237
45.055	0.000889
45.06	0.00076
45.065	0.000906
45.07	0.001388
45.075	0.00223
45.08	0.003432
45.085	0.004948
45.09	0.006651
45.095	0.008382
45.1	0.00996
45.105	0.011215
45.11	0.012021
45.115	0.012301
45.12	0.012058
45.125	0.011349
45.13	0.010264
45.135	0.008917
45.14	0.007437

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
54.85839844	0.000735
54.86450195	0.000728
54.87060547	0.000719
54.87670898	0.00071
54.8828125	0.000709
54.88891602	0.000713
54.89501953	0.000715
54.90112305	0.000717
54.90722656	0.000716
54.91333008	0.000711
54.91943359	0.00071
54.92553711	0.000715
54.93164063	0.000725
54.93774414	0.000734
54.94384766	0.000735
54.94995117	0.000729
54.95605469	0.000723
54.9621582	0.00072
54.96826172	0.000726
54.97436523	0.000736
54.98046875	0.000741
54.98657227	0.000744
54.99267578	0.000743
54.9987793	0.000741
55.00488281	0.000747
55.01098633	0.000756
55.01708984	0.000765
55.02319336	0.000773
55.02929688	0.000773
55.03540039	0.000767
55.04150391	0.000769
55.04760742	0.000776
55.05371094	0.000781
55.05981445	0.000785
55.06591797	0.000784
55.07202148	0.000777
55.078125	0.000772
55.08422852	0.000771
55.09033203	0.000772
55.09643555	0.000777
55.10253906	0.000781
55.10864258	0.000777

Time (s)	Acceleration (g)
45.145	0.005943
45.15	0.004539
45.155	0.003304
45.16	0.002274
45.165	0.001461
45.17	0.000853
45.175	0.000418
45.18	0.000124
45.185	-0.000059
45.19	-0.000169
45.195	-0.000228
45.2	-0.00023
45.205	-0.000157
45.21	0.000012
45.215	0.000299
45.22	0.000719
45.225	0.001268
45.23	0.001919
45.235	0.002628
45.24	0.003315
45.245	0.003905
45.25	0.004345
45.255	0.004609
45.26	0.004715
45.265	0.004707
45.27	0.004646
45.275	0.004589
45.28	0.004558
45.285	0.004556
45.29	0.004555
45.295	0.004513
45.3	0.004397
45.305	0.004175
45.31	0.003847
45.315	0.003425
45.32	0.002909
45.325	0.002314
45.33	0.001675
45.335	0.001029
45.34	0.000441
45.345	-0.00003
45.35	-0.000339

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
55.11474609	0.00077
55.12084961	0.000766
55.12695313	0.000765
55.13305664	0.000767
55.13916016	0.000766
55.14526367	0.000757
55.15136719	0.000744
55.1574707	0.00073
55.16357422	0.000715
55.16967773	0.000705
55.17578125	0.0007
55.18188477	0.000691
55.18798828	0.00068
55.1940918	0.000668
55.20019531	0.000652
55.20629883	0.000643
55.21240234	0.000644
55.21850586	0.000648
55.22460938	0.000653
55.23071289	0.000652
55.23681641	0.000643
55.24291992	0.000642
55.24902344	0.000652
55.25512695	0.000662
55.26123047	0.000672
55.26733398	0.000679
55.2734375	0.000682
55.27954102	0.000686
55.28564453	0.00069
55.29174805	0.000697
55.29785156	0.000706
55.30395508	0.000719
55.31005859	0.000726
55.31616211	0.00072
55.32226563	0.00071
55.32836914	0.000711
55.33447266	0.000725
55.34057617	0.000736
55.34667969	0.000736
55.3527832	0.000728
55.35888672	0.000721
55.36499023	0.00072

Time (s)	Acceleration (g)
45.355	-0.00045
45.36	-0.000357
45.365	-0.000073
45.37	0.000402
45.375	0.001062
45.38	0.001873
45.385	0.002818
45.39	0.003888
45.395	0.005075
45.4	0.006408
45.405	0.007901
45.41	0.009507
45.415	0.011145
45.42	0.012689
45.425	0.013987
45.43	0.014905
45.435	0.015328
45.44	0.015207
45.445	0.014543
45.45	0.013404
45.455	0.011892
45.46	0.010137
45.465	0.008271
45.47	0.006401
45.475	0.004624
45.48	0.003009
45.485	0.001608
45.49	0.000499
45.495	-0.000251
45.5	-0.000599
45.505	-0.000518
45.51	-0.000012
45.515	0.00088
45.52	0.002096
45.525	0.00355
45.53	0.005119
45.535	0.006675
45.54	0.008105
45.545	0.009307
45.55	0.010203
45.555	0.010745
45.56	0.010909

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
55.37109375	0.000722
55.37719727	0.000724
55.38330078	0.000727
55.3894043	0.000728
55.39550781	0.000722
55.40161133	0.000715
55.40771484	0.000712
55.41381836	0.00072
55.41992188	0.000738
55.42602539	0.000751
55.43212891	0.00075
55.43823242	0.000747
55.44433594	0.000745
55.45043945	0.000746
55.45654297	0.000753
55.46264648	0.000757
55.46875	0.00075
55.47485352	0.000737
55.48095703	0.000724
55.48706055	0.000711
55.49316406	0.000708
55.49926758	0.000711
55.50537109	0.000708
55.51147461	0.000701
55.51757813	0.00069
55.52368164	0.000677
55.52978516	0.000672
55.53588867	0.000673
55.54199219	0.000671
55.5480957	0.000668
55.55419922	0.000661
55.56030273	0.000648
55.56640625	0.000642
55.57250977	0.000651
55.57861328	0.000663
55.5847168	0.000671
55.59082031	0.000673
55.59692383	0.000671
55.60302734	0.000669
55.60913086	0.000669
55.61523438	0.000674
55.62133789	0.00068

Input Motion

Time (s)	Acceleration (g)
45.565	0.010697
45.57	0.010166
45.575	0.009392
45.58	0.008472
45.585	0.007508
45.59	0.006601
45.595	0.005835
45.6	0.005278
45.605	0.004978
45.61	0.004956
45.615	0.005213
45.62	0.005744
45.625	0.006516
45.63	0.007493
45.635	0.00862
45.64	0.009787
45.645	0.010884
45.65	0.011814
45.655	0.012498
45.66	0.012924
45.665	0.013117
45.67	0.013099
45.675	0.012919
45.68	0.012632
45.685	0.012288
45.69	0.011948
45.695	0.011663
45.7	0.011444
45.705	0.011284
45.71	0.011153
45.715	0.01101
45.72	0.010802
45.725	0.010485
45.73	0.010021
45.735	0.009386
45.74	0.008583
45.745	0.007626
45.75	0.006525
45.755	0.005299
45.76	0.003976
45.765	0.002578
45.77	0.001152

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
55.62744141	0.000681
55.63354492	0.000677
55.63964844	0.000668
55.64575195	0.000658
55.65185547	0.000657
55.65795898	0.000668
55.6640625	0.000679
55.67016602	0.000684
55.67626953	0.000682
55.68237305	0.000678
55.68847656	0.000675
55.69458008	0.00068
55.70068359	0.000692
55.70678711	0.0007
55.71289063	0.000701
55.71899414	0.000702
55.72509766	0.0007
55.73120117	0.000703
55.73730469	0.000714
55.7434082	0.000726
55.74951172	0.000735
55.75561523	0.000744
55.76171875	0.000743
55.76782227	0.000732
55.77392578	0.000726
55.7800293	0.000732
55.78613281	0.000736
55.79223633	0.000733
55.79833984	0.000722
55.80444336	0.000706
55.81054688	0.000695
55.81665039	0.000697
55.82275391	0.000697
55.82885742	0.000691
55.83496094	0.000685
55.84106445	0.000677
55.84716797	0.000666
55.85327148	0.000661
55.859375	0.000663
55.86547852	0.000667
55.87158203	0.000672
55.87768555	0.000676

Time (s)	Acceleration (g)
45.775	-0.000265
45.78	-0.001681
45.785	-0.003108
45.79	-0.004567
45.795	-0.006075
45.8	-0.007601
45.805	-0.0091
45.81	-0.010517
45.815	-0.011791
45.82	-0.012879
45.825	-0.013744
45.83	-0.014362
45.835	-0.014728
45.84	-0.014829
45.845	-0.014677
45.85	-0.014331
45.855	-0.013852
45.86	-0.013342
45.865	-0.012895
45.87	-0.012541
45.875	-0.012289
45.88	-0.012115
45.885	-0.011975
45.89	-0.01182
45.895	-0.011597
45.9	-0.011271
45.905	-0.010818
45.91	-0.010204
45.915	-0.009412
45.92	-0.008444
45.925	-0.007311
45.93	-0.006039
45.935	-0.004653
45.94	-0.003165
45.945	-0.001594
45.95	0.000074
45.955	0.001832
45.96	0.003627
45.965	0.005388
45.97	0.007017
45.975	0.00842
45.98	0.009531

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
55.88378906	0.00067
55.88989258	0.000659
55.89599609	0.000661
55.90209961	0.000675
55.90820313	0.000686
55.91430664	0.000686
55.92041016	0.000676
55.92651367	0.000661
55.93261719	0.000652
55.9387207	0.000657
55.94482422	0.000666
55.95092773	0.000666
55.95703125	0.000664
55.96313477	0.000661
55.96923828	0.000656
55.9753418	0.000654
55.98144531	0.000657
55.98754883	0.000668
55.99365234	0.000681
55.99975586	0.000681
56.00585938	0.000668
56.01196289	0.000656
56.01806641	0.000655
56.02416992	0.000666
56.03027344	0.00068
56.03637695	0.000681
56.04248047	0.00067
56.04858398	0.000664
56.0546875	0.000667
56.06079102	0.000675
56.06689453	0.000687
56.07299805	0.000696
56.07910156	0.000697
56.08520508	0.000694
56.09130859	0.00069
56.09741211	0.000688
56.10351563	0.000696
56.10961914	0.000704
56.11572266	0.000704
56.12182617	0.000696
56.12792969	0.000682
56.1340332	0.00067

Input Motion

Time (s)	Acceleration (g)
45.985	0.010313
45.99	0.010797
45.995	0.011043
46	0.011102
46.005	0.011028
46.01	0.010868
46.015	0.010641
46.02	0.010348
46.025	0.00997
46.03	0.009456
46.035	0.008759
46.04	0.007853
46.045	0.006738
46.05	0.005458
46.055	0.004071
46.06	0.002658
46.065	0.001294
46.07	-0.000001
46.075	-0.00122
46.08	-0.002368
46.085	-0.003461
46.09	-0.00449
46.095	-0.005451
46.1	-0.006356
46.105	-0.007221
46.11	-0.008094
46.115	-0.009024
46.12	-0.010058
46.125	-0.011219
46.13	-0.012495
46.135	-0.013835
46.14	-0.015138
46.145	-0.016291
46.15	-0.0172
46.155	-0.017792
46.16	-0.018056
46.165	-0.018011
46.17	-0.017689
46.175	-0.017128
46.18	-0.016337
46.185	-0.01532
46.19	-0.014057

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
56.14013672	0.000672
56.14624023	0.000682
56.15234375	0.000686
56.15844727	0.000677
56.16455078	0.000663
56.1706543	0.000652
56.17675781	0.000651
56.18286133	0.000659
56.18896484	0.000662
56.19506836	0.000658
56.20117188	0.000651
56.20727539	0.000638
56.21337891	0.000623
56.21948242	0.000615
56.22558594	0.000615
56.23168945	0.000617
56.23779297	0.000615
56.24389648	0.000608
56.25	0.000597
56.25610352	0.00059
56.26220703	0.000595
56.26831055	0.00061
56.27441406	0.000624
56.28051758	0.000628
56.28662109	0.000626
56.29272461	0.000628
56.29882813	0.000639
56.30493164	0.000653
56.31103516	0.000661
56.31713867	0.000666
56.32324219	0.00067
56.3293457	0.000668
56.33544922	0.000665
56.34155273	0.000667
56.34765625	0.000675
56.35375977	0.000687
56.35986328	0.000693
56.3659668	0.000683
56.37207031	0.000671
56.37817383	0.000668
56.38427734	0.000675
56.39038086	0.00069

Time (s)	Acceleration (g)
46.195	-0.01253
46.2	-0.010748
46.205	-0.008736
46.21	-0.006544
46.215	-0.004234
46.22	-0.001861
46.225	0.000524
46.23	0.002882
46.235	0.005177
46.24	0.007367
46.245	0.009405
46.25	0.01122
46.255	0.012743
46.26	0.013918
46.265	0.014706
46.27	0.015105
46.275	0.015144
46.28	0.014875
46.285	0.014372
46.29	0.013729
46.295	0.013045
46.3	0.012404
46.305	0.01189
46.31	0.011564
46.315	0.011463
46.32	0.011643
46.325	0.012122
46.33	0.012823
46.335	0.013643
46.34	0.014455
46.345	0.015125
46.35	0.015569
46.355	0.015727
46.36	0.015573
46.365	0.015107
46.37	0.014312
46.375	0.01319
46.38	0.01175
46.385	0.010019
46.39	0.008075
46.395	0.006024
46.4	0.003971

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
56.39648438	0.000699
56.40258789	0.000693
56.40869141	0.000685
56.41479492	0.000684
56.42089844	0.000686
56.42700195	0.000693
56.43310547	0.000703
56.43920898	0.000705
56.4453125	0.000699
56.45141602	0.000692
56.45751953	0.000681
56.46362305	0.000676
56.46972656	0.000681
56.47583008	0.000687
56.48193359	0.000681
56.48803711	0.000667
56.49414063	0.000649
56.50024414	0.000637
56.50634766	0.000635
56.51245117	0.000637
56.51855469	0.000632
56.5246582	0.000617
56.53076172	0.000601
56.53686523	0.000589
56.54296875	0.000584
56.54907227	0.000585
56.55517578	0.000588
56.5612793	0.000587
56.56738281	0.000583
56.57348633	0.00058
56.57958984	0.000578
56.58569336	0.00058
56.59179688	0.000592
56.59790039	0.000608
56.60400391	0.00061
56.61010742	0.000605
56.61621094	0.000602
56.62231445	0.000608
56.62841797	0.000627
56.63452148	0.000648
56.640625	0.000655
56.64672852	0.000652

Input Motion

Time (s)	Acceleration (g)
46.405	0.002034
46.41	0.000338
46.415	-0.001005
46.42	-0.001907
46.425	-0.002304
46.43	-0.002166
46.435	-0.001498
46.44	-0.00033
46.445	0.001285
46.45	0.003258
46.455	0.005504
46.46	0.007947
46.465	0.010512
46.47	0.013167
46.475	0.015877
46.48	0.018563
46.485	0.021143
46.49	0.023531
46.495	0.025637
46.5	0.027418
46.505	0.028855
46.51	0.029923
46.515	0.030622
46.52	0.030982
46.525	0.031041
46.53	0.030837
46.535	0.030406
46.54	0.029773
46.545	0.028961
46.55	0.027975
46.555	0.026833
46.56	0.025573
46.565	0.024245
46.57	0.022938
46.575	0.021736
46.58	0.020689
46.585	0.019818
46.59	0.019092
46.595	0.018446
46.6	0.01781
46.605	0.0171
46.61	0.016242

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
56.65283203	0.000649
56.65893555	0.000648
56.66503906	0.000649
56.67114258	0.000655
56.67724609	0.00066
56.68334961	0.000661
56.68945313	0.000657
56.69555664	0.000648
56.70166016	0.00064
56.70776367	0.000644
56.71386719	0.000659
56.7199707	0.000673
56.72607422	0.00068
56.73217773	0.000679
56.73828125	0.000677
56.74438477	0.000686
56.75048828	0.000703
56.7565918	0.000715
56.76269531	0.000716
56.76879883	0.000709
56.77490234	0.000701
56.78100586	0.000695
56.78710938	0.000693
56.79321289	0.00069
56.79931641	0.000686
56.80541992	0.00068
56.81152344	0.000669
56.81762695	0.000652
56.82373047	0.000639
56.82983398	0.000636
56.8359375	0.000636
56.84204102	0.000631
56.84814453	0.000615
56.85424805	0.000596
56.86035156	0.000587
56.86645508	0.000587
56.87255859	0.000586
56.87866211	0.000585
56.88476563	0.000581
56.89086914	0.000571
56.89697266	0.000565
56.90307617	0.000562

Input Motion

Time (s)	Acceleration (g)
46.615	0.015166
46.62	0.013812
46.625	0.012136
46.63	0.01013
46.635	0.007813
46.64	0.005245
46.645	0.002513
46.65	-0.000277
46.655	-0.00301
46.66	-0.005583
46.665	-0.007905
46.67	-0.009903
46.675	-0.011536
46.68	-0.012788
46.685	-0.013668
46.69	-0.014229
46.695	-0.014537
46.7	-0.014665
46.705	-0.014682
46.71	-0.014637
46.715	-0.014548
46.72	-0.014419
46.725	-0.014223
46.73	-0.013912
46.735	-0.013443
46.74	-0.01278
46.745	-0.011912
46.75	-0.01092
46.755	-0.009906
46.76	-0.008976
46.765	-0.008242
46.77	-0.007755
46.775	-0.007533
46.78	-0.007598
46.785	-0.007939
46.79	-0.00851
46.795	-0.009258
46.8	-0.010104
46.805	-0.010982
46.81	-0.011855
46.815	-0.012701
46.82	-0.01353

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
56.90917969	0.00056
56.9152832	0.000567
56.92138672	0.000575
56.92749023	0.000578
56.93359375	0.000579
56.93969727	0.000578
56.94580078	0.000579
56.9519043	0.000589
56.95800781	0.000605
56.96411133	0.000614
56.97021484	0.000613
56.97631836	0.000606
56.98242188	0.000602
56.98852539	0.000605
56.99462891	0.000612
57.00073242	0.000617
57.00683594	0.000617
57.01293945	0.000615
57.01904297	0.000612
57.02514648	0.000613
57.03125	0.000619
57.03735352	0.000628
57.04345703	0.000639
57.04956055	0.000646
57.05566406	0.000644
57.06176758	0.000636
57.06787109	0.000634
57.07397461	0.000641
57.08007813	0.000651
57.08618164	0.000656
57.09228516	0.00065
57.09838867	0.000637
57.10449219	0.000634
57.1105957	0.00064
57.11669922	0.000647
57.12280273	0.000649
57.12890625	0.000648
57.13500977	0.000639
57.14111328	0.000627
57.1472168	0.00062
57.15332031	0.000618
57.15942383	0.000619

Time (s)	Acceleration (g)
46.825	-0.014358
46.83	-0.015137
46.835	-0.015815
46.84	-0.016326
46.845	-0.016598
46.85	-0.016605
46.855	-0.016325
46.86	-0.015744
46.865	-0.014868
46.87	-0.013694
46.875	-0.012243
46.88	-0.010574
46.885	-0.008764
46.89	-0.006943
46.895	-0.005248
46.9	-0.003778
46.905	-0.002617
46.91	-0.001833
46.915	-0.001459
46.92	-0.001517
46.925	-0.002007
46.93	-0.002884
46.935	-0.004083
46.94	-0.005531
46.945	-0.007134
46.95	-0.00877
46.955	-0.010312
46.96	-0.011628
46.965	-0.012604
46.97	-0.013164
46.975	-0.013271
46.98	-0.012925
46.985	-0.012164
46.99	-0.011069
46.995	-0.009742
47	-0.008321
47.005	-0.006948
47.01	-0.005772
47.015	-0.004921
47.02	-0.004501
47.025	-0.004576
47.03	-0.005145

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
57.16552734	0.000623
57.17163086	0.00062
57.17773438	0.000609
57.18383789	0.000597
57.18994141	0.000592
57.19604492	0.000597
57.20214844	0.000607
57.20825195	0.000609
57.21435547	0.000598
57.22045898	0.000584
57.2265625	0.000578
57.23266602	0.000582
57.23876953	0.000589
57.24487305	0.000593
57.25097656	0.000589
57.25708008	0.000582
57.26318359	0.000581
57.26928711	0.000582
57.27539063	0.000584
57.28149414	0.000594
57.28759766	0.000606
57.29370117	0.00061
57.29980469	0.000609
57.3059082	0.000609
57.31201172	0.000613
57.31811523	0.000625
57.32421875	0.000641
57.33032227	0.000646
57.33642578	0.00064
57.3425293	0.000636
57.34863281	0.000637
57.35473633	0.00064
57.36083984	0.000645
57.36694336	0.000645
57.37304688	0.000638
57.37915039	0.000634
57.38525391	0.000631
57.39135742	0.000626
57.39746094	0.000622
57.40356445	0.000625
57.40966797	0.000628
57.41577148	0.000628

Time (s)	Acceleration (g)
47.035	-0.00616
47.04	-0.007526
47.045	-0.009117
47.05	-0.010803
47.055	-0.012441
47.06	-0.0139
47.065	-0.01506
47.07	-0.0158
47.075	-0.016024
47.08	-0.015693
47.085	-0.014807
47.09	-0.013385
47.095	-0.011488
47.1	-0.009198
47.105	-0.006613
47.11	-0.003842
47.115	-0.000983
47.12	0.00191
47.125	0.00481
47.13	0.00771
47.135	0.010618
47.14	0.013552
47.145	0.016528
47.15	0.01952
47.155	0.022495
47.16	0.025424
47.165	0.028262
47.17	0.030964
47.175	0.033486
47.18	0.035764
47.185	0.037737
47.19	0.039376
47.195	0.040659
47.2	0.041572
47.205	0.042119
47.21	0.042315
47.215	0.042177
47.22	0.041753
47.225	0.041086
47.23	0.04017
47.235	0.038984
47.24	0.037494

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
57.421875	0.000621
57.42797852	0.000611
57.43408203	0.000611
57.44018555	0.000618
57.44628906	0.000618
57.45239258	0.000611
57.45849609	0.0006
57.46459961	0.00059
57.47070313	0.000591
57.47680664	0.000595
57.48291016	0.000592
57.48901367	0.000589
57.49511719	0.000588
57.5012207	0.000587
57.50732422	0.000582
57.51342773	0.000573
57.51953125	0.000567
57.52563477	0.000569
57.53173828	0.00057
57.5378418	0.000562
57.54394531	0.000552
57.55004883	0.000543
57.55615234	0.000537
57.56225586	0.000538
57.56835938	0.000542
57.57446289	0.000538
57.58056641	0.000532
57.58666992	0.000534
57.59277344	0.000541
57.59887695	0.000548
57.60498047	0.000554
57.61108398	0.000562
57.6171875	0.000575
57.62329102	0.000585
57.62939453	0.00059
57.63549805	0.000594
57.64160156	0.000599
57.64770508	0.000605
57.65380859	0.000616
57.65991211	0.000618
57.66601563	0.000612
57.67211914	0.000608

Time (s)	Acceleration (g)
47.245	0.03565
47.25	0.033403
47.255	0.03072
47.26	0.027577
47.265	0.023991
47.27	0.020026
47.275	0.01579
47.28	0.011449
47.285	0.007181
47.29	0.003132
47.295	-0.000561
47.3	-0.003803
47.305	-0.006541
47.31	-0.008705
47.315	-0.010272
47.32	-0.011292
47.325	-0.011846
47.33	-0.012043
47.335	-0.012006
47.34	-0.011836
47.345	-0.011627
47.35	-0.011451
47.355	-0.011358
47.36	-0.011392
47.365	-0.011571
47.37	-0.01188
47.375	-0.012295
47.38	-0.012773
47.385	-0.013279
47.39	-0.013828
47.395	-0.014448
47.4	-0.015176
47.405	-0.016054
47.41	-0.017091
47.415	-0.018284
47.42	-0.019611
47.425	-0.021026
47.43	-0.022471
47.435	-0.023872
47.44	-0.025124
47.445	-0.026122
47.45	-0.02678

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
57.67822266	0.000611
57.68432617	0.000616
57.69042969	0.000623
57.6965332	0.000624
57.70263672	0.000618
57.70874023	0.000613
57.71484375	0.000611
57.72094727	0.00061
57.72705078	0.000607
57.7331543	0.000606
57.73925781	0.000609
57.74536133	0.000604
57.75146484	0.000591
57.75756836	0.000587
57.76367188	0.000589
57.76977539	0.000595
57.77587891	0.000606
57.78198242	0.000608
57.78808594	0.000599
57.79418945	0.000596
57.80029297	0.000598
57.80639648	0.000604
57.8125	0.000611
57.81860352	0.000606
57.82470703	0.000593
57.83081055	0.000587
57.83691406	0.000586
57.84301758	0.00058
57.84912109	0.000577
57.85522461	0.000575
57.86132813	0.00057
57.86743164	0.000563
57.87353516	0.000553
57.87963867	0.000541
57.88574219	0.000539
57.8918457	0.000545
57.89794922	0.000544
57.90405273	0.000537
57.91015625	0.000528
57.91625977	0.000524
57.92236328	0.000532
57.9284668	0.000543

Time (s)	Acceleration (g)
47.455	-0.027025
47.46	-0.026819
47.465	-0.026153
47.47	-0.025037
47.475	-0.023515
47.48	-0.021661
47.485	-0.019565
47.49	-0.017325
47.495	-0.015042
47.5	-0.012773
47.505	-0.010564
47.51	-0.008443
47.515	-0.006433
47.52	-0.00455
47.525	-0.002816
47.53	-0.001249
47.535	0.00014
47.54	0.001322
47.545	0.002277
47.55	0.003023
47.555	0.003574
47.56	0.00393
47.565	0.004084
47.57	0.003986
47.575	0.003577
47.58	0.002823
47.585	0.001705
47.59	0.000244
47.595	-0.00151
47.6	-0.003477
47.605	-0.005571
47.61	-0.007705
47.615	-0.009804
47.62	-0.011819
47.625	-0.01371
47.63	-0.015445
47.635	-0.017002
47.64	-0.018338
47.645	-0.019412
47.65	-0.020221
47.655	-0.020771
47.66	-0.021062

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
57.93457031	0.000549
57.94067383	0.000548
57.94677734	0.000548
57.95288086	0.000555
57.95898438	0.000566
57.96508789	0.000571
57.97119141	0.000572
57.97729492	0.00058
57.98339844	0.000589
57.98950195	0.000589
57.99560547	0.000585
58.00170898	0.000583
58.0078125	0.000587
58.01391602	0.000599
58.02001953	0.000606
58.02612305	0.000603
58.03222656	0.000597
58.03833008	0.000595
58.04443359	0.000599
58.05053711	0.000602
58.05664063	0.000595
58.06274414	0.000592
58.06884766	0.000595
58.07495117	0.000595
58.08105469	0.000592
58.0871582	0.000591
58.09326172	0.000589
58.09936523	0.000594
58.10546875	0.000601
58.11157227	0.000598
58.11767578	0.000588
58.1237793	0.000581
58.12988281	0.000582
58.13598633	0.000587
58.14208984	0.000586
58.14819336	0.000579
58.15429688	0.000573
58.16040039	0.000569
58.16650391	0.000571
58.17260742	0.000574
58.17871094	0.000572
58.18481445	0.000566

Input Motion

Time (s)	Acceleration (g)
47.665	-0.021111
47.67	-0.02095
47.675	-0.020617
47.68	-0.020155
47.685	-0.019607
47.69	-0.018996
47.695	-0.018341
47.7	-0.017641
47.705	-0.016878
47.71	-0.016047
47.715	-0.015132
47.72	-0.014095
47.725	-0.012905
47.73	-0.011534
47.735	-0.009968
47.74	-0.008214
47.745	-0.006295
47.75	-0.004251
47.755	-0.002124
47.76	0.000042
47.765	0.002204
47.77	0.00436
47.775	0.006506
47.78	0.008608
47.785	0.010642
47.79	0.012562
47.795	0.014317
47.8	0.015915
47.805	0.01736
47.81	0.018613
47.815	0.019647
47.82	0.020429
47.825	0.020936
47.83	0.021214
47.835	0.021332
47.84	0.021348
47.845	0.021325
47.85	0.021299
47.855	0.021275
47.86	0.021226
47.865	0.021098
47.87	0.020802

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
58.19091797	0.000563
58.19702148	0.000558
58.203125	0.000547
58.20922852	0.000534
58.21533203	0.000529
58.22143555	0.000534
58.22753906	0.000535
58.23364258	0.000527
58.23974609	0.000516
58.24584961	0.000516
58.25195313	0.000525
58.25805664	0.000536
58.26416016	0.000547
58.27026367	0.000552
58.27636719	0.000551
58.2824707	0.000554
58.28857422	0.000557
58.29467773	0.000555
58.30078125	0.000558
58.30688477	0.000566
58.31298828	0.000568
58.3190918	0.000564
58.32519531	0.000561
58.33129883	0.000559
58.33740234	0.000561
58.34350586	0.000569
58.34960938	0.000576
58.35571289	0.000575
58.36181641	0.000569
58.36791992	0.000564
58.37402344	0.000566
58.38012695	0.000571
58.38623047	0.000572
58.39233398	0.000566
58.3984375	0.000555
58.40454102	0.000549
58.41064453	0.000549
58.41674805	0.000546
58.42285156	0.000543
58.42895508	0.000545
58.43505859	0.000543
58.44116211	0.00054

Input Motion

Time (s)	Acceleration (g)
47.875	0.020246
47.88	0.019333
47.885	0.017993
47.89	0.016201
47.895	0.013973
47.9	0.011385
47.905	0.008554
47.91	0.005618
47.915	0.00272
47.92	-0.000007
47.925	-0.002451
47.93	-0.004554
47.935	-0.00629
47.94	-0.007633
47.945	-0.008592
47.95	-0.009209
47.955	-0.009551
47.96	-0.009732
47.965	-0.009873
47.97	-0.010063
47.975	-0.01037
47.98	-0.010812
47.985	-0.011368
47.99	-0.012
47.995	-0.012633
48	-0.013191
48.005	-0.01359
48.01	-0.013723
48.015	-0.013495
48.02	-0.01286
48.025	-0.011805
48.03	-0.010357
48.035	-0.008589
48.04	-0.006612
48.045	-0.004561
48.05	-0.002563
48.055	-0.000738
48.06	0.000812
48.065	0.002014
48.07	0.00282
48.075	0.003228
48.08	0.003276

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
58.44726563	0.000541
58.45336914	0.000541
58.45947266	0.000545
58.46557617	0.000557
58.47167969	0.000562
58.4777832	0.000553
58.48388672	0.000542
58.48999023	0.00054
58.49609375	0.000545
58.50219727	0.00055
58.50830078	0.000548
58.5144043	0.000539
58.52050781	0.000531
58.52661133	0.000528
58.53271484	0.000526
58.53881836	0.000522
58.54492188	0.00052
58.55102539	0.000523
58.55712891	0.000526
58.56323242	0.000523
58.56933594	0.000513
58.57543945	0.000508
58.58154297	0.000515
58.58764648	0.000526
58.59375	0.000532
58.59985352	0.000528
58.60595703	0.00052
58.61206055	0.000522
58.61816406	0.000531
58.62426758	0.000537
58.63037109	0.000538
58.63647461	0.000541
58.64257813	0.000548
58.64868164	0.000555
58.65478516	0.000555
58.66088867	0.000553
58.66699219	0.00056
58.6730957	0.000573
58.67919922	0.000579
58.68530273	0.000575
58.69140625	0.000566
58.69750977	0.000564

Time (s)	Acceleration (g)
48.085	0.003037
48.09	0.002654
48.095	0.002272
48.1	0.002005
48.105	0.001941
48.11	0.00209
48.115	0.002413
48.12	0.002865
48.125	0.003368
48.13	0.003821
48.135	0.004129
48.14	0.004194
48.145	0.003945
48.15	0.003388
48.155	0.002561
48.16	0.00154
48.165	0.000421
48.17	-0.000712
48.175	-0.001786
48.18	-0.002768
48.185	-0.003653
48.19	-0.004448
48.195	-0.005183
48.2	-0.005907
48.205	-0.006673
48.21	-0.007539
48.215	-0.008558
48.22	-0.00976
48.225	-0.011146
48.23	-0.012696
48.235	-0.014355
48.24	-0.016002
48.245	-0.017511
48.25	-0.01877
48.255	-0.019683
48.26	-0.020214
48.265	-0.02037
48.27	-0.020177
48.275	-0.019705
48.28	-0.01906
48.285	-0.018357
48.29	-0.017732

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
58.70361328	0.000572
58.7097168	0.000579
58.71582031	0.000574
58.72192383	0.000558
58.72802734	0.00055
58.73413086	0.000549
58.74023438	0.000549
58.74633789	0.000548
58.75244141	0.000546
58.75854492	0.000543
58.76464844	0.00054
58.77075195	0.000535
58.77685547	0.000526
58.78295898	0.000526
58.7890625	0.000531
58.79516602	0.000533
58.80126953	0.000531
58.80737305	0.000523
58.81347656	0.000511
58.81958008	0.000507
58.82568359	0.000515
58.83178711	0.000522
58.83789063	0.000521
58.84399414	0.000516
58.85009766	0.000511
58.85620117	0.000509
58.86230469	0.000513
58.8684082	0.000517
58.87451172	0.000518
58.88061523	0.000519
58.88671875	0.000515
58.89282227	0.000509
58.89892578	0.000508
58.9050293	0.000508
58.91113281	0.000512
58.91723633	0.000522
58.92333984	0.000522
58.92944336	0.000512
58.93554688	0.000506
58.94165039	0.000509
58.94775391	0.00052
58.95385742	0.00053

Time (s)	Acceleration (g)
48.295	-0.017299
48.3	-0.01712
48.305	-0.017217
48.31	-0.017538
48.315	-0.017995
48.32	-0.018498
48.325	-0.018952
48.33	-0.019282
48.335	-0.01943
48.34	-0.019369
48.345	-0.019095
48.35	-0.01863
48.355	-0.018014
48.36	-0.01729
48.365	-0.0165
48.37	-0.015689
48.375	-0.014891
48.38	-0.014105
48.385	-0.013325
48.39	-0.012545
48.395	-0.01176
48.4	-0.011
48.405	-0.010312
48.41	-0.009715
48.415	-0.00923
48.42	-0.008916
48.425	-0.008805
48.43	-0.008898
48.435	-0.009186
48.44	-0.009598
48.445	-0.010068
48.45	-0.010585
48.455	-0.011162
48.46	-0.011858
48.465	-0.012742
48.47	-0.013872
48.475	-0.015279
48.48	-0.016917
48.485	-0.018707
48.49	-0.020534
48.495	-0.022281
48.5	-0.02388

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
58.95996094	0.000529
58.96606445	0.000519
58.97216797	0.000511
58.97827148	0.000511
58.984375	0.000519
58.99047852	0.000525
58.99658203	0.00053
59.00268555	0.000533
59.00878906	0.000531
59.01489258	0.000526
59.02099609	0.000525
59.02709961	0.000528
59.03320313	0.000535
59.03930664	0.000545
59.04541016	0.000546
59.05151367	0.000531
59.05761719	0.000518
59.0637207	0.000519
59.06982422	0.000528
59.07592773	0.000534
59.08203125	0.00053
59.08813477	0.000517
59.09423828	0.00051
59.1003418	0.000515
59.10644531	0.000521
59.11254883	0.00052
59.11865234	0.000518
59.12475586	0.000517
59.13085938	0.000514
59.13696289	0.000509
59.14306641	0.000506
59.14916992	0.000508
59.15527344	0.000515
59.16137695	0.000518
59.16748047	0.000508
59.17358398	0.000488
59.1796875	0.000478
59.18579102	0.000487
59.19189453	0.000495
59.19799805	0.000494
59.20410156	0.000489
59.21020508	0.000481

Time (s)	Acceleration (g)
48.505	-0.025278
48.51	-0.026452
48.515	-0.027395
48.52	-0.028071
48.525	-0.028448
48.53	-0.028509
48.535	-0.028239
48.54	-0.027671
48.545	-0.026851
48.55	-0.025833
48.555	-0.024681
48.56	-0.023458
48.565	-0.022221
48.57	-0.021011
48.575	-0.019853
48.58	-0.018761
48.585	-0.017721
48.59	-0.01671
48.595	-0.015695
48.6	-0.014607
48.605	-0.013389
48.61	-0.012036
48.615	-0.010559
48.62	-0.009007
48.625	-0.007437
48.63	-0.005886
48.635	-0.004384
48.64	-0.002934
48.645	-0.001538
48.65	-0.000213
48.655	0.001019
48.66	0.002101
48.665	0.002972
48.67	0.003613
48.675	0.00402
48.68	0.004205
48.685	0.004211
48.69	0.004095
48.695	0.003925
48.7	0.003812
48.705	0.003858
48.71	0.004129

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
59.21630859	0.000479
59.22241211	0.000488
59.22851563	0.000494
59.23461914	0.000498
59.24072266	0.000504
59.24682617	0.000506
59.25292969	0.0005
59.2590332	0.000491
59.26513672	0.000483
59.27124023	0.000489
59.27734375	0.000506
59.28344727	0.000513
59.28955078	0.000507
59.2956543	0.000501
59.30175781	0.000504
59.30786133	0.000522
59.31396484	0.00054
59.32006836	0.000541
59.32617188	0.000539
59.33227539	0.00054
59.33837891	0.000539
59.34448242	0.000539
59.35058594	0.000536
59.35668945	0.000534
59.36279297	0.000541
59.36889648	0.000542
59.375	0.000529
59.38110352	0.000519
59.38720703	0.000521
59.39331055	0.000529
59.39941406	0.000538
59.40551758	0.000534
59.41162109	0.00052
59.41772461	0.000513
59.42382813	0.000517
59.42993164	0.000523
59.43603516	0.000527
59.44213867	0.000527
59.44824219	0.000521
59.4543457	0.000517
59.46044922	0.000517
59.46655273	0.000518

Input Motion

Time (s)	Acceleration (g)
48.715	0.004672
48.72	0.005502
48.725	0.006598
48.73	0.00793
48.735	0.009435
48.74	0.010999
48.745	0.012502
48.75	0.013804
48.755	0.014784
48.76	0.015381
48.765	0.015575
48.77	0.015391
48.775	0.014895
48.78	0.014146
48.785	0.013218
48.79	0.012183
48.795	0.011101
48.8	0.010033
48.805	0.009027
48.81	0.008092
48.815	0.007227
48.82	0.006443
48.825	0.005737
48.83	0.005095
48.835	0.004513
48.84	0.003956
48.845	0.003411
48.85	0.002916
48.855	0.002514
48.86	0.002263
48.865	0.002203
48.87	0.002297
48.875	0.00249
48.88	0.00268
48.885	0.002766
48.89	0.002712
48.895	0.002505
48.9	0.002159
48.905	0.0017
48.91	0.001122
48.915	0.000406
48.92	-0.00049

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
59.47265625	0.00052
59.47875977	0.000525
59.48486328	0.000529
59.4909668	0.000524
59.49707031	0.000512
59.50317383	0.000507
59.50927734	0.000511
59.51538086	0.000519
59.52148438	0.000526
59.52758789	0.000526
59.53369141	0.000518
59.53979492	0.000513
59.54589844	0.000515
59.55200195	0.000521
59.55810547	0.000527
59.56420898	0.000529
59.5703125	0.000525
59.57641602	0.000518
59.58251953	0.000515
59.58862305	0.000517
59.59472656	0.000524
59.60083008	0.00053
59.60693359	0.00053
59.61303711	0.000531
59.61914063	0.000529
59.62524414	0.000521
59.63134766	0.000521
59.63745117	0.000535
59.64355469	0.000546
59.6496582	0.000545
59.65576172	0.000537
59.66186523	0.000524
59.66796875	0.00052
59.67407227	0.000531
59.68017578	0.000541
59.6862793	0.00054
59.69238281	0.000534
59.69848633	0.000528
59.70458984	0.000524
59.71069336	0.000524
59.71679688	0.000521
59.72290039	0.000524

Input Motion

Time (s)	Acceleration (g)
48.925	-0.001618
48.93	-0.003007
48.935	-0.004672
48.94	-0.006609
48.945	-0.008778
48.95	-0.01112
48.955	-0.013543
48.96	-0.015921
48.965	-0.018114
48.97	-0.019985
48.975	-0.021417
48.98	-0.022336
48.985	-0.022706
48.99	-0.022565
48.995	-0.02198
49	-0.021009
49.005	-0.01972
49.01	-0.01816
49.015	-0.016374
49.02	-0.014446
49.025	-0.012455
49.03	-0.010494
49.035	-0.008648
49.04	-0.006958
49.045	-0.005448
49.05	-0.004111
49.055	-0.002924
49.06	-0.001882
49.065	-0.000979
49.07	-0.000203
49.075	0.000451
49.08	0.00099
49.085	0.001418
49.09	0.001729
49.095	0.001921
49.1	0.001986
49.105	0.001927
49.11	0.001782
49.115	0.001598
49.12	0.00143
49.125	0.001329
49.13	0.00132

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
59.72900391	0.000533
59.73510742	0.000527
59.74121094	0.000513
59.74731445	0.000505
59.75341797	0.000504
59.75952148	0.000515
59.765625	0.000524
59.77172852	0.000517
59.77783203	0.000506
59.78393555	0.0005
59.79003906	0.000501
59.79614258	0.000515
59.80224609	0.000523
59.80834961	0.000513
59.81445313	0.000505
59.82055664	0.000505
59.82666016	0.000502
59.83276367	0.000497
59.83886719	0.000501
59.8449707	0.000507
59.85107422	0.000507
59.85717773	0.000499
59.86328125	0.000486
59.86938477	0.000481
59.87548828	0.000493
59.8815918	0.00051
59.88769531	0.000518
59.89379883	0.000513
59.89990234	0.000505
59.90600586	0.000503
59.91210938	0.000509
59.91821289	0.000519
59.92431641	0.000521
59.93041992	0.000517
59.93652344	0.000512
59.94262695	0.000509
59.94873047	0.000502
59.95483398	0.000501
59.9609375	0.000512
59.96704102	0.000527
59.97314453	0.000533
59.97924805	0.00053

Input Motion

Time (s)	Acceleration (g)
49.135	0.001409
49.14	0.001575
49.145	0.001781
49.15	0.001981
49.155	0.002126
49.16	0.00218
49.165	0.002115
49.17	0.001898
49.175	0.001512
49.18	0.000951
49.185	0.000226
49.19	-0.000631
49.195	-0.001584
49.2	-0.002581
49.205	-0.00358
49.21	-0.004581
49.215	-0.005604
49.22	-0.006669
49.225	-0.007814
49.23	-0.00906
49.235	-0.010418
49.24	-0.011894
49.245	-0.013476
49.25	-0.015103
49.255	-0.016696
49.26	-0.018179
49.265	-0.019475
49.27	-0.020511
49.275	-0.021248
49.28	-0.021696
49.285	-0.021893
49.29	-0.021921
49.295	-0.021862
49.3	-0.021775
49.305	-0.021693
49.31	-0.021602
49.315	-0.021453
49.32	-0.021191
49.325	-0.020741
49.33	-0.020028
49.335	-0.018989
49.34	-0.017572

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
59.98535156	0.000524
59.99145508	0.000526
59.99755859	0.000539
60.00366211	0.00055
60.00976563	0.00055
60.01586914	0.000542
60.02197266	0.000533
60.02807617	0.00053
60.03417969	0.000535
60.0402832	0.000535
60.04638672	0.000531
60.05249023	0.000531
60.05859375	0.000527
60.06469727	0.000515
60.07080078	0.000509
60.0769043	0.00051
60.08300781	0.000513
60.08911133	0.000517
60.09521484	0.000512
60.10131836	0.000494
60.10742188	0.000483
60.11352539	0.000487
60.11962891	0.000494
60.12573242	0.000502
60.13183594	0.000504
60.13793945	0.0005
60.14404297	0.000499
60.15014648	0.000501
60.15625	0.000505
60.16235352	0.000515
60.16845703	0.000521
60.17456055	0.000523
60.18066406	0.000524
60.18676758	0.000522
60.19287109	0.000521
60.19897461	0.00053
60.20507813	0.000538
60.21118164	0.000541
60.21728516	0.000544
60.22338867	0.000538
60.22949219	0.000526
60.2355957	0.000524

Time (s)	Acceleration (g)
49.345	-0.015763
49.35	-0.013602
49.355	-0.011165
49.36	-0.00855
49.365	-0.005867
49.37	-0.003205
49.375	-0.000638
49.38	0.001793
49.385	0.004065
49.39	0.006155
49.395	0.00805
49.4	0.009746
49.405	0.01124
49.41	0.012551
49.415	0.013704
49.42	0.014708
49.425	0.015575
49.43	0.016326
49.435	0.016982
49.44	0.017553
49.445	0.018054
49.45	0.018477
49.455	0.01882
49.46	0.019084
49.465	0.019279
49.47	0.019421
49.475	0.01952
49.48	0.01958
49.485	0.019603
49.49	0.019551
49.495	0.019387
49.5	0.019097
49.505	0.018668
49.51	0.018099
49.515	0.0174
49.52	0.016607
49.525	0.015768
49.53	0.014956
49.535	0.014251
49.54	0.013719
49.545	0.013413
49.55	0.013368

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
60.24169922	0.000529
60.24780273	0.000527
60.25390625	0.000522
60.26000977	0.000513
60.26611328	0.000502
60.2722168	0.000499
60.27832031	0.000508
60.28442383	0.000516
60.29052734	0.000519
60.29663086	0.000521
60.30273438	0.000522
60.30883789	0.000522
60.31494141	0.000526
60.32104492	0.000532
60.32714844	0.000541
60.33325195	0.000551
60.33935547	0.000554
60.34545898	0.000545
60.3515625	0.000537
60.35766602	0.000541
60.36376953	0.000556
60.36987305	0.000564
60.37597656	0.000559
60.38208008	0.000545
60.38818359	0.000533
60.39428711	0.000529
60.40039063	0.000524
60.40649414	0.000516
60.41259766	0.000511
60.41870117	0.000507
60.42480469	0.000498
60.4309082	0.000488
60.43701172	0.000481
60.44311523	0.000484
60.44921875	0.000497
60.45532227	0.000505
60.46142578	0.000499
60.4675293	0.00049
60.47363281	0.000489
60.47973633	0.000495
60.48583984	0.000504
60.49194336	0.000506

Time (s)	Acceleration (g)
49.555	0.013581
49.56	0.014002
49.565	0.014558
49.57	0.015139
49.575	0.015636
49.58	0.015971
49.585	0.016091
49.59	0.015976
49.595	0.015632
49.6	0.015088
49.605	0.014384
49.61	0.013536
49.615	0.012563
49.62	0.011505
49.625	0.010399
49.63	0.009282
49.635	0.008189
49.64	0.007132
49.645	0.006117
49.65	0.005152
49.655	0.004244
49.66	0.003381
49.665	0.00256
49.67	0.001793
49.675	0.001102
49.68	0.000526
49.685	0.000104
49.69	-0.000147
49.695	-0.000222
49.7	-0.000142
49.705	0.000063
49.71	0.000348
49.715	0.000666
49.72	0.000988
49.725	0.001292
49.73	0.001545
49.735	0.001713
49.74	0.001775
49.745	0.001708
49.75	0.001484
49.755	0.001087
49.76	0.00052

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
60.49804688	0.000499
60.50415039	0.000494
60.51025391	0.000497
60.51635742	0.000501
60.52246094	0.000505
60.52856445	0.000511
60.53466797	0.000515
60.54077148	0.000517
60.546875	0.000517
60.55297852	0.000513
60.55908203	0.000513
60.56518555	0.000522
60.57128906	0.000531
60.57739258	0.000531
60.58349609	0.000522
60.58959961	0.000513
60.59570313	0.000514
60.60180664	0.000525
60.60791016	0.000535
60.61401367	0.00054
60.62011719	0.000543
60.6262207	0.000545
60.63232422	0.000549
60.63842773	0.000555
60.64453125	0.000563
60.65063477	0.000572
60.65673828	0.000579
60.6628418	0.000582
60.66894531	0.000578
60.67504883	0.000571
60.68115234	0.000571
60.68725586	0.000575
60.69335938	0.000574
60.69946289	0.000567
60.70556641	0.000558
60.71166992	0.00055
60.71777344	0.000546
60.72387695	0.000545
60.72998047	0.000545
60.73608398	0.000542
60.7421875	0.000536
60.74829102	0.000533

Time (s)	Acceleration (g)
49.765	-0.000208
49.77	-0.001059
49.775	-0.002001
49.78	-0.003022
49.785	-0.004113
49.79	-0.005299
49.795	-0.006607
49.8	-0.008011
49.805	-0.009481
49.81	-0.010979
49.815	-0.01246
49.82	-0.013895
49.825	-0.015261
49.83	-0.016531
49.835	-0.017694
49.84	-0.018739
49.845	-0.019669
49.85	-0.020522
49.855	-0.021334
49.86	-0.022137
49.865	-0.022953
49.87	-0.023766
49.875	-0.024544
49.88	-0.025263
49.885	-0.025886
49.89	-0.026384
49.895	-0.026736
49.9	-0.026904
49.905	-0.026863
49.91	-0.026615
49.915	-0.026177
49.92	-0.025573
49.925	-0.024842
49.93	-0.024008
49.935	-0.023093
49.94	-0.022118
49.945	-0.02109
49.95	-0.019998
49.955	-0.018821
49.96	-0.017541
49.965	-0.016144
49.97	-0.01464

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
60.75439453	0.000533
60.76049805	0.00053
60.76660156	0.000528
60.77270508	0.000532
60.77880859	0.00053
60.78491211	0.000522
60.79101563	0.000519
60.79711914	0.000517
60.80322266	0.000516
60.80932617	0.000522
60.81542969	0.000524
60.8215332	0.000518
60.82763672	0.000514
60.83374023	0.000512
60.83984375	0.000508
60.84594727	0.000512
60.85205078	0.000518
60.8581543	0.000519
60.86425781	0.000518
60.87036133	0.000518
60.87646484	0.000519
60.88256836	0.000521
60.88867188	0.000524
60.89477539	0.000527
60.90087891	0.000533
60.90698242	0.000537
60.91308594	0.000534
60.91918945	0.000532
60.92529297	0.000536
60.93139648	0.000543
60.9375	0.00055
60.94360352	0.000554
60.94970703	0.000551
60.95581055	0.000549
60.96191406	0.000554
60.96801758	0.000561
60.97412109	0.000565
60.98022461	0.000564
60.98632813	0.000559
60.99243164	0.000554
60.99853516	0.000553
61.00463867	0.000557

Input Motion

Time (s)	Acceleration (g)
49.975	-0.013053
49.98	-0.011426
49.985	-0.009803
49.99	-0.008241
49.995	-0.006772
50	-0.005373
50.005	-0.004002
50.01	-0.002592
50.015	-0.001076
50.02	0.00057
50.025	0.002346
50.03	0.004223
50.035	0.006144
50.04	0.008047
50.045	0.009863
50.05	0.011504
50.055	0.012888
50.06	0.013951
50.065	0.014641
50.07	0.014916
50.075	0.014756
50.08	0.014162
50.085	0.013168
50.09	0.011845
50.095	0.010285
50.1	0.008622
50.105	0.006989
50.11	0.005498
50.115	0.004247
50.12	0.003289
50.125	0.002647
50.13	0.00234
50.135	0.002359
50.14	0.002657
50.145	0.003176
50.15	0.003836
50.155	0.00456
50.16	0.005288
50.165	0.005986
50.17	0.006644
50.175	0.007267
50.18	0.007883

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
61.01074219	0.000557
61.0168457	0.000556
61.02294922	0.000557
61.02905273	0.000559
61.03515625	0.000558
61.04125977	0.000557
61.04736328	0.000561
61.0534668	0.00057
61.05957031	0.000576
61.06567383	0.000569
61.07177734	0.000556
61.07788086	0.000551
61.08398438	0.000554
61.09008789	0.000554
61.09619141	0.000551
61.10229492	0.000546
61.10839844	0.00054
61.11450195	0.000541
61.12060547	0.000541
61.12670898	0.000532
61.1328125	0.00053
61.13891602	0.000535
61.14501953	0.000533
61.15112305	0.000525
61.15722656	0.000519
61.16333008	0.00051
61.16943359	0.000511
61.17553711	0.00052
61.18164063	0.000519
61.18774414	0.000516
61.19384766	0.000523
61.19995117	0.00053
61.20605469	0.000537
61.2121582	0.000546
61.21826172	0.000549
61.22436523	0.000553
61.23046875	0.000559
61.23657227	0.000559
61.24267578	0.000555
61.2487793	0.000557
61.25488281	0.000561
61.26098633	0.000563

Input Motion

Time (s)	Acceleration (g)
50.185	0.008516
50.19	0.009132
50.195	0.009685
50.2	0.010112
50.205	0.010345
50.21	0.010349
50.215	0.010097
50.22	0.009602
50.225	0.008884
50.23	0.007956
50.235	0.006842
50.24	0.005564
50.245	0.004147
50.25	0.002669
50.255	0.001208
50.26	-0.000178
50.265	-0.001432
50.27	-0.002544
50.275	-0.003519
50.28	-0.00434
50.285	-0.005005
50.29	-0.005514
50.295	-0.005866
50.3	-0.006088
50.305	-0.006211
50.31	-0.006257
50.315	-0.006251
50.32	-0.006205
50.325	-0.006134
50.33	-0.006036
50.335	-0.005911
50.34	-0.005796
50.345	-0.005726
50.35	-0.005723
50.355	-0.005807
50.36	-0.005969
50.365	-0.006197
50.37	-0.006485
50.375	-0.006828
50.38	-0.007249
50.385	-0.007772
50.39	-0.008415

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
61.26708984	0.000562
61.27319336	0.000556
61.27929688	0.000553
61.28540039	0.000559
61.29150391	0.000565
61.29760742	0.000569
61.30371094	0.000567
61.30981445	0.000562
61.31591797	0.000558
61.32202148	0.000558
61.328125	0.000557
61.33422852	0.000556
61.34033203	0.000557
61.34643555	0.000559
61.35253906	0.000556
61.35864258	0.000551
61.36474609	0.000549
61.37084961	0.000549
61.37695313	0.000546
61.38305664	0.000541
61.38916016	0.000537
61.39526367	0.000531
61.40136719	0.000523
61.4074707	0.000516
61.41357422	0.00051
61.41967773	0.000507
61.42578125	0.000505
61.43188477	0.0005
61.43798828	0.000495
61.4440918	0.000496
61.45019531	0.000497
61.45629883	0.000493
61.46240234	0.00049
61.46850586	0.00049
61.47460938	0.000493
61.48071289	0.000499
61.48681641	0.000506
61.49291992	0.00051
61.49902344	0.000513
61.50512695	0.000518
61.51123047	0.000525
61.51733398	0.00053

Time (s)	Acceleration (g)
50.395	-0.009189
50.4	-0.010072
50.405	-0.011036
50.41	-0.012057
50.415	-0.013112
50.42	-0.014197
50.425	-0.01529
50.43	-0.016364
50.435	-0.017369
50.44	-0.018171
50.445	-0.01864
50.45	-0.018666
50.455	-0.01817
50.46	-0.017176
50.465	-0.015754
50.47	-0.013975
50.475	-0.011932
50.48	-0.009722
50.485	-0.007428
50.49	-0.005109
50.495	-0.002797
50.5	-0.000515
50.505	0.001728
50.51	0.003955
50.515	0.006173
50.52	0.008357
50.525	0.010468
50.53	0.012396
50.535	0.014029
50.54	0.015315
50.545	0.016223
50.55	0.016752
50.555	0.016943
50.56	0.016855
50.565	0.016563
50.57	0.016155
50.575	0.015715
50.58	0.015317
50.585	0.015014
50.59	0.014833
50.595	0.014782
50.6	0.014853

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
61.5234375	0.000531
61.52954102	0.000533
61.53564453	0.00054
61.54174805	0.000545
61.54785156	0.000543
61.55395508	0.00054
61.56005859	0.000536
61.56616211	0.000534
61.57226563	0.000537
61.57836914	0.000539
61.58447266	0.000537
61.59057617	0.000541
61.59667969	0.000545
61.6027832	0.000546
61.60888672	0.000548
61.61499023	0.000551
61.62109375	0.000555
61.62719727	0.000561
61.63330078	0.000564
61.6394043	0.000564
61.64550781	0.000565
61.65161133	0.000569
61.65771484	0.000571
61.66381836	0.000572
61.66992188	0.000572
61.67602539	0.000569
61.68212891	0.000566
61.68823242	0.000564
61.69433594	0.000561
61.70043945	0.000556
61.70654297	0.000553
61.71264648	0.00055
61.71875	0.000546
61.72485352	0.000538
61.73095703	0.000531
61.73706055	0.000526
61.74316406	0.000519
61.74926758	0.000511
61.75537109	0.000504
61.76147461	0.000497
61.76757813	0.000491
61.77368164	0.00049

Time (s)	Acceleration (g)
50.605	0.015027
50.61	0.015291
50.615	0.015614
50.62	0.015978
50.625	0.016349
50.63	0.016661
50.635	0.016856
50.64	0.016897
50.645	0.016766
50.65	0.016535
50.655	0.016291
50.66	0.016112
50.665	0.01607
50.67	0.016165
50.675	0.016367
50.68	0.01665
50.685	0.016979
50.69	0.017326
50.695	0.017683
50.7	0.018067
50.705	0.018505
50.71	0.019015
50.715	0.019608
50.72	0.020269
50.725	0.020967
50.73	0.021669
50.735	0.02233
50.74	0.0229
50.745	0.023326
50.75	0.023555
50.755	0.023547
50.76	0.023237
50.765	0.022581
50.77	0.021587
50.775	0.020283
50.78	0.018744
50.785	0.017057
50.79	0.015288
50.795	0.013493
50.8	0.011713
50.805	0.009963
50.81	0.008262

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
61.77978516	0.000491
61.78588867	0.000491
61.79199219	0.000489
61.7980957	0.000487
61.80419922	0.000486
61.81030273	0.000486
61.81640625	0.000486
61.82250977	0.000487
61.82861328	0.000488
61.8347168	0.00049
61.84082031	0.000491
61.84692383	0.00049
61.85302734	0.00049
61.85913086	0.000495
61.86523438	0.000502
61.87133789	0.00051
61.87744141	0.000517
61.88354492	0.000519
61.88964844	0.000522
61.89575195	0.000525
61.90185547	0.000528
61.90795898	0.000535
61.9140625	0.000543
61.92016602	0.000546
61.92626953	0.000546
61.93237305	0.000547
61.93847656	0.000546
61.94458008	0.000546
61.95068359	0.000553
61.95678711	0.000561
61.96289063	0.000561
61.96899414	0.000558
61.97509766	0.000558
61.98120117	0.000555
61.98730469	0.00055
61.9934082	0.000546
61.99951172	0.000541
62.00561523	0.000533
62.01171875	0.000528
62.01782227	0.000523
62.02392578	0.00052
62.0300293	0.000521

Time (s)	Acceleration (g)
50.815	0.00661
50.82	0.004988
50.825	0.003371
50.83	0.001735
50.835	0.000057
50.84	-0.00168
50.845	-0.003485
50.85	-0.00536
50.855	-0.007299
50.86	-0.009284
50.865	-0.01129
50.87	-0.013295
50.875	-0.015272
50.88	-0.017188
50.885	-0.019009
50.89	-0.020703
50.895	-0.022235
50.9	-0.023558
50.905	-0.024626
50.91	-0.025374
50.915	-0.025735
50.92	-0.025678
50.925	-0.025191
50.93	-0.02428
50.935	-0.022988
50.94	-0.0214
50.945	-0.019625
50.95	-0.017788
50.955	-0.016011
50.96	-0.014388
50.965	-0.012986
50.97	-0.011844
50.975	-0.010974
50.98	-0.010381
50.985	-0.010055
50.99	-0.009982
50.995	-0.010139
51	-0.010481
51.005	-0.010959
51.01	-0.011498
51.015	-0.012028
51.02	-0.01249

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
62.03613281	0.000519
62.04223633	0.000513
62.04833984	0.000508
62.05444336	0.000507
62.06054688	0.000511
62.06665039	0.000511
62.07275391	0.000509
62.07885742	0.000511
62.08496094	0.000508
62.09106445	0.000498
62.09716797	0.000492
62.10327148	0.000487
62.109375	0.000481
62.11547852	0.00048
62.12158203	0.000475
62.12768555	0.000467
62.13378906	0.00046
62.13989258	0.000453
62.14599609	0.000451
62.15209961	0.000457
62.15820313	0.000455
62.16430664	0.000453
62.17041016	0.000457
62.17651367	0.000455
62.18261719	0.000453
62.1887207	0.000459
62.19482422	0.000464
62.20092773	0.000469
62.20703125	0.000478
62.21313477	0.000481
62.21923828	0.000479
62.2253418	0.000483
62.23144531	0.000491
62.23754883	0.000497
62.24365234	0.000498
62.24975586	0.000496
62.25585938	0.000497
62.26196289	0.000503
62.26806641	0.000506
62.27416992	0.000504
62.28027344	0.000503
62.28637695	0.000503

Time (s)	Acceleration (g)
51.025	-0.012836
51.03	-0.01304
51.035	-0.013086
51.04	-0.01294
51.045	-0.012579
51.05	-0.011999
51.055	-0.011209
51.06	-0.010268
51.065	-0.009238
51.07	-0.008183
51.075	-0.007154
51.08	-0.006136
51.085	-0.005102
51.09	-0.004013
51.095	-0.002832
51.1	-0.001584
51.105	-0.000303
51.11	0.000975
51.115	0.002206
51.12	0.003393
51.125	0.004531
51.13	0.005602
51.135	0.006581
51.14	0.007399
51.145	0.007992
51.15	0.008325
51.155	0.008376
51.16	0.008184
51.165	0.007811
51.17	0.007303
51.175	0.006723
51.18	0.006113
51.185	0.005514
51.19	0.005004
51.195	0.004645
51.2	0.004497
51.205	0.004596
51.21	0.004907
51.215	0.005368
51.22	0.005902
51.225	0.006423
51.23	0.006869

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
62.29248047	0.000499
62.29858398	0.000494
62.3046875	0.000491
62.31079102	0.000489
62.31689453	0.000491
62.32299805	0.000492
62.32910156	0.000489
62.33520508	0.000486
62.34130859	0.000488
62.34741211	0.000491
62.35351563	0.000492
62.35961914	0.000495
62.36572266	0.000499
62.37182617	0.000498
62.37792969	0.000494
62.3840332	0.000495
62.39013672	0.000496
62.39624023	0.000493
62.40234375	0.000491
62.40844727	0.000486
62.41455078	0.000477
62.4206543	0.00047
62.42675781	0.000468
62.43286133	0.000461
62.43896484	0.000453
62.44506836	0.000449
62.45117188	0.000444
62.45727539	0.000438
62.46337891	0.000434
62.46948242	0.00043
62.47558594	0.000432
62.48168945	0.000436
62.48779297	0.000432
62.49389648	0.000431
62.5	0.000438
62.50610352	0.000444
62.51220703	0.000448
62.51831055	0.000452
62.52441406	0.000453
62.53051758	0.000454
62.53662109	0.000456
62.54272461	0.000457

Time (s)	Acceleration (g)
51.235	0.007199
51.24	0.007389
51.245	0.007443
51.25	0.007398
51.255	0.00731
51.26	0.007243
51.265	0.007256
51.27	0.007405
51.275	0.007723
51.28	0.008189
51.285	0.008756
51.29	0.009354
51.295	0.009899
51.3	0.010311
51.305	0.010522
51.31	0.010485
51.315	0.010173
51.32	0.009579
51.325	0.008715
51.33	0.007603
51.335	0.006275
51.34	0.004784
51.345	0.003181
51.35	0.001504
51.355	-0.000207
51.36	-0.001937
51.365	-0.003672
51.37	-0.005356
51.375	-0.006937
51.38	-0.008365
51.385	-0.009592
51.39	-0.010592
51.395	-0.011342
51.4	-0.011818
51.405	-0.012002
51.41	-0.011854
51.415	-0.011351
51.42	-0.010496
51.425	-0.009323
51.43	-0.007925
51.435	-0.006413
51.44	-0.004905

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
62.54882813	0.000459
62.55493164	0.00046
62.56103516	0.000462
62.56713867	0.000465
62.57324219	0.000462
62.5793457	0.000456
62.58544922	0.00045
62.59155273	0.000446
62.59765625	0.000447
62.60375977	0.000448
62.60986328	0.000444
62.6159668	0.000439
62.62207031	0.000437
62.62817383	0.000437
62.63427734	0.00044
62.64038086	0.000443
62.64648438	0.000444
62.65258789	0.000442
62.65869141	0.000439
62.66479492	0.000438
62.67089844	0.000439
62.67700195	0.000435
62.68310547	0.00043
62.68920898	0.00043
62.6953125	0.000429
62.70141602	0.000419
62.70751953	0.000415
62.71362305	0.000418
62.71972656	0.000419
62.72583008	0.000416
62.73193359	0.000413
62.73803711	0.000408
62.74414063	0.000404
62.75024414	0.000403
62.75634766	0.000403
62.76245117	0.0004
62.76855469	0.000395
62.7746582	0.000387
62.78076172	0.000383
62.78686523	0.000381
62.79296875	0.000381
62.79907227	0.000383

Time (s)	Acceleration (g)
51.445	-0.003519
51.45	-0.002306
51.455	-0.001299
51.46	-0.000553
51.465	-0.000097
51.47	0.000031
51.475	-0.00019
51.48	-0.000724
51.485	-0.001516
51.49	-0.002496
51.495	-0.003585
51.5	-0.004718
51.505	-0.005842
51.51	-0.006931
51.515	-0.007975
51.52	-0.008965
51.525	-0.009893
51.53	-0.01074
51.535	-0.011475
51.54	-0.012061
51.545	-0.01246
51.55	-0.012649
51.555	-0.012611
51.56	-0.012366
51.565	-0.011933
51.57	-0.011301
51.575	-0.010468
51.58	-0.009407
51.585	-0.0081
51.59	-0.006595
51.595	-0.004965
51.6	-0.003281
51.605	-0.001635
51.61	-0.000125
51.615	0.001167
51.62	0.002191
51.625	0.002927
51.63	0.003394
51.635	0.003639
51.64	0.003721
51.645	0.0037
51.65	0.003622

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
62.80517578	0.000385
62.8112793	0.000383
62.81738281	0.000379
62.82348633	0.000375
62.82958984	0.000375
62.83569336	0.000378
62.84179688	0.000382
62.84790039	0.000378
62.85400391	0.000369
62.86010742	0.000365
62.86621094	0.000362
62.87231445	0.000362
62.87841797	0.000366
62.88452148	0.000366
62.890625	0.000364
62.89672852	0.000365
62.90283203	0.000363
62.90893555	0.000361
62.91503906	0.000364
62.92114258	0.000368
62.92724609	0.000377
62.93334961	0.000383
62.93945313	0.000382
62.94555664	0.000386
62.95166016	0.000396
62.95776367	0.000403
62.96386719	0.000407
62.9699707	0.000408
62.97607422	0.000407
62.98217773	0.000404
62.98828125	0.000403
62.99438477	0.000407
63.00048828	0.00041
63.0065918	0.000405
63.01269531	0.000399
63.01879883	0.000397
63.02490234	0.000392
63.03100586	0.000387
63.03710938	0.000387
63.04321289	0.000387
63.04931641	0.000384
63.05541992	0.000378

Input Motion

Time (s)	Acceleration (g)
51.655	0.003522
51.66	0.003413
51.665	0.0033
51.67	0.0032
51.675	0.003132
51.68	0.003122
51.685	0.003202
51.69	0.00338
51.695	0.003659
51.7	0.004056
51.705	0.00457
51.71	0.005167
51.715	0.005798
51.72	0.006394
51.725	0.006886
51.73	0.00721
51.735	0.007319
51.74	0.007205
51.745	0.006886
51.75	0.006395
51.755	0.005786
51.76	0.005134
51.765	0.004513
51.77	0.003994
51.775	0.003629
51.78	0.003434
51.785	0.003401
51.79	0.003503
51.795	0.003708
51.8	0.003984
51.805	0.004298
51.81	0.004653
51.815	0.005046
51.82	0.005432
51.825	0.005761
51.83	0.005941
51.835	0.00588
51.84	0.005522
51.845	0.004833
51.85	0.003819
51.855	0.002517
51.86	0.000979

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
63.06152344	0.000369
63.06762695	0.000364
63.07373047	0.000366
63.07983398	0.000369
63.0859375	0.000367
63.09204102	0.00036
63.09814453	0.000351
63.10424805	0.000347
63.11035156	0.000345
63.11645508	0.000344
63.12255859	0.000341
63.12866211	0.000332
63.13476563	0.000322
63.14086914	0.000319
63.14697266	0.000313
63.15307617	0.000307
63.15917969	0.000308
63.1652832	0.00031
63.17138672	0.000307
63.17749023	0.000303
63.18359375	0.000297
63.18969727	0.000297
63.19580078	0.000306
63.2019043	0.000311
63.20800781	0.000307
63.21411133	0.000305
63.22021484	0.000301
63.22631836	0.000298
63.23242188	0.000301
63.23852539	0.000306
63.24462891	0.000307
63.25073242	0.000307
63.25683594	0.000308
63.26293945	0.000306
63.26904297	0.000308
63.27514648	0.000311
63.28125	0.000312
63.28735352	0.000319
63.29345703	0.000325
63.29956055	0.000319
63.30566406	0.000312
63.31176758	0.000313

Time (s)	Acceleration (g)
51.865	-0.000731
51.87	-0.002539
51.875	-0.004374
51.88	-0.006166
51.885	-0.007849
51.89	-0.009384
51.895	-0.010739
51.9	-0.011883
51.905	-0.012793
51.91	-0.013444
51.915	-0.013817
51.92	-0.013906
51.925	-0.01372
51.93	-0.013266
51.935	-0.012567
51.94	-0.011686
51.945	-0.010694
51.95	-0.00967
51.955	-0.008694
51.96	-0.007823
51.965	-0.007099
51.97	-0.006547
51.975	-0.006169
51.98	-0.005954
51.985	-0.005882
51.99	-0.005899
51.995	-0.005952
52	-0.006013
52.005	-0.006066
52.01	-0.006088
52.015	-0.006078
52.02	-0.006058
52.025	-0.006057
52.03	-0.006132
52.035	-0.006331
52.04	-0.006678
52.045	-0.007193
52.05	-0.007843
52.055	-0.008592
52.06	-0.009457
52.065	-0.010441
52.07	-0.011541

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
63.31787109	0.000318
63.32397461	0.000324
63.33007813	0.000323
63.33618164	0.000316
63.34228516	0.000313
63.34838867	0.000314
63.35449219	0.000313
63.3605957	0.000314
63.36669922	0.000313
63.37280273	0.00031
63.37890625	0.000311
63.38500977	0.000311
63.39111328	0.000307
63.3972168	0.000306
63.40332031	0.000309
63.40942383	0.000307
63.41552734	0.000298
63.42163086	0.000287
63.42773438	0.000275
63.43383789	0.000266
63.43994141	0.000261
63.44604492	0.000252
63.45214844	0.000238
63.45825195	0.000226
63.46435547	0.00022
63.47045898	0.000216
63.4765625	0.000214
63.48266602	0.000213
63.48876953	0.000211
63.49487305	0.000213
63.50097656	0.000213
63.50708008	0.000207
63.51318359	0.000206
63.51928711	0.000214
63.52539063	0.000223
63.53149414	0.000224
63.53759766	0.000221
63.54370117	0.000216
63.54980469	0.000212
63.5559082	0.000217
63.56201172	0.000228
63.56811523	0.000229

Time (s)	Acceleration (g)
52.075	-0.012746
52.08	-0.01398
52.085	-0.015159
52.09	-0.016218
52.095	-0.017087
52.1	-0.01776
52.105	-0.018246
52.11	-0.01853
52.115	-0.018606
52.12	-0.018441
52.125	-0.018003
52.13	-0.017277
52.135	-0.016258
52.14	-0.014964
52.145	-0.013426
52.15	-0.011674
52.155	-0.009742
52.16	-0.007679
52.165	-0.005542
52.17	-0.003386
52.175	-0.001277
52.18	0.000695
52.185	0.002445
52.19	0.0039
52.195	0.005008
52.2	0.005767
52.205	0.006206
52.21	0.00638
52.215	0.006368
52.22	0.006257
52.225	0.006133
52.23	0.006072
52.235	0.006122
52.24	0.006314
52.245	0.006649
52.25	0.00707
52.255	0.007504
52.26	0.007895
52.265	0.008192
52.27	0.008348
52.275	0.008338
52.28	0.00817

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
63.57421875	0.000226
63.58032227	0.000227
63.58642578	0.000226
63.5925293	0.000231
63.59863281	0.000238
63.60473633	0.000238
63.61083984	0.00024
63.61694336	0.000247
63.62304688	0.000249
63.62915039	0.000249
63.63525391	0.00025
63.64135742	0.000252
63.64746094	0.000259
63.65356445	0.000261
63.65966797	0.000254
63.66577148	0.000249
63.671875	0.000248
63.67797852	0.00025
63.68408203	0.000253
63.69018555	0.000247
63.69628906	0.000237
63.70239258	0.000231
63.70849609	0.000229
63.71459961	0.000229
63.72070313	0.000229
63.72680664	0.000224
63.73291016	0.000216
63.73901367	0.000211
63.74511719	0.000205
63.7512207	0.000195
63.75732422	0.000188
63.76342773	0.000188
63.76953125	0.000187
63.77563477	0.000178
63.78173828	0.000166
63.7878418	0.000159
63.79394531	0.000161
63.80004883	0.00016
63.80615234	0.000156
63.81225586	0.000152
63.81835938	0.000145
63.82446289	0.000138

Input Motion

Time (s)	Acceleration (g)
52.285	0.007855
52.29	0.007417
52.295	0.006883
52.3	0.006246
52.305	0.005507
52.31	0.004717
52.315	0.003935
52.32	0.003253
52.325	0.002755
52.33	0.002488
52.335	0.002476
52.34	0.002674
52.345	0.003013
52.35	0.003448
52.355	0.00393
52.36	0.004428
52.365	0.004929
52.37	0.005407
52.375	0.005851
52.38	0.006272
52.385	0.00669
52.39	0.007135
52.395	0.007639
52.4	0.008231
52.405	0.008918
52.41	0.009677
52.415	0.010467
52.42	0.011201
52.425	0.011788
52.43	0.012182
52.435	0.012354
52.44	0.012312
52.445	0.01209
52.45	0.01172
52.455	0.011243
52.46	0.010701
52.465	0.010126
52.47	0.009565
52.475	0.009042
52.48	0.008533
52.485	0.008
52.49	0.007382

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
63.83056641	0.000138
63.83666992	0.000137
63.84277344	0.000133
63.84887695	0.000133
63.85498047	0.000132
63.86108398	0.000127
63.8671875	0.000124
63.87329102	0.00012
63.87939453	0.000118
63.88549805	0.000122
63.89160156	0.000127
63.89770508	0.000126
63.90380859	0.00012
63.90991211	0.000116
63.91601563	0.000123
63.92211914	0.000138
63.92822266	0.000146
63.93432617	0.000147
63.94042969	0.00015
63.9465332	0.000156
63.95263672	0.000164
63.95874023	0.000174
63.96484375	0.000177
63.97094727	0.000179
63.97705078	0.000182
63.9831543	0.000174
63.98925781	0.000164
63.99536133	0.000164
64.00146484	0.000164
64.00756836	0.000163
64.01367188	0.000161
64.01977539	0.000151
64.02587891	0.000142
64.03198242	0.000147
64.03808594	0.000155
64.04418945	0.000156
64.05029297	0.000153
64.05639648	0.000148
64.0625	0.000145
64.06860352	0.000143
64.07470703	0.00014
64.08081055	0.000141

Time (s)	Acceleration (g)
52.495	0.006624
52.5	0.005711
52.505	0.004642
52.51	0.00346
52.515	0.002221
52.52	0.000951
52.525	-0.000315
52.53	-0.001546
52.535	-0.0027
52.54	-0.003695
52.545	-0.004447
52.55	-0.00485
52.555	-0.004825
52.56	-0.004374
52.565	-0.00355
52.57	-0.002447
52.575	-0.001197
52.58	0.000054
52.585	0.001174
52.59	0.002058
52.595	0.002636
52.6	0.0029
52.605	0.002866
52.61	0.002565
52.615	0.002027
52.62	0.001254
52.625	0.000231
52.63	-0.001075
52.635	-0.002696
52.64	-0.004654
52.645	-0.006954
52.65	-0.009557
52.655	-0.012405
52.66	-0.015436
52.665	-0.01857
52.67	-0.021726
52.675	-0.024813
52.68	-0.027701
52.685	-0.030264
52.69	-0.032375
52.695	-0.033923
52.7	-0.034862

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
64.08691406	0.00014
64.09301758	0.000135
64.09912109	0.000129
64.10522461	0.000123
64.11132813	0.000119
64.11743164	0.00012
64.12353516	0.000118
64.12963867	0.000111
64.13574219	0.000104
64.1418457	9.3E-05
64.14794922	8.39E-05
64.15405273	8.44E-05
64.16015625	8.32E-05
64.16625977	7.37E-05
64.17236328	6.47E-05
64.1784668	5.69E-05
64.18457031	5.25E-05
64.19067383	5.33E-05
64.19677734	5.07E-05
64.20288086	4.56E-05
64.20898438	4.46E-05
64.21508789	3.96E-05
64.22119141	3.45E-05
64.22729492	3.66E-05
64.23339844	3.52E-05
64.23950195	3.77E-05
64.24560547	5.15E-05
64.25170898	5.95E-05
64.2578125	5.93E-05
64.26391602	6.16E-05
64.27001953	6.44E-05
64.27612305	6.97E-05
64.28222656	7.78E-05
64.28833008	7.88E-05
64.29443359	7.37E-05
64.30053711	7.05E-05
64.30664063	7.07E-05
64.31274414	7.37E-05
64.31884766	7.47E-05
64.32495117	7.27E-05
64.33105469	7.73E-05
64.3371582	8.34E-05

Time (s)	Acceleration (g)
52.705	-0.03518
52.71	-0.034893
52.715	-0.034052
52.72	-0.032707
52.725	-0.030911
52.73	-0.02872
52.735	-0.02618
52.74	-0.023341
52.745	-0.020246
52.75	-0.016946
52.755	-0.013501
52.76	-0.009945
52.765	-0.006325
52.77	-0.002713
52.775	0.000816
52.78	0.004187
52.785	0.007327
52.79	0.010183
52.795	0.012712
52.8	0.014876
52.805	0.016653
52.81	0.018021
52.815	0.018984
52.82	0.019574
52.825	0.01984
52.83	0.019865
52.835	0.019723
52.84	0.019455
52.845	0.019089
52.85	0.018601
52.855	0.017966
52.86	0.017178
52.865	0.016234
52.87	0.015185
52.875	0.014107
52.88	0.013031
52.885	0.012013
52.89	0.011139
52.895	0.010482
52.9	0.010138
52.905	0.010174
52.91	0.010554

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
64.34326172	8.23E-05
64.34936523	8.33E-05
64.35546875	8.95E-05
64.36157227	9.6E-05
64.36767578	0.000103
64.3737793	0.000104
64.37988281	9.76E-05
64.38598633	9.91E-05
64.39208984	0.000109
64.39819336	0.000115
64.40429688	0.000115
64.41040039	0.000108
64.41650391	0.000102
64.42260742	0.000104
64.42871094	0.000105
64.43481445	0.000102
64.44091797	0.0001
64.44702148	9.95E-05
64.453125	9.62E-05
64.45922852	8.86E-05
64.46533203	8.06E-05
64.47143555	8.34E-05
64.47753906	9.04E-05
64.48364258	8.83E-05
64.48974609	8.25E-05
64.49584961	7.77E-05
64.50195313	7.68E-05
64.50805664	8.41E-05
64.51416016	8.77E-05
64.52026367	8.2E-05
64.52636719	7.81E-05
64.5324707	7.55E-05
64.53857422	7.02E-05
64.54467773	6.65E-05
64.55078125	6.25E-05
64.55688477	5.78E-05
64.56298828	5.52E-05
64.5690918	4.78E-05
64.57519531	3.82E-05
64.58129883	3.51E-05
64.58740234	3.57E-05
64.59350586	3.64E-05

Input Motion

Time (s)	Acceleration (g)
52.915	0.011212
52.92	0.012028
52.925	0.012861
52.93	0.01362
52.935	0.014223
52.94	0.014594
52.945	0.014686
52.95	0.014436
52.955	0.013805
52.96	0.012797
52.965	0.011436
52.97	0.009779
52.975	0.007901
52.98	0.005887
52.985	0.003835
52.99	0.001859
52.995	0.000075
53	-0.0014
53.005	-0.002466
53.01	-0.003039
53.015	-0.003077
53.02	-0.002606
53.025	-0.001694
53.03	-0.000471
53.035	0.00091
53.04	0.002308
53.045	0.003595
53.05	0.004687
53.055	0.005547
53.06	0.006176
53.065	0.006627
53.07	0.006993
53.075	0.007383
53.08	0.007932
53.085	0.008762
53.09	0.009924
53.095	0.01143
53.1	0.013246
53.105	0.015287
53.11	0.017439
53.115	0.019565
53.12	0.0215

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
64.59960938	4.17E-05
64.60571289	4.15E-05
64.61181641	3.57E-05
64.61791992	3.33E-05
64.62402344	3.87E-05
64.63012695	4.88E-05
64.63623047	5.61E-05
64.64233398	5.69E-05
64.6484375	5.61E-05
64.65454102	5.87E-05
64.66064453	6.43E-05
64.66674805	7.07E-05
64.67285156	7.82E-05
64.67895508	8.53E-05
64.68505859	9.08E-05
64.69116211	9.55E-05
64.69726563	9.64E-05
64.70336914	9.34E-05
64.70947266	9.61E-05
64.71557617	0.000104
64.72167969	0.000109
64.7277832	0.000112
64.73388672	0.00011
64.73999023	0.000111
64.74609375	0.000121
64.75219727	0.000132
64.75830078	0.000137
64.7644043	0.000142
64.77050781	0.000144
64.77661133	0.000145
64.78271484	0.00015
64.78881836	0.000154
64.79492188	0.000156
64.80102539	0.000159
64.80712891	0.000158
64.81323242	0.000151
64.81933594	0.000148
64.82543945	0.000152
64.83154297	0.000157
64.83764648	0.00016
64.84375	0.000158
64.84985352	0.000148

Input Motion

Time (s)	Acceleration (g)
53.125	0.023099
53.13	0.024272
53.135	0.024983
53.14	0.02525
53.145	0.025135
53.15	0.02474
53.155	0.024167
53.16	0.023479
53.165	0.022716
53.17	0.021863
53.175	0.020885
53.18	0.019745
53.185	0.018405
53.19	0.016824
53.195	0.014973
53.2	0.012835
53.205	0.010406
53.21	0.007693
53.215	0.004716
53.22	0.001527
53.225	-0.001827
53.23	-0.005286
53.235	-0.008804
53.24	-0.012378
53.245	-0.016007
53.25	-0.01969
53.255	-0.023428
53.26	-0.027153
53.265	-0.030792
53.27	-0.034297
53.275	-0.037615
53.28	-0.040713
53.285	-0.043572
53.29	-0.046153
53.295	-0.04843
53.3	-0.050395
53.305	-0.052041
53.31	-0.053383
53.315	-0.054428
53.32	-0.055156
53.325	-0.05554
53.33	-0.055541

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
64.85595703	0.000142
64.86206055	0.000145
64.86816406	0.000147
64.87426758	0.000143
64.88037109	0.000139
64.88647461	0.000137
64.89257813	0.000134
64.89868164	0.00013
64.90478516	0.000127
64.91088867	0.000127
64.91699219	0.000129
64.9230957	0.00013
64.92919922	0.000127
64.93530273	0.000123
64.94140625	0.000123
64.94750977	0.000127
64.95361328	0.000133
64.9597168	0.000135
64.96582031	0.000132
64.97192383	0.000132
64.97802734	0.000134
64.98413086	0.000134
64.99023438	0.000137
64.99633789	0.000139
65.00244141	0.000137
65.00854492	0.000137
65.01464844	0.000138
65.02075195	0.000138
65.02685547	0.000139
65.03295898	0.000144
65.0390625	0.000152
65.04516602	0.000159
65.05126953	0.000162
65.05737305	0.000163
65.06347656	0.000167
65.06958008	0.000176
65.07568359	0.000189
65.08178711	0.000199
65.08789063	0.000199
65.09399414	0.000198
65.10009766	0.000203
65.10620117	0.000209

Time (s)	Acceleration (g)
53.335	-0.055116
53.34	-0.054223
53.345	-0.052828
53.35	-0.050899
53.355	-0.048419
53.36	-0.045383
53.365	-0.041801
53.37	-0.037715
53.375	-0.033165
53.38	-0.028193
53.385	-0.022838
53.39	-0.017097
53.395	-0.010971
53.4	-0.004476
53.405	0.002356
53.41	0.009449
53.415	0.016694
53.42	0.023987
53.425	0.031201
53.43	0.038185
53.435	0.044805
53.44	0.050924
53.445	0.056435
53.45	0.061317
53.455	0.065573
53.46	0.069186
53.465	0.072154
53.47	0.074443
53.475	0.076023
53.48	0.076901
53.485	0.077102
53.49	0.076681
53.495	0.075713
53.5	0.074254
53.505	0.072358
53.51	0.070087
53.515	0.067494
53.52	0.064615
53.525	0.061493
53.53	0.058179
53.535	0.054742
53.54	0.051275

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
65.11230469	0.000214
65.1184082	0.00022
65.12451172	0.000224
65.13061523	0.000226
65.13671875	0.000228
65.14282227	0.000229
65.14892578	0.000227
65.1550293	0.000233
65.16113281	0.000241
65.16723633	0.000241
65.17333984	0.000236
65.17944336	0.000231
65.18554688	0.000232
65.19165039	0.000238
65.19775391	0.000239
65.20385742	0.000238
65.20996094	0.000235
65.21606445	0.000231
65.22216797	0.00023
65.22827148	0.000232
65.234375	0.000231
65.24047852	0.00023
65.24658203	0.00023
65.25268555	0.000225
65.25878906	0.000219
65.26489258	0.000216
65.27099609	0.000217
65.27709961	0.000218
65.28320313	0.000215
65.28930664	0.000209
65.29541016	0.000203
65.30151367	0.000202
65.30761719	0.000203
65.3137207	0.000205
65.31982422	0.000207
65.32592773	0.000205
65.33203125	0.000201
65.33813477	0.000202
65.34423828	0.000205
65.3503418	0.000208
65.35644531	0.000212
65.36254883	0.000215

Time (s)	Acceleration (g)
53.545	0.047881
53.55	0.044673
53.555	0.041746
53.56	0.039152
53.565	0.036908
53.57	0.034984
53.575	0.033319
53.58	0.031855
53.585	0.030525
53.59	0.029262
53.595	0.028006
53.6	0.026695
53.605	0.025281
53.61	0.023726
53.615	0.02201
53.62	0.02016
53.625	0.018213
53.63	0.016188
53.635	0.014108
53.64	0.011977
53.645	0.009766
53.65	0.0075
53.655	0.005167
53.66	0.002692
53.665	0.000266
53.67	-0.002033
53.675	-0.004593
53.68	-0.007451
53.685	-0.010162
53.69	-0.012869
53.695	-0.015207
53.7	-0.016377
53.705	-0.016822
53.71	-0.016807
53.715	-0.016144
53.72	-0.014895
53.725	-0.013091
53.73	-0.010734
53.735	-0.007869
53.74	-0.004548
53.745	-0.000834
53.75	0.003194

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
65.36865234	0.000218
65.37475586	0.000222
65.38085938	0.000222
65.38696289	0.000225
65.39306641	0.000236
65.39916992	0.000245
65.40527344	0.000252
65.41137695	0.000256
65.41748047	0.000259
65.42358398	0.000265
65.4296875	0.000275
65.43579102	0.000283
65.44189453	0.000291
65.44799805	0.000296
65.45410156	0.000296
65.46020508	0.000296
65.46630859	0.000301
65.47241211	0.000304
65.47851563	0.000307
65.48461914	0.00031
65.49072266	0.000311
65.49682617	0.000307
65.50292969	0.000305
65.5090332	0.00031
65.51513672	0.000315
65.52124023	0.000315
65.52734375	0.000311
65.53344727	0.000307
65.53955078	0.000307
65.5456543	0.000306
65.55175781	0.000307
65.55786133	0.000308
65.56396484	0.000305
65.57006836	0.0003
65.57617188	0.000298
65.58227539	0.000297
65.58837891	0.000295
65.59448242	0.000296
65.60058594	0.000299
65.60668945	0.000301
65.61279297	0.000301
65.61889648	0.0003

Input Motion

Time (s)	Acceleration (g)
53.755	0.007452
53.76	0.011849
53.765	0.016296
53.77	0.020704
53.775	0.024986
53.78	0.02906
53.785	0.032838
53.79	0.036237
53.795	0.039173
53.8	0.041544
53.805	0.043262
53.81	0.044268
53.815	0.04453
53.82	0.044063
53.825	0.04292
53.83	0.04118
53.835	0.038949
53.84	0.036348
53.845	0.033505
53.85	0.030543
53.855	0.027584
53.86	0.024737
53.865	0.022097
53.87	0.01976
53.875	0.017798
53.88	0.016235
53.885	0.015064
53.89	0.014248
53.895	0.013714
53.9	0.01338
53.905	0.013161
53.91	0.012935
53.915	0.012593
53.92	0.012067
53.925	0.011309
53.93	0.010292
53.935	0.009013
53.94	0.007462
53.945	0.005646
53.95	0.003607
53.955	0.001411
53.96	-0.000848

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
65.625	0.0003
65.63110352	0.000301
65.63720703	0.000303
65.64331055	0.000304
65.64941406	0.000303
65.65551758	0.000298
65.66162109	0.000295
65.66772461	0.000297
65.67382813	0.0003
65.67993164	0.000302
65.68603516	0.000303
65.69213867	0.000303
65.69824219	0.0003
65.7043457	0.000301
65.71044922	0.000304
65.71655273	0.000307
65.72265625	0.000315
65.72875977	0.00032
65.73486328	0.000321
65.7409668	0.000324
65.74707031	0.000327
65.75317383	0.000333
65.75927734	0.000343
65.76538086	0.000352
65.77148438	0.000357
65.77758789	0.000361
65.78369141	0.000362
65.78979492	0.000366
65.79589844	0.000376
65.80200195	0.000381
65.80810547	0.000383
65.81420898	0.000387
65.8203125	0.000389
65.82641602	0.000386
65.83251953	0.000384
65.83862305	0.000387
65.84472656	0.000392
65.85083008	0.000391
65.85693359	0.000386
65.86303711	0.000385
65.86914063	0.000385
65.87524414	0.000386

Input Motion

Time (s)	Acceleration (g)
53.965	-0.003067
53.97	-0.005121
53.975	-0.006899
53.98	-0.008345
53.985	-0.009416
53.99	-0.010095
53.995	-0.010373
54	-0.010214
54.005	-0.009591
54.01	-0.008495
54.015	-0.006937
54.02	-0.004973
54.025	-0.002699
54.03	-0.000251
54.035	0.002214
54.04	0.004518
54.045	0.0065
54.05	0.008039
54.055	0.00906
54.06	0.009547
54.065	0.009549
54.07	0.009154
54.075	0.008493
54.08	0.007735
54.085	0.007036
54.09	0.006532
54.095	0.006318
54.1	0.00639
54.105	0.006703
54.11	0.007213
54.115	0.007858
54.12	0.008575
54.125	0.009313
54.13	0.010038
54.135	0.010734
54.14	0.01138
54.145	0.011956
54.15	0.012468
54.155	0.012915
54.16	0.013254
54.165	0.013451
54.17	0.013491

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
65.88134766	0.000389
65.88745117	0.000386
65.89355469	0.000381
65.8996582	0.000379
65.90576172	0.000373
65.91186523	0.000368
65.91796875	0.000368
65.92407227	0.000366
65.93017578	0.000358
65.9362793	0.000354
65.94238281	0.000349
65.94848633	0.000341
65.95458984	0.000341
65.96069336	0.000346
65.96679688	0.000347
65.97290039	0.000345
65.97900391	0.000338
65.98510742	0.000332
65.99121094	0.000335
65.99731445	0.000339
66.00341797	0.000342
66.00952148	0.000346
66.015625	0.000346
66.02172852	0.000341
66.02783203	0.000343
66.03393555	0.000346
66.04003906	0.000351
66.04614258	0.00036
66.05224609	0.000366
66.05834961	0.000367
66.06445313	0.000367
66.07055664	0.000368
66.07666016	0.000377
66.08276367	0.000389
66.08886719	0.000393
66.0949707	0.000398
66.10107422	0.000403
66.10717773	0.000404
66.11328125	0.000408
66.11938477	0.000413
66.12548828	0.000415
66.1315918	0.000418

Time (s)	Acceleration (g)
54.175	0.013364
54.18	0.013088
54.185	0.012693
54.19	0.012206
54.195	0.011653
54.2	0.011071
54.205	0.010493
54.21	0.009921
54.215	0.009362
54.22	0.00884
54.225	0.008383
54.23	0.00802
54.235	0.00777
54.24	0.007634
54.245	0.007592
54.25	0.007593
54.255	0.007574
54.26	0.007478
54.265	0.007259
54.27	0.006905
54.275	0.006435
54.28	0.005888
54.285	0.005323
54.29	0.00482
54.295	0.004446
54.3	0.004241
54.305	0.004221
54.31	0.004339
54.315	0.004537
54.32	0.004755
54.325	0.004933
54.33	0.005067
54.335	0.005166
54.34	0.005208
54.345	0.005188
54.35	0.005094
54.355	0.004905
54.36	0.004638
54.365	0.00431
54.37	0.003898
54.375	0.003384
54.38	0.002765

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
66.13769531	0.000423
66.14379883	0.000422
66.14990234	0.000418
66.15600586	0.00042
66.16210938	0.000427
66.16821289	0.000434
66.17431641	0.000444
66.18041992	0.000448
66.18652344	0.000445
66.19262695	0.000448
66.19873047	0.000456
66.20483398	0.000461
66.2109375	0.000462
66.21704102	0.00046
66.22314453	0.000456
66.22924805	0.000455
66.23535156	0.000452
66.24145508	0.000451
66.24755859	0.000451
66.25366211	0.000452
66.25976563	0.000449
66.26586914	0.000443
66.27197266	0.000437
66.27807617	0.000438
66.28417969	0.00044
66.2902832	0.00044
66.29638672	0.000438
66.30249023	0.000432
66.30859375	0.000423
66.31469727	0.000417
66.32080078	0.000419
66.3269043	0.000423
66.33300781	0.000427
66.33911133	0.000426
66.34521484	0.000424
66.35131836	0.000424
66.35742188	0.000426
66.36352539	0.00043
66.36962891	0.000433
66.37573242	0.000435
66.38183594	0.000434
66.38793945	0.000429

Time (s)	Acceleration (g)
54.385	0.002033
54.39	0.001178
54.395	0.000204
54.4	-0.000885
54.405	-0.002063
54.41	-0.003269
54.415	-0.004428
54.42	-0.005463
54.425	-0.006306
54.43	-0.006929
54.435	-0.007339
54.44	-0.007586
54.445	-0.007755
54.45	-0.007941
54.455	-0.008244
54.46	-0.008744
54.465	-0.009556
54.47	-0.010746
54.475	-0.012293
54.48	-0.014181
54.485	-0.016326
54.49	-0.018624
54.495	-0.02098
54.5	-0.023292
54.505	-0.025491
54.51	-0.027513
54.515	-0.029328
54.52	-0.030887
54.525	-0.032107
54.53	-0.033022
54.535	-0.033695
54.54	-0.034228
54.545	-0.034749
54.55	-0.035353
54.555	-0.036109
54.56	-0.037018
54.565	-0.038038
54.57	-0.039096
54.575	-0.040092
54.58	-0.040913
54.585	-0.041455
54.59	-0.041637

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
66.39404297	0.000428
66.40014648	0.000431
66.40625	0.000434
66.41235352	0.000437
66.41845703	0.000441
66.42456055	0.000439
66.43066406	0.000435
66.43676758	0.000439
66.44287109	0.000449
66.44897461	0.000455
66.45507813	0.000459
66.46118164	0.000461
66.46728516	0.00046
66.47338867	0.00046
66.47949219	0.000465
66.4855957	0.000472
66.49169922	0.000481
66.49780273	0.000488
66.50390625	0.00049
66.51000977	0.000492
66.51611328	0.000492
66.5222168	0.000491
66.52832031	0.0005
66.53442383	0.00051
66.54052734	0.000507
66.54663086	0.000503
66.55273438	0.0005
66.55883789	0.000496
66.56494141	0.0005
66.57104492	0.000503
66.57714844	0.000492
66.58325195	0.000485
66.58935547	0.000487
66.59545898	0.000483
66.6015625	0.000477
66.60766602	0.000475
66.61376953	0.000473
66.61987305	0.000476
66.62597656	0.000475
66.63208008	0.000466
66.63818359	0.000466
66.64428711	0.000475

Time (s)	Acceleration (g)
54.595	-0.041401
54.6	-0.040718
54.605	-0.03959
54.61	-0.038007
54.615	-0.035989
54.62	-0.033602
54.625	-0.030931
54.63	-0.028083
54.635	-0.025172
54.64	-0.022302
54.645	-0.019555
54.65	-0.016989
54.655	-0.014638
54.66	-0.012505
54.665	-0.010575
54.67	-0.008822
54.675	-0.007217
54.68	-0.005726
54.685	-0.004321
54.69	-0.003009
54.695	-0.001815
54.7	-0.00075
54.705	0.000169
54.71	0.0009
54.715	0.001418
54.72	0.001731
54.725	0.001863
54.73	0.001876
54.735	0.001852
54.74	0.001836
54.745	0.001878
54.75	0.00204
54.755	0.002366
54.76	0.002891
54.765	0.00363
54.77	0.00456
54.775	0.005645
54.78	0.00683
54.785	0.008062
54.79	0.009325
54.795	0.01061
54.8	0.011925

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
66.65039063	0.000478
66.65649414	0.000477
66.66259766	0.000475
66.66870117	0.000468
66.67480469	0.000465
66.6809082	0.000469
66.68701172	0.000474
66.69311523	0.000475
66.69921875	0.000475
66.70532227	0.000477
66.71142578	0.00048
66.7175293	0.00048
66.72363281	0.000478
66.72973633	0.000483
66.73583984	0.000494
66.74194336	0.000497
66.74804688	0.000491
66.75415039	0.000488
66.76025391	0.000487
66.76635742	0.000492
66.77246094	0.000504
66.77856445	0.000511
66.78466797	0.000506
66.79077148	0.000504
66.796875	0.000506
66.80297852	0.000509
66.80908203	0.000512
66.81518555	0.000515
66.82128906	0.000524
66.82739258	0.000533
66.83349609	0.000532
66.83959961	0.000527
66.84570313	0.000531
66.85180664	0.000537
66.85791016	0.00054
66.86401367	0.00054
66.87011719	0.000532
66.8762207	0.000526
66.88232422	0.000526
66.88842773	0.000528
66.89453125	0.000531
66.90063477	0.000528

Time (s)	Acceleration (g)
54.805	0.013292
54.81	0.014704
54.815	0.016159
54.82	0.017679
54.825	0.01928
54.83	0.020984
54.835	0.022811
54.84	0.02476
54.845	0.026822
54.85	0.028978
54.855	0.031187
54.86	0.0334
54.865	0.035546
54.87	0.037519
54.875	0.039204
54.88	0.040498
54.885	0.041316
54.89	0.041625
54.895	0.04143
54.9	0.040777
54.905	0.039733
54.91	0.038395
54.915	0.036859
54.92	0.035181
54.925	0.033408
54.93	0.031579
54.935	0.029722
54.94	0.027863
54.945	0.026029
54.95	0.024238
54.955	0.022509
54.96	0.020883
54.965	0.019382
54.97	0.018012
54.975	0.016769
54.98	0.015594
54.985	0.014424
54.99	0.013231
54.995	0.011988
55	0.010677
55.005	0.00929
55.01	0.007812

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
66.90673828	0.000524
66.9128418	0.000522
66.91894531	0.000518
66.92504883	0.000519
66.93115234	0.000526
66.93725586	0.000527
66.94335938	0.000527
66.94946289	0.000528
66.95556641	0.00052
66.96166992	0.000512
66.96777344	0.000515
66.97387695	0.00052
66.97998047	0.000522
66.98608398	0.000519
66.9921875	0.000508
66.99829102	0.0005
67.00439453	0.000501
67.01049805	0.000507
67.01660156	0.000513
67.02270508	0.000516
67.02880859	0.000515
67.03491211	0.000509
67.04101563	0.000506
67.04711914	0.000509
67.05322266	0.000511
67.05932617	0.000514
67.06542969	0.000519
67.0715332	0.000518
67.07763672	0.000514
67.08374023	0.000514
67.08984375	0.000517
67.09594727	0.000523
67.10205078	0.000532
67.1081543	0.000536
67.11425781	0.000534
67.12036133	0.000528
67.12646484	0.000531
67.13256836	0.00054
67.13867188	0.000546
67.14477539	0.000545
67.15087891	0.000544
67.15698242	0.000544

Input Motion

Time (s)	Acceleration (g)
55.015	0.006216
55.02	0.004486
55.025	0.002651
55.03	0.000735
55.035	-0.001245
55.04	-0.00324
55.045	-0.005175
55.05	-0.006994
55.055	-0.008616
55.06	-0.009959
55.065	-0.010989
55.07	-0.011683
55.075	-0.01202
55.08	-0.012003
55.085	-0.011632
55.09	-0.010923
55.095	-0.009911
55.1	-0.00865
55.105	-0.007215
55.11	-0.005698
55.115	-0.004199
55.12	-0.002814
55.125	-0.001625
55.13	-0.000706
55.135	-0.000095
55.14	0.000198
55.145	0.000197
55.15	-0.00002
55.155	-0.00034
55.16	-0.000661
55.165	-0.0009
55.17	-0.00097
55.175	-0.000801
55.18	-0.000357
55.185	0.000364
55.19	0.001335
55.195	0.002494
55.2	0.003733
55.205	0.004928
55.21	0.005967
55.215	0.006745
55.22	0.007174

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
67.16308594	0.000547
67.16918945	0.000553
67.17529297	0.000555
67.18139648	0.000558
67.1875	0.000562
67.19360352	0.000561
67.19970703	0.000558
67.20581055	0.000555
67.21191406	0.000555
67.21801758	0.000562
67.22412109	0.000566
67.23022461	0.000559
67.23632813	0.000549
67.24243164	0.000545
67.24853516	0.00055
67.25463867	0.00056
67.26074219	0.000562
67.2668457	0.000555
67.27294922	0.000551
67.27905273	0.000549
67.28515625	0.000544
67.29125977	0.000542
67.29736328	0.000543
67.3034668	0.000546
67.30957031	0.000549
67.31567383	0.000541
67.32177734	0.000528
67.32788086	0.000527
67.33398438	0.000534
67.34008789	0.00054
67.34619141	0.00054
67.35229492	0.000531
67.35839844	0.000525
67.36450195	0.000528
67.37060547	0.000532
67.37670898	0.000537
67.3828125	0.00054
67.38891602	0.000538
67.39501953	0.000541
67.40112305	0.000546
67.40722656	0.000543
67.41333008	0.000543

Input Motion

Time (s)	Acceleration (g)
55.225	0.007189
55.23	0.006752
55.235	0.005843
55.24	0.004459
55.245	0.002653
55.25	0.000461
55.255	-0.002039
55.26	-0.004737
55.265	-0.007504
55.27	-0.010189
55.275	-0.012694
55.28	-0.014922
55.285	-0.016797
55.29	-0.018285
55.295	-0.019373
55.3	-0.020084
55.305	-0.02046
55.31	-0.020514
55.315	-0.020287
55.32	-0.019838
55.325	-0.01925
55.33	-0.018659
55.335	-0.018214
55.34	-0.018022
55.345	-0.018166
55.35	-0.018678
55.355	-0.019541
55.36	-0.020716
55.365	-0.022137
55.37	-0.023723
55.375	-0.025395
55.38	-0.027101
55.385	-0.028799
55.39	-0.030467
55.395	-0.032085
55.4	-0.03363
55.405	-0.03507
55.41	-0.036365
55.415	-0.037474
55.42	-0.038349
55.425	-0.038944
55.43	-0.039261

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
67.41943359	0.000551
67.42553711	0.000555
67.43164063	0.000555
67.43774414	0.000552
67.44384766	0.000544
67.44995117	0.000544
67.45605469	0.000552
67.4621582	0.000557
67.46826172	0.000559
67.47436523	0.000557
67.48046875	0.000555
67.48657227	0.00056
67.49267578	0.000566
67.4987793	0.000571
67.50488281	0.000577
67.51098633	0.000577
67.51708984	0.000571
67.52319336	0.000567
67.52929688	0.000565
67.53540039	0.000565
67.54150391	0.000569
67.54760742	0.00057
67.55371094	0.000566
67.55981445	0.000563
67.56591797	0.000557
67.57202148	0.000556
67.578125	0.000568
67.58422852	0.000576
67.59033203	0.000572
67.59643555	0.000567
67.60253906	0.000566
67.60864258	0.000568
67.61474609	0.000573
67.62084961	0.000574
67.62695313	0.00057
67.63305664	0.000569
67.63916016	0.00057
67.64526367	0.000563
67.65136719	0.000555
67.6574707	0.000557
67.66357422	0.000566
67.66967773	0.000569

Input Motion

Time (s)	Acceleration (g)
55.435	-0.0393
55.44	-0.039045
55.445	-0.038481
55.45	-0.037585
55.455	-0.036347
55.46	-0.034802
55.465	-0.033006
55.47	-0.031056
55.475	-0.029059
55.48	-0.027098
55.485	-0.025239
55.49	-0.023514
55.495	-0.021928
55.5	-0.02046
55.505	-0.019081
55.51	-0.017756
55.515	-0.016456
55.52	-0.015193
55.525	-0.013981
55.53	-0.012841
55.535	-0.011795
55.54	-0.010824
55.545	-0.009916
55.55	-0.009085
55.555	-0.008357
55.56	-0.007794
55.565	-0.007462
55.57	-0.007421
55.575	-0.007714
55.58	-0.008338
55.585	-0.009259
55.59	-0.010438
55.595	-0.011808
55.6	-0.01329
55.605	-0.014797
55.61	-0.016218
55.615	-0.017448
55.62	-0.018412
55.625	-0.019062
55.63	-0.019399
55.635	-0.019468
55.64	-0.019331

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
67.67578125	0.000564
67.68188477	0.000558
67.68798828	0.000555
67.6940918	0.000558
67.70019531	0.000563
67.70629883	0.000567
67.71240234	0.000566
67.71850586	0.000561
67.72460938	0.000555
67.73071289	0.000555
67.73681641	0.000558
67.74291992	0.000559
67.74902344	0.000557
67.75512695	0.000559
67.76123047	0.000559
67.76733398	0.000553
67.7734375	0.000552
67.77954102	0.000559
67.78564453	0.000567
67.79174805	0.000573
67.79785156	0.000575
67.80395508	0.00057
67.81005859	0.000568
67.81616211	0.00058
67.82226563	0.000589
67.82836914	0.00059
67.83447266	0.000591
67.84057617	0.000589
67.84667969	0.000589
67.8527832	0.000594
67.85888672	0.000597
67.86499023	0.000596
67.87109375	0.000597
67.87719727	0.000594
67.88330078	0.000589
67.8894043	0.000582
67.89550781	0.000575
67.90161133	0.000579
67.90771484	0.000588
67.91381836	0.000585
67.91992188	0.000574
67.92602539	0.000563

Time (s)	Acceleration (g)
55.645	-0.01908
55.65	-0.01882
55.655	-0.018659
55.66	-0.018701
55.665	-0.019027
55.67	-0.019678
55.675	-0.020652
55.68	-0.021891
55.685	-0.023306
55.69	-0.024787
55.695	-0.026217
55.7	-0.027532
55.705	-0.028683
55.71	-0.029621
55.715	-0.030324
55.72	-0.03077
55.725	-0.030954
55.73	-0.030912
55.735	-0.030689
55.74	-0.030335
55.745	-0.029905
55.75	-0.029423
55.755	-0.028906
55.76	-0.028349
55.765	-0.027735
55.77	-0.027061
55.775	-0.026327
55.78	-0.025511
55.785	-0.02459
55.79	-0.023575
55.795	-0.022458
55.8	-0.021207
55.805	-0.019771
55.81	-0.018065
55.815	-0.015997
55.82	-0.013483
55.825	-0.01046
55.83	-0.006923
55.835	-0.002903
55.84	0.001545
55.845	0.006332
55.85	0.011351

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
67.93212891	0.000559
67.93823242	0.000567
67.94433594	0.000575
67.95043945	0.000573
67.95654297	0.000564
67.96264648	0.000556
67.96875	0.000554
67.97485352	0.000555
67.98095703	0.000551
67.98706055	0.000552
67.99316406	0.00056
67.99926758	0.000561
68.00537109	0.000554
68.01147461	0.000552
68.01757813	0.000557
68.02368164	0.000563
68.02978516	0.000571
68.03588867	0.000574
68.04199219	0.000567
68.0480957	0.000562
68.05419922	0.000567
68.06030273	0.000574
68.06640625	0.000577
68.07250977	0.000579
68.07861328	0.000574
68.0847168	0.00057
68.09082031	0.000569
68.09692383	0.000566
68.10302734	0.000567
68.10913086	0.000574
68.11523438	0.000573
68.12133789	0.000565
68.12744141	0.000559
68.13354492	0.000558
68.13964844	0.000564
68.14575195	0.000573
68.15185547	0.00058
68.15795898	0.000581
68.1640625	0.000575
68.17016602	0.000569
68.17626953	0.000572
68.18237305	0.000577

Time (s)	Acceleration (g)
55.855	0.016484
55.86	0.0216
55.865	0.026572
55.87	0.031306
55.875	0.035716
55.88	0.039742
55.885	0.043333
55.89	0.046431
55.895	0.048993
55.9	0.050985
55.905	0.052384
55.91	0.053245
55.915	0.053639
55.92	0.053607
55.925	0.053201
55.93	0.052469
55.935	0.051458
55.94	0.050246
55.945	0.048919
55.95	0.047586
55.955	0.04636
55.96	0.045337
55.965	0.044599
55.97	0.044192
55.975	0.044127
55.98	0.044399
55.985	0.044953
55.99	0.045673
55.995	0.046422
56	0.04706
56.005	0.04745
56.01	0.047486
56.015	0.047109
56.02	0.046311
56.025	0.045136
56.03	0.043677
56.035	0.042042
56.04	0.040333
56.045	0.038631
56.05	0.036988
56.055	0.03544
56.06	0.033993

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
68.18847656	0.000582
68.19458008	0.000583
68.20068359	0.000577
68.20678711	0.000576
68.21289063	0.000575
68.21899414	0.000571
68.22509766	0.000575
68.23120117	0.000582
68.23730469	0.000581
68.2434082	0.00058
68.24951172	0.000578
68.25561523	0.00057
68.26171875	0.00057
68.26782227	0.000577
68.27392578	0.000574
68.2800293	0.000567
68.28613281	0.000557
68.29223633	0.000547
68.29833984	0.000549
68.30444336	0.000554
68.31054688	0.000552
68.31665039	0.000548
68.32275391	0.000543
68.32885742	0.000539
68.33496094	0.000538
68.34106445	0.000541
68.34716797	0.000546
68.35327148	0.000549
68.359375	0.000552
68.36547852	0.000552
68.37158203	0.000545
68.37768555	0.000544
68.38378906	0.000555
68.38989258	0.000563
68.39599609	0.000565
68.40209961	0.000562
68.40820313	0.000554
68.41430664	0.00055
68.42041016	0.000559
68.42651367	0.000567
68.43261719	0.000568
68.4387207	0.000567

Time (s)	Acceleration (g)
56.065	0.032581
56.07	0.031151
56.075	0.02969
56.08	0.028171
56.085	0.026572
56.09	0.024911
56.095	0.023227
56.1	0.021519
56.105	0.019835
56.11	0.018146
56.115	0.016408
56.12	0.014596
56.125	0.012674
56.13	0.010617
56.135	0.008415
56.14	0.006072
56.145	0.003607
56.15	0.001048
56.155	-0.00157
56.16	-0.004218
56.165	-0.006858
56.17	-0.009429
56.175	-0.011872
56.18	-0.01411
56.185	-0.016036
56.19	-0.017597
56.195	-0.018752
56.2	-0.019352
56.205	-0.019442
56.21	-0.019346
56.215	-0.019216
56.22	-0.018799
56.225	-0.017918
56.23	-0.016868
56.235	-0.015806
56.24	-0.014654
56.245	-0.013448
56.25	-0.012215
56.255	-0.010899
56.26	-0.009568
56.265	-0.00823
56.27	-0.006835

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
68.44482422	0.000567
68.45092773	0.000566
68.45703125	0.000564
68.46313477	0.000563
68.46923828	0.000567
68.4753418	0.000568
68.48144531	0.000566
68.48754883	0.000561
68.49365234	0.000552
68.49975586	0.000549
68.50585938	0.000557
68.51196289	0.000566
68.51806641	0.000566
68.52416992	0.000561
68.53027344	0.000558
68.53637695	0.00056
68.54248047	0.000562
68.54858398	0.000563
68.5546875	0.000566
68.56079102	0.000563
68.56689453	0.000558
68.57299805	0.000557
68.57910156	0.000554
68.58520508	0.000553
68.59130859	0.000561
68.59741211	0.000566
68.60351563	0.000563
68.60961914	0.000558
68.61572266	0.00055
68.62182617	0.000547
68.62792969	0.000555
68.6340332	0.000558
68.64013672	0.000554
68.64624023	0.000549
68.65234375	0.000541
68.65844727	0.000538
68.66455078	0.000543
68.6706543	0.000547
68.67675781	0.000548
68.68286133	0.00055
68.68896484	0.000551
68.69506836	0.00055

Time (s)	Acceleration (g)
56.275	-0.005173
56.28	-0.003018
56.285	-0.000555
56.29	0.001864
56.295	0.004201
56.3	0.006637
56.305	0.009299
56.31	0.012172
56.315	0.015166
56.32	0.018099
56.325	0.020989
56.33	0.024091
56.335	0.02735
56.34	0.030367
56.345	0.033033
56.35	0.035296
56.355	0.03704
56.36	0.03827
56.365	0.038995
56.37	0.039236
56.375	0.039042
56.38	0.03847
56.385	0.037581
56.39	0.036452
56.395	0.03515
56.4	0.033708
56.405	0.032149
56.41	0.03048
56.415	0.028699
56.42	0.026804
56.425	0.024781
56.43	0.02261
56.435	0.020258
56.44	0.017682
56.445	0.014841
56.45	0.011671
56.455	0.008126
56.46	0.004223
56.465	0.000002
56.47	-0.004452
56.475	-0.00903
56.48	-0.013648

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
68.70117188	0.000548
68.70727539	0.000549
68.71337891	0.000557
68.71948242	0.000563
68.72558594	0.000558
68.73168945	0.00055
68.73779297	0.000547
68.74389648	0.00055
68.75	0.000558
68.75610352	0.000563
68.76220703	0.000559
68.76831055	0.000551
68.77441406	0.000549
68.78051758	0.000548
68.78662109	0.000548
68.79272461	0.000554
68.79882813	0.000557
68.80493164	0.000552
68.81103516	0.000546
68.81713867	0.000543
68.82324219	0.000544
68.8293457	0.00055
68.83544922	0.000557
68.84155273	0.00056
68.84765625	0.000554
68.85375977	0.000542
68.85986328	0.000536
68.8659668	0.000538
68.87207031	0.000541
68.87817383	0.000544
68.88427734	0.000544
68.89038086	0.000535
68.89648438	0.000529
68.90258789	0.000532
68.90869141	0.000534
68.91479492	0.000537
68.92089844	0.000538
68.92700195	0.000532
68.93310547	0.000526
68.93920898	0.000524
68.9453125	0.000521
68.95141602	0.000522

Time (s)	Acceleration (g)
56.485	-0.018207
56.49	-0.022586
56.495	-0.026661
56.5	-0.030285
56.505	-0.033323
56.51	-0.035678
56.515	-0.037298
56.52	-0.038192
56.525	-0.038409
56.53	-0.03805
56.535	-0.037224
56.54	-0.036007
56.545	-0.034456
56.55	-0.032602
56.555	-0.030445
56.56	-0.027988
56.565	-0.025216
56.57	-0.022106
56.575	-0.018647
56.58	-0.014836
56.585	-0.010672
56.59	-0.006201
56.595	-0.001483
56.6	0.003453
56.605	0.008554
56.61	0.013738
56.615	0.018921
56.62	0.023981
56.625	0.028798
56.63	0.033312
56.635	0.037466
56.64	0.04121
56.645	0.044503
56.65	0.047285
56.655	0.049495
56.66	0.051094
56.665	0.052053
56.67	0.052353
56.675	0.052002
56.68	0.051051
56.685	0.049565
56.69	0.047637

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
68.95751953	0.000526
68.96362305	0.000524
68.96972656	0.000518
68.97583008	0.000513
68.98193359	0.00051
68.98803711	0.000514
68.99414063	0.000522
69.00024414	0.000525
69.00634766	0.000522
69.01245117	0.00052
69.01855469	0.000523
69.0246582	0.000527
69.03076172	0.00053
69.03686523	0.000534
69.04296875	0.000536
69.04907227	0.000536
69.05517578	0.000533
69.0612793	0.000525
69.06738281	0.000522
69.07348633	0.000532
69.07958984	0.00054
69.08569336	0.000538
69.09179688	0.000534
69.09790039	0.00053
69.10400391	0.000529
69.11010742	0.000537
69.11621094	0.000544
69.12231445	0.000546
69.12841797	0.000545
69.13452148	0.000538
69.140625	0.000533
69.14672852	0.000535
69.15283203	0.000536
69.15893555	0.000536
69.16503906	0.000538
69.17114258	0.000537
69.17724609	0.000531
69.18334961	0.000526
69.18945313	0.000524
69.19555664	0.000528
69.20166016	0.000535
69.20776367	0.000534

Input Motion

Time (s)	Acceleration (g)
56.695	0.045366
56.7	0.042819
56.705	0.040057
56.71	0.03714
56.715	0.034118
56.72	0.031045
56.725	0.027967
56.73	0.024894
56.735	0.021828
56.74	0.018783
56.745	0.015758
56.75	0.012777
56.755	0.009853
56.76	0.006962
56.765	0.004082
56.77	0.001189
56.775	-0.001738
56.78	-0.004682
56.785	-0.00762
56.79	-0.010535
56.795	-0.013413
56.8	-0.016247
56.805	-0.019048
56.81	-0.021836
56.815	-0.02462
56.82	-0.027406
56.825	-0.030191
56.83	-0.032896
56.835	-0.035448
56.84	-0.037814
56.845	-0.039965
56.85	-0.041932
56.855	-0.04376
56.86	-0.045431
56.865	-0.046924
56.87	-0.048219
56.875	-0.049278
56.88	-0.050089
56.885	-0.050653
56.89	-0.050972
56.895	-0.051069
56.9	-0.050995

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
69.21386719	0.000523
69.2199707	0.000517
69.22607422	0.000519
69.23217773	0.000522
69.23828125	0.000521
69.24438477	0.000518
69.25048828	0.000514
69.2565918	0.000513
69.26269531	0.000513
69.26879883	0.000511
69.27490234	0.000512
69.28100586	0.000516
69.28710938	0.000519
69.29321289	0.000516
69.29931641	0.000506
69.30541992	0.000496
69.31152344	0.000496
69.31762695	0.000502
69.32373047	0.000504
69.32983398	0.000501
69.3359375	0.000497
69.34204102	0.000493
69.34814453	0.000492
69.35424805	0.000496
69.36035156	0.000504
69.36645508	0.000508
69.37255859	0.000503
69.37866211	0.000499
69.38476563	0.0005
69.39086914	0.000499
69.39697266	0.000498
69.40307617	0.000503
69.40917969	0.000508
69.4152832	0.000504
69.42138672	0.000497
69.42749023	0.000493
69.43359375	0.000497
69.43969727	0.000504
69.44580078	0.000508
69.4519043	0.000504
69.45800781	0.000497
69.46411133	0.000493

Input Motion

Time (s)	Acceleration (g)
56.905	-0.050808
56.91	-0.050581
56.915	-0.050336
56.92	-0.050102
56.925	-0.049891
56.93	-0.049514
56.935	-0.049021
56.94	-0.048509
56.945	-0.046986
56.95	-0.045136
56.955	-0.045218
56.96	-0.046221
56.965	-0.046574
56.97	-0.046129
56.975	-0.045671
56.98	-0.045103
56.985	-0.043291
56.99	-0.040865
56.995	-0.038655
57	-0.036312
57.005	-0.033731
57.01	-0.031349
57.015	-0.029006
57.02	-0.026515
57.025	-0.02424
57.03	-0.022267
57.035	-0.020344
57.04	-0.018628
57.045	-0.017399
57.05	-0.016594
57.055	-0.016157
57.06	-0.016083
57.065	-0.016321
57.07	-0.016859
57.075	-0.017701
57.08	-0.018871
57.085	-0.020387
57.09	-0.022212
57.095	-0.024274
57.1	-0.026481
57.105	-0.028699
57.11	-0.030783

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
69.47021484	0.000494
69.47631836	0.000496
69.48242188	0.000495
69.48852539	0.000492
69.49462891	0.000488
69.50073242	0.000484
69.50683594	0.000479
69.51293945	0.000475
69.51904297	0.000475
69.52514648	0.000476
69.53125	0.000477
69.53735352	0.000474
69.54345703	0.000467
69.54956055	0.000464
69.55566406	0.000468
69.56176758	0.000475
69.56787109	0.000479
69.57397461	0.000476
69.58007813	0.000471
69.58618164	0.000468
69.59228516	0.000469
69.59838867	0.000475
69.60449219	0.000479
69.6105957	0.000474
69.61669922	0.000467
69.62280273	0.000462
69.62890625	0.000456
69.63500977	0.000455
69.64111328	0.000459
69.6472168	0.000463
69.65332031	0.000466
69.65942383	0.000463
69.66552734	0.000457
69.67163086	0.000457
69.67773438	0.000464
69.68383789	0.000473
69.68994141	0.000475
69.69604492	0.00047
69.70214844	0.000467
69.70825195	0.000469
69.71435547	0.000471
69.72045898	0.000474

Time (s)	Acceleration (g)
57.115	-0.03258
57.12	-0.033938
57.125	-0.03471
57.13	-0.034815
57.135	-0.034229
57.14	-0.032903
57.145	-0.03085
57.15	-0.028258
57.155	-0.025192
57.16	-0.021575
57.165	-0.017587
57.17	-0.013523
57.175	-0.009494
57.18	-0.005582
57.185	-0.001879
57.19	0.001604
57.195	0.004857
57.2	0.007896
57.205	0.010793
57.21	0.013421
57.215	0.015775
57.22	0.01805
57.225	0.020181
57.23	0.021987
57.235	0.023401
57.24	0.024429
57.245	0.025135
57.25	0.025535
57.255	0.025644
57.26	0.025548
57.265	0.025284
57.27	0.024899
57.275	0.024438
57.28	0.023978
57.285	0.023333
57.29	0.022647
57.295	0.022449
57.3	0.022575
57.305	0.022578
57.31	0.022784
57.315	0.023552
57.32	0.024736

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
69.7265625	0.000479
69.73266602	0.00048
69.73876953	0.000479
69.74487305	0.00048
69.75097656	0.000479
69.75708008	0.000479
69.76318359	0.000484
69.76928711	0.000488
69.77539063	0.000485
69.78149414	0.000476
69.78759766	0.000469
69.79370117	0.00047
69.79980469	0.000475
69.8059082	0.000476
69.81201172	0.000472
69.81811523	0.000467
69.82421875	0.000461
69.83032227	0.000458
69.83642578	0.00046
69.8425293	0.000461
69.84863281	0.000461
69.85473633	0.00046
69.86083984	0.000455
69.86694336	0.000448
69.87304688	0.000445
69.87915039	0.000446
69.88525391	0.000451
69.89135742	0.000456
69.89746094	0.000453
69.90356445	0.000446
69.90966797	0.000438
69.91577148	0.000436
69.921875	0.000444
69.92797852	0.000447
69.93408203	0.000442
69.94018555	0.00044
69.94628906	0.000438
69.95239258	0.000433
69.95849609	0.000435
69.96459961	0.00044
69.97070313	0.000439
69.97680664	0.000439

Time (s)	Acceleration (g)
57.325	0.026231
57.33	0.028183
57.335	0.030647
57.34	0.033503
57.345	0.036637
57.35	0.040034
57.355	0.043567
57.36	0.046869
57.365	0.049806
57.37	0.052384
57.375	0.054242
57.38	0.055119
57.385	0.055184
57.39	0.054477
57.395	0.052799
57.4	0.050166
57.405	0.046788
57.41	0.042818
57.415	0.038362
57.42	0.033565
57.425	0.028684
57.43	0.024096
57.435	0.019697
57.44	0.015126
57.445	0.010852
57.45	0.006958
57.455	0.002753
57.46	-0.001831
57.465	-0.006418
57.47	-0.010838
57.475	-0.015179
57.48	-0.019512
57.485	-0.023734
57.49	-0.027734
57.495	-0.031484
57.5	-0.034909
57.505	-0.037953
57.51	-0.040572
57.515	-0.042655
57.52	-0.044279
57.525	-0.045529
57.53	-0.046157

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
69.98291016	0.000438
69.98901367	0.000429
69.99511719	0.000425
70.0012207	0.000433
70.00732422	0.000443
70.01342773	0.000446
70.01953125	0.000441
70.02563477	0.000435
70.03173828	0.000434
70.0378418	0.00044
70.04394531	0.000447
70.05004883	0.000451
70.05615234	0.00045
70.06225586	0.000445
70.06835938	0.00044
70.07446289	0.000438
70.08056641	0.000439
70.08666992	0.000442
70.09277344	0.000444
70.09887695	0.000445
70.10498047	0.000443
70.11108398	0.000438
70.1171875	0.000434
70.12329102	0.000437
70.12939453	0.000445
70.13549805	0.000445
70.14160156	0.000437
70.14770508	0.00043
70.15380859	0.000424
70.15991211	0.000422
70.16601563	0.000427
70.17211914	0.000426
70.17822266	0.000416
70.18432617	0.000407
70.19042969	0.000405
70.1965332	0.000405
70.20263672	0.000405
70.20874023	0.000408
70.21484375	0.00041
70.22094727	0.000406
70.22705078	0.0004
70.2331543	0.000398

Time (s)	Acceleration (g)
57.535	-0.046225
57.54	-0.045998
57.545	-0.045251
57.55	-0.043978
57.555	-0.042376
57.56	-0.040079
57.565	-0.037044
57.57	-0.033793
57.575	-0.030399
57.58	-0.026728
57.585	-0.022933
57.59	-0.019109
57.595	-0.015271
57.6	-0.011491
57.605	-0.007814
57.61	-0.004238
57.615	-0.000769
57.62	0.002587
57.625	0.005818
57.63	0.008865
57.635	0.011661
57.64	0.014136
57.645	0.016221
57.65	0.01788
57.655	0.019097
57.66	0.019856
57.665	0.020153
57.67	0.020012
57.675	0.019466
57.68	0.01856
57.685	0.017357
57.69	0.015941
57.695	0.014404
57.7	0.01286
57.705	0.011415
57.71	0.010139
57.715	0.009076
57.72	0.008238
57.725	0.0076
57.73	0.007161
57.735	0.006943
57.74	0.006889

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
70.23925781	0.000401
70.24536133	0.000407
70.25146484	0.000413
70.25756836	0.000413
70.26367188	0.000408
70.26977539	0.000403
70.27587891	0.0004
70.28198242	0.000404
70.28808594	0.000411
70.29418945	0.000409
70.30029297	0.000402
70.30639648	0.000398
70.3125	0.000397
70.31860352	0.000397
70.32470703	0.0004
70.33081055	0.000403
70.33691406	0.000406
70.34301758	0.000407
70.34912109	0.0004
70.35522461	0.000394
70.36132813	0.000398
70.36743164	0.000404
70.37353516	0.000404
70.37963867	0.000401
70.38574219	0.000396
70.3918457	0.000394
70.39794922	0.000399
70.40405273	0.000406
70.41015625	0.000412
70.41625977	0.000415
70.42236328	0.000412
70.4284668	0.00041
70.43457031	0.000411
70.44067383	0.000409
70.44677734	0.000409
70.45288086	0.000413
70.45898438	0.000415
70.46508789	0.000411
70.47119141	0.000402
70.47729492	0.000395
70.48339844	0.000396
70.48950195	0.000401

Input Motion

Time (s)	Acceleration (g)
57.745	0.006969
57.75	0.007303
57.755	0.007794
57.76	0.0081
57.765	0.008234
57.77	0.008405
57.775	0.008624
57.78	0.008952
57.785	0.009446
57.79	0.010127
57.795	0.01119
57.8	0.012571
57.805	0.013902
57.81	0.015185
57.815	0.016581
57.82	0.018038
57.825	0.019555
57.83	0.021098
57.835	0.022633
57.84	0.024407
57.845	0.026357
57.85	0.028025
57.855	0.029402
57.86	0.030651
57.865	0.031627
57.87	0.032285
57.875	0.032591
57.88	0.032529
57.885	0.032394
57.89	0.032153
57.895	0.031381
57.9	0.030145
57.905	0.028764
57.91	0.027251
57.915	0.025462
57.92	0.023379
57.925	0.02119
57.93	0.018772
57.935	0.015652
57.94	0.011842
57.945	0.007639
57.95	0.003058

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
70.49560547	0.0004
70.50170898	0.000394
70.5078125	0.000386
70.51391602	0.00038
70.52001953	0.000378
70.52612305	0.00038
70.53222656	0.000382
70.53833008	0.000379
70.54443359	0.000374
70.55053711	0.000373
70.55664063	0.000372
70.56274414	0.000369
70.56884766	0.00037
70.57495117	0.000378
70.58105469	0.000378
70.5871582	0.000371
70.59326172	0.000363
70.59936523	0.000358
70.60546875	0.000361
70.61157227	0.000369
70.61767578	0.000369
70.6237793	0.000362
70.62988281	0.000355
70.63598633	0.000352
70.64208984	0.000354
70.64819336	0.000359
70.65429688	0.000362
70.66040039	0.000364
70.66650391	0.000363
70.67260742	0.000357
70.67871094	0.000353
70.68481445	0.000354
70.69091797	0.000361
70.69702148	0.000369
70.703125	0.000373
70.70922852	0.000369
70.71533203	0.000362
70.72143555	0.000359
70.72753906	0.000361
70.73364258	0.000365
70.73974609	0.000365
70.74584961	0.00036

Input Motion

Time (s)	Acceleration (g)
57.955	-0.001897
57.96	-0.00709
57.965	-0.012438
57.97	-0.017891
57.975	-0.023384
57.98	-0.028856
57.985	-0.034231
57.99	-0.039443
57.995	-0.044442
58	-0.049095
58.005	-0.053244
58.01	-0.056699
58.015	-0.059262
58.02	-0.060765
58.025	-0.061086
58.03	-0.060201
58.035	-0.058169
58.04	-0.05509
58.045	-0.051119
58.05	-0.046463
58.055	-0.041342
58.06	-0.035943
58.065	-0.030437
58.07	-0.024995
58.075	-0.019756
58.08	-0.014837
58.085	-0.010337
58.09	-0.006313
58.095	-0.002802
58.1	0.000143
58.105	0.00249
58.11	0.004224
58.115	0.005357
58.12	0.005934
58.125	0.006015
58.13	0.005698
58.135	0.005072
58.14	0.004188
58.145	0.003213
58.15	0.002204
58.155	0.001032
58.16	-0.00002

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
70.75195313	0.000353
70.75805664	0.00035
70.76416016	0.000353
70.77026367	0.000355
70.77636719	0.000358
70.7824707	0.000362
70.78857422	0.000359
70.79467773	0.000351
70.80078125	0.000349
70.80688477	0.000352
70.81298828	0.000358
70.8190918	0.000362
70.82519531	0.00036
70.83129883	0.000353
70.83740234	0.000346
70.84350586	0.000346
70.84960938	0.000353
70.85571289	0.000358
70.86181641	0.000356
70.86791992	0.00035
70.87402344	0.000344
70.88012695	0.000342
70.88623047	0.000344
70.89233398	0.000347
70.8984375	0.000349
70.90454102	0.000347
70.91064453	0.000339
70.91674805	0.000333
70.92285156	0.000329
70.92895508	0.000328
70.93505859	0.000331
70.94116211	0.000332
70.94726563	0.000327
70.95336914	0.000321
70.95947266	0.000319
70.96557617	0.00032
70.97167969	0.000327
70.9777832	0.000333
70.98388672	0.000334
70.98999023	0.00033
70.99609375	0.000326
71.00219727	0.000327

Input Motion

Time (s)	Acceleration (g)
58.165	-0.000764
58.17	-0.001548
58.175	-0.00199
58.18	-0.001589
58.185	-0.001109
58.19	-0.00084
58.195	-0.000037
58.2	0.001117
58.205	0.001972
58.21	0.002699
58.215	0.003469
58.22	0.004127
58.225	0.00473
58.23	0.005209
58.235	0.005298
58.24	0.004978
58.245	0.004511
58.25	0.00422
58.255	0.004212
58.26	0.004477
58.265	0.005135
58.27	0.006289
58.275	0.007916
58.28	0.009948
58.285	0.012269
58.29	0.014681
58.295	0.016982
58.3	0.018981
58.305	0.02048
58.31	0.021389
58.315	0.021643
58.32	0.021097
58.325	0.019779
58.33	0.017701
58.335	0.014574
58.34	0.010547
58.345	0.006246
58.35	0.001738
58.355	-0.003172
58.36	-0.008264
58.365	-0.013305
58.37	-0.018207

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
71.00830078	0.000333
71.0144043	0.000336
71.02050781	0.000335
71.02661133	0.000334
71.03271484	0.000331
71.03881836	0.000325
71.04492188	0.00032
71.05102539	0.000321
71.05712891	0.000328
71.06323242	0.00033
71.06933594	0.000327
71.07543945	0.000322
71.08154297	0.000321
71.08764648	0.000327
71.09375	0.000336
71.09985352	0.000338
71.10595703	0.000334
71.11206055	0.00033
71.11816406	0.00033
71.12426758	0.00033
71.13037109	0.000331
71.13647461	0.000335
71.14257813	0.000338
71.14868164	0.000337
71.15478516	0.000332
71.16088867	0.000323
71.16699219	0.00032
71.1730957	0.000327
71.17919922	0.000332
71.18530273	0.000329
71.19140625	0.00032
71.19750977	0.000311
71.20361328	0.000308
71.2097168	0.00031
71.21582031	0.000311
71.22192383	0.000311
71.22802734	0.000309
71.23413086	0.000305
71.24023438	0.000303
71.24633789	0.000304
71.25244141	0.000305
71.25854492	0.00031

Time (s)	Acceleration (g)
58.375	-0.022821
58.38	-0.027039
58.385	-0.03081
58.39	-0.03406
58.395	-0.036757
58.4	-0.038914
58.405	-0.040563
58.41	-0.041768
58.415	-0.042601
58.42	-0.043109
58.425	-0.043336
58.43	-0.043311
58.435	-0.043042
58.44	-0.042534
58.445	-0.041726
58.45	-0.040528
58.455	-0.038958
58.46	-0.036898
58.465	-0.034099
58.47	-0.030589
58.475	-0.026536
58.48	-0.022025
58.485	-0.017175
58.49	-0.012163
58.495	-0.007143
58.5	-0.002286
58.505	0.002281
58.51	0.006472
58.515	0.010111
58.52	0.013158
58.525	0.015759
58.53	0.017877
58.535	0.019424
58.54	0.02052
58.545	0.021301
58.55	0.021888
58.555	0.022424
58.56	0.022987
58.565	0.023633
58.57	0.024423
58.575	0.025393
58.58	0.026598

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
71.26464844	0.000316
71.27075195	0.000314
71.27685547	0.000306
71.28295898	0.0003
71.2890625	0.0003
71.29516602	0.000307
71.30126953	0.000313
71.30737305	0.000309
71.31347656	0.000303
71.31958008	0.000301
71.32568359	0.000299
71.33178711	0.000298
71.33789063	0.000301
71.34399414	0.000302
71.35009766	0.000299
71.35620117	0.000297
71.36230469	0.000292
71.3684082	0.00029
71.37451172	0.000292
71.38061523	0.000294
71.38671875	0.000297
71.39282227	0.000296
71.39892578	0.000286
71.4050293	0.00028
71.41113281	0.000288
71.41723633	0.000296
71.42333984	0.000298
71.42944336	0.000298
71.43554688	0.000295
71.44165039	0.000292
71.44775391	0.000298
71.45385742	0.000305
71.45996094	0.000308
71.46606445	0.00031
71.47216797	0.000311
71.47827148	0.000306
71.484375	0.000301
71.49047852	0.0003
71.49658203	0.000305
71.50268555	0.000307
71.50878906	0.000302
71.51489258	0.000298

Time (s)	Acceleration (g)
58.585	0.028075
58.59	0.029826
58.595	0.031829
58.6	0.034007
58.605	0.036265
58.61	0.038531
58.615	0.040733
58.62	0.042804
58.625	0.044709
58.63	0.046442
58.635	0.048012
58.64	0.049453
58.645	0.050799
58.65	0.052047
58.655	0.05318
58.66	0.054171
58.665	0.054977
58.67	0.055569
58.675	0.055925
58.68	0.056036
58.685	0.055901
58.69	0.055541
58.695	0.054975
58.7	0.054179
58.705	0.053122
58.71	0.051747
58.715	0.050001
58.72	0.047858
58.725	0.04532
58.73	0.042449
58.735	0.039335
58.74	0.036076
58.745	0.032776
58.75	0.029534
58.755	0.026428
58.76	0.023506
58.765	0.020794
58.77	0.01829
58.775	0.015951
58.78	0.01373
58.785	0.011554
58.79	0.009292

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
71.52099609	0.000293
71.52709961	0.000289
71.53320313	0.000292
71.53930664	0.000297
71.54541016	0.000296
71.55151367	0.000293
71.55761719	0.000288
71.5637207	0.000287
71.56982422	0.000288
71.57592773	0.000286
71.58203125	0.000286
71.58813477	0.000288
71.59423828	0.000285
71.6003418	0.000278
71.60644531	0.000274
71.61254883	0.000274
71.61865234	0.000275
71.62475586	0.00028
71.63085938	0.00028
71.63696289	0.000275
71.64306641	0.000272
71.64916992	0.000273
71.65527344	0.000276
71.66137695	0.000282
71.66748047	0.000281
71.67358398	0.000277
71.6796875	0.000276
71.68579102	0.000275
71.69189453	0.000275
71.69799805	0.000279
71.70410156	0.000281
71.71020508	0.00028
71.71630859	0.000277
71.72241211	0.000274
71.72851563	0.000274
71.73461914	0.000274
71.74072266	0.000275
71.74682617	0.000279
71.75292969	0.000281
71.7590332	0.000276
71.76513672	0.000273
71.77124023	0.000276

Time (s)	Acceleration (g)
58.795	0.006803
58.8	0.004029
58.805	0.000892
58.81	-0.002675
58.815	-0.006683
58.82	-0.011113
58.825	-0.015973
58.83	-0.021213
58.835	-0.026726
58.84	-0.032339
58.845	-0.037807
58.85	-0.042839
58.855	-0.047114
58.86	-0.050358
58.865	-0.052346
58.87	-0.052899
58.875	-0.051995
58.88	-0.049709
58.885	-0.046047
58.89	-0.041229
58.895	-0.035745
58.9	-0.029855
58.905	-0.023694
58.91	-0.01759
58.915	-0.011863
58.92	-0.006713
58.925	-0.002314
58.93	0.001222
58.935	0.003866
58.94	0.005652
58.945	0.006683
58.95	0.007095
58.955	0.00703
58.96	0.006771
58.965	0.006537
58.97	0.006343
58.975	0.006435
58.98	0.007144
58.985	0.008448
58.99	0.01025
58.995	0.012562
59	0.014951

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
71.77734375	0.000278
71.78344727	0.000281
71.78955078	0.000281
71.7956543	0.000278
71.80175781	0.000278
71.80786133	0.00028
71.81396484	0.000281
71.82006836	0.000286
71.82617188	0.000289
71.83227539	0.000287
71.83837891	0.000285
71.84448242	0.000281
71.85058594	0.000279
71.85668945	0.000281
71.86279297	0.000281
71.86889648	0.000276
71.875	0.000273
71.88110352	0.000269
71.88720703	0.000264
71.89331055	0.000265
71.89941406	0.000269
71.90551758	0.000269
71.91162109	0.000267
71.91772461	0.000262
71.92382813	0.000256
71.92993164	0.000256
71.93603516	0.000255
71.94213867	0.000254
71.94824219	0.000257
71.9543457	0.000256
71.96044922	0.000249
71.96655273	0.000247
71.97265625	0.000249
71.97875977	0.000254
71.98486328	0.000261
71.9909668	0.000262
71.99707031	0.000258
72.00317383	0.000256
72.00927734	0.000256
72.01538086	0.000258
72.02148438	0.000263
72.02758789	0.000264

Input Motion

Time (s)	Acceleration (g)
59.005	0.01714
59.01	0.019201
59.015	0.020904
59.02	0.022029
59.025	0.02248
59.03	0.022074
59.035	0.020824
59.04	0.018846
59.045	0.016272
59.05	0.013248
59.055	0.009925
59.06	0.006507
59.065	0.003167
59.07	0.000123
59.075	-0.00242
59.08	-0.004474
59.085	-0.006062
59.09	-0.007098
59.095	-0.007578
59.1	-0.007574
59.105	-0.007147
59.11	-0.006376
59.115	-0.005344
59.12	-0.00408
59.125	-0.002636
59.13	-0.00109
59.135	0.000522
59.14	0.00216
59.145	0.003736
59.15	0.005152
59.155	0.006309
59.16	0.007104
59.165	0.007449
59.17	0.007282
59.175	0.006569
59.18	0.005332
59.185	0.003632
59.19	0.001553
59.195	-0.000795
59.2	-0.003271
59.205	-0.005753
59.21	-0.008148

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
72.03369141	0.000264
72.03979492	0.000266
72.04589844	0.00026
72.05200195	0.000255
72.05810547	0.000259
72.06420898	0.000261
72.0703125	0.000262
72.07641602	0.000265
72.08251953	0.000263
72.08862305	0.00026
72.09472656	0.000266
72.10083008	0.000274
72.10693359	0.000279
72.11303711	0.000282
72.11914063	0.000282
72.12524414	0.000281
72.13134766	0.000283
72.13745117	0.000285
72.14355469	0.00029
72.1496582	0.000294
72.15576172	0.000291
72.16186523	0.000283
72.16796875	0.000277
72.17407227	0.000276
72.18017578	0.00028
72.1862793	0.000282
72.19238281	0.000281
72.19848633	0.000278
72.20458984	0.000273
72.21069336	0.00027
72.21679688	0.000271
72.22290039	0.000274
72.22900391	0.000273
72.23510742	0.00027
72.24121094	0.000265
72.24731445	0.000258
72.25341797	0.000254
72.25952148	0.000254
72.265625	0.000254
72.27172852	0.000254
72.27783203	0.000252
72.28393555	0.000247

Time (s)	Acceleration (g)
59.215	-0.010399
59.22	-0.012524
59.225	-0.014575
59.23	-0.016609
59.235	-0.01869
59.24	-0.020872
59.245	-0.023188
59.25	-0.025647
59.255	-0.028236
59.26	-0.030917
59.265	-0.033619
59.27	-0.036289
59.275	-0.038852
59.28	-0.041196
59.285	-0.043208
59.29	-0.044775
59.295	-0.045792
59.3	-0.046188
59.305	-0.045921
59.31	-0.044933
59.315	-0.0432
59.32	-0.040739
59.325	-0.037491
59.33	-0.033532
59.335	-0.02917
59.34	-0.024332
59.345	-0.018905
59.35	-0.013418
59.355	-0.008183
59.36	-0.003053
59.365	0.001914
59.37	0.006654
59.375	0.011127
59.38	0.015025
59.385	0.018162
59.39	0.021017
59.395	0.024177
59.4	0.027526
59.405	0.030918
59.41	0.034448
59.415	0.037868
59.42	0.04135

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
72.29003906	0.000244
72.29614258	0.000245
72.30224609	0.000245
72.30834961	0.000246
72.31445313	0.000246
72.32055664	0.000243
72.32666016	0.000239
72.33276367	0.000236
72.33886719	0.000236
72.3449707	0.000239
72.35107422	0.000241
72.35717773	0.000242
72.36328125	0.000242
72.36938477	0.000241
72.37548828	0.000243
72.3815918	0.000248
72.38769531	0.000251
72.39379883	0.000254
72.39990234	0.000255
72.40600586	0.000253
72.41210938	0.000251
72.41821289	0.000255
72.42431641	0.000262
72.43041992	0.000267
72.43652344	0.000267
72.44262695	0.000265
72.44873047	0.000263
72.45483398	0.000265
72.4609375	0.000268
72.46704102	0.000272
72.47314453	0.000274
72.47924805	0.000271
72.48535156	0.000268
72.49145508	0.00027
72.49755859	0.000273
72.50366211	0.000273
72.50976563	0.000273
72.51586914	0.000274
72.52197266	0.000273
72.52807617	0.00027
72.53417969	0.000266
72.5402832	0.000267

Input Motion

Time (s)	Acceleration (g)
59.425	0.045304
59.43	0.04928
59.435	0.052877
59.44	0.056234
59.445	0.05899
59.45	0.060593
59.455	0.060925
59.46	0.059765
59.465	0.056854
59.47	0.052301
59.475	0.046337
59.48	0.039253
59.485	0.031471
59.49	0.02347
59.495	0.015741
59.5	0.008725
59.505	0.002824
59.51	-0.001643
59.515	-0.004618
59.52	-0.005969
59.525	-0.005581
59.53	-0.003717
59.535	-0.000763
59.54	0.002247
59.545	0.004494
59.55	0.006545
59.555	0.008133
59.56	0.007841
59.565	0.006286
59.57	0.004503
59.575	0.001999
59.58	-0.00134
59.585	-0.005166
59.59	-0.008948
59.595	-0.011921
59.6	-0.013503
59.605	-0.013502
59.61	-0.01168
59.615	-0.007914
59.62	-0.002175
59.625	0.005379
59.63	0.014275

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
72.54638672	0.000272
72.55249023	0.000276
72.55859375	0.000278
72.56469727	0.000275
72.57080078	0.000271
72.5769043	0.000271
72.58300781	0.000274
72.58911133	0.000274
72.59521484	0.000272
72.60131836	0.000268
72.60742188	0.000262
72.61352539	0.000256
72.61962891	0.000251
72.62573242	0.000248
72.63183594	0.000252
72.63793945	0.000255
72.64404297	0.000249
72.65014648	0.000244
72.65625	0.000245
72.66235352	0.00025
72.66845703	0.000255
72.67456055	0.000259
72.68066406	0.000257
72.68676758	0.000254
72.69287109	0.000253
72.69897461	0.000255
72.70507813	0.000259
72.71118164	0.00026
72.71728516	0.00026
72.72338867	0.000262
72.72949219	0.000259
72.7355957	0.000255
72.74169922	0.000258
72.74780273	0.000263
72.75390625	0.000265
72.76000977	0.000268
72.76611328	0.000266
72.7722168	0.000262
72.77832031	0.000265
72.78442383	0.00027
72.79052734	0.000273
72.79663086	0.000274

Time (s)	Acceleration (g)
59.635	0.023881
59.64	0.033571
59.645	0.042684
59.65	0.050397
59.655	0.055761
59.66	0.058007
59.665	0.056748
59.67	0.051705
59.675	0.04264
59.68	0.029709
59.685	0.013423
59.69	-0.00512
59.695	-0.024651
59.7	-0.044162
59.705	-0.062223
59.71	-0.07727
59.715	-0.087899
59.72	-0.093083
59.725	-0.092442
59.73	-0.085339
59.735	-0.071925
59.74	-0.052507
59.745	-0.027848
59.75	-0.000442
59.755	0.028922
59.76	0.058278
59.765	0.084447
59.77	0.107343
59.775	0.124008
59.78	0.132997
59.785	0.135411
59.79	0.129079
59.795	0.115242
59.8	0.095245
59.805	0.06912
59.81	0.038596
59.815	0.006021
59.82	-0.025625
59.825	-0.057497
59.83	-0.085167
59.835	-0.110938
59.84	-0.134481

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
72.80273438	0.000275
72.80883789	0.000273
72.81494141	0.00027
72.82104492	0.000271
72.82714844	0.000275
72.83325195	0.000278
72.83935547	0.000279
72.84545898	0.000279
72.8515625	0.000277
72.85766602	0.000278
72.86376953	0.000281
72.86987305	0.00028
72.87597656	0.000278
72.88208008	0.00028
72.88818359	0.000275
72.89428711	0.000265
72.90039063	0.000261
72.90649414	0.000262
72.91259766	0.00026
72.91870117	0.000258
72.92480469	0.000255
72.9309082	0.000249
72.93701172	0.000246
72.94311523	0.000248
72.94921875	0.000249
72.95532227	0.000249
72.96142578	0.000248
72.9675293	0.000246
72.97363281	0.000246
72.97973633	0.000247
72.98583984	0.000249
72.99194336	0.000253
72.99804688	0.000253
73.00415039	0.00025
73.01025391	0.00025
73.01635742	0.00025
73.02246094	0.000249
73.02856445	0.000253
73.03466797	0.000259
73.04077148	0.00026
73.046875	0.000258
73.05297852	0.000255

Time (s)	Acceleration (g)
59.845	-0.143834
59.85	-0.145086
59.855	-0.144652
59.86	-0.145934
59.865	-0.140672
59.87	-0.129158
59.875	-0.118967
59.88	-0.107514
59.885	-0.093899
59.89	-0.081124
59.895	-0.073793
59.9	-0.072356
59.905	-0.070739
59.91	-0.067311
59.915	-0.068221
59.92	-0.073088
59.925	-0.076295
59.93	-0.076943
59.935	-0.075881
59.94	-0.072858
59.945	-0.068075
59.95	-0.06231
59.955	-0.056132
59.96	-0.04999
59.965	-0.04393
59.97	-0.037481
59.975	-0.03131
59.98	-0.02634
59.985	-0.022
59.99	-0.01799
59.995	-0.014793
60	-0.011853
60.005	-0.00859
60.01	-0.005369
60.015	-0.002375
60.02	0.000387
60.025	0.003141
60.03	0.005739
60.035	0.007209
60.04	0.007686
60.045	0.007377
60.05	0.005955

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
73.05908203	0.000251
73.06518555	0.000252
73.07128906	0.000257
73.07739258	0.00026
73.08349609	0.000261
73.08959961	0.000262
73.09570313	0.000261
73.10180664	0.000261
73.10791016	0.000266
73.11401367	0.000274
73.12011719	0.000277
73.1262207	0.000279
73.13232422	0.000278
73.13842773	0.000278
73.14453125	0.000281
73.15063477	0.000286
73.15673828	0.000292
73.1628418	0.000293
73.16894531	0.000291
73.17504883	0.00029
73.18115234	0.000289
73.18725586	0.000289
73.19335938	0.000293
73.19946289	0.000294
73.20556641	0.00029
73.21166992	0.000286
73.21777344	0.000284
73.22387695	0.000285
73.22998047	0.000288
73.23608398	0.00029
73.2421875	0.00029
73.24829102	0.000288
73.25439453	0.000282
73.26049805	0.00028
73.26660156	0.000281
73.27270508	0.000281
73.27880859	0.000278
73.28491211	0.000275
73.29101563	0.00027
73.29711914	0.000267
73.30322266	0.000265
73.30932617	0.000266

Time (s)	Acceleration (g)
60.055	0.00358
60.06	0.000714
60.065	-0.002801
60.07	-0.006897
60.075	-0.011094
60.08	-0.015421
60.085	-0.020092
60.09	-0.02477
60.095	-0.029267
60.1	-0.033756
60.105	-0.038246
60.11	-0.0426
60.115	-0.046708
60.12	-0.050419
60.125	-0.053574
60.13	-0.056084
60.135	-0.057883
60.14	-0.058945
60.145	-0.059285
60.15	-0.058918
60.155	-0.057849
60.16	-0.056223
60.165	-0.054005
60.17	-0.05117
60.175	-0.04827
60.18	-0.045481
60.185	-0.042837
60.19	-0.040474
60.195	-0.03837
60.2	-0.036616
60.205	-0.03517
60.21	-0.033736
60.215	-0.032163
60.22	-0.030371
60.225	-0.028169
60.23	-0.025518
60.235	-0.02225
60.24	-0.017999
60.245	-0.012784
60.25	-0.0068
60.255	-0.000147
60.26	0.006862

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
73.31542969	0.000268
73.3215332	0.000269
73.32763672	0.000267
73.33374023	0.000265
73.33984375	0.000265
73.34594727	0.000266
73.35205078	0.00027
73.3581543	0.000272
73.36425781	0.000268
73.37036133	0.000263
73.37646484	0.000259
73.38256836	0.000259
73.38867188	0.000263
73.39477539	0.000267
73.40087891	0.000269
73.40698242	0.000269
73.41308594	0.000269
73.41918945	0.000269
73.42529297	0.000273
73.43139648	0.000277
73.4375	0.000282
73.44360352	0.000287
73.44970703	0.000283
73.45581055	0.000278
73.46191406	0.000278
73.46801758	0.000278
73.47412109	0.000281
73.48022461	0.000284
73.48632813	0.000283
73.49243164	0.00028
73.49853516	0.000281
73.50463867	0.000281
73.51074219	0.000285
73.5168457	0.000294
73.52294922	0.000296
73.52905273	0.000294
73.53515625	0.000294
73.54125977	0.000294
73.54736328	0.000293
73.5534668	0.000296
73.55957031	0.000297
73.56567383	0.000298

Input Motion

Time (s)	Acceleration (g)
60.265	0.014082
60.27	0.021404
60.275	0.028561
60.28	0.035325
60.285	0.041462
60.29	0.046781
60.295	0.051339
60.3	0.055105
60.305	0.057743
60.31	0.059288
60.315	0.060106
60.32	0.060239
60.325	0.059548
60.33	0.058078
60.335	0.055944
60.34	0.053196
60.345	0.049867
60.35	0.046075
60.355	0.041921
60.36	0.037517
60.365	0.032984
60.37	0.028421
60.375	0.023991
60.38	0.019678
60.385	0.015508
60.39	0.01217
60.395	0.010168
60.4	0.008651
60.405	0.006966
60.41	0.005489
60.415	0.004244
60.42	0.003017
60.425	0.00172
60.43	0.000232
60.435	-0.001531
60.44	-0.003577
60.445	-0.005865
60.45	-0.008314
60.455	-0.010835
60.46	-0.013341
60.465	-0.015708
60.47	-0.017878

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
73.57177734	0.000296
73.57788086	0.00029
73.58398438	0.000286
73.59008789	0.000288
73.59619141	0.000288
73.60229492	0.000289
73.60839844	0.000286
73.61450195	0.000278
73.62060547	0.000274
73.62670898	0.000275
73.6328125	0.000275
73.63891602	0.000277
73.64501953	0.000277
73.65112305	0.000272
73.65722656	0.000269
73.66333008	0.00027
73.66943359	0.00027
73.67553711	0.000276
73.68164063	0.000279
73.68774414	0.000277
73.69384766	0.000275
73.69995117	0.000274
73.70605469	0.000273
73.7121582	0.000278
73.71826172	0.000285
73.72436523	0.000286
73.73046875	0.000285
73.73657227	0.00028
73.74267578	0.000277
73.7487793	0.000279
73.75488281	0.000285
73.76098633	0.000287
73.76708984	0.000287
73.77319336	0.000286
73.77929688	0.000285
73.78540039	0.000285
73.79150391	0.000288
73.79760742	0.000292
73.80371094	0.000296
73.80981445	0.000298
73.81591797	0.000297
73.82202148	0.000295

Time (s)	Acceleration (g)
60.475	-0.019847
60.48	-0.021471
60.485	-0.022733
60.49	-0.023578
60.495	-0.024006
60.5	-0.024612
60.505	-0.02554
60.51	-0.026675
60.515	-0.028128
60.52	-0.029827
60.525	-0.031728
60.53	-0.034295
60.535	-0.037468
60.54	-0.040871
60.545	-0.044423
60.55	-0.048065
60.555	-0.051669
60.56	-0.055069
60.565	-0.058417
60.57	-0.061113
60.575	-0.062029
60.58	-0.061698
60.585	-0.060479
60.59	-0.058283
60.595	-0.055528
60.6	-0.052458
60.605	-0.048742
60.61	-0.044172
60.615	-0.039201
60.62	-0.033935
60.625	-0.027998
60.63	-0.021613
60.635	-0.015184
60.64	-0.008654
60.645	-0.002053
60.65	0.004459
60.655	0.010795
60.66	0.016874
60.665	0.022605
60.67	0.027896
60.675	0.032731
60.68	0.037056

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
73.828125	0.000295
73.83422852	0.000299
73.84033203	0.000305
73.84643555	0.000307
73.85253906	0.000306
73.85864258	0.000304
73.86474609	0.000304
73.87084961	0.000306
73.87695313	0.000311
73.88305664	0.000313
73.88916016	0.000313
73.89526367	0.000309
73.90136719	0.000305
73.9074707	0.000303
73.91357422	0.000304
73.91967773	0.000306
73.92578125	0.000306
73.93188477	0.000303
73.93798828	0.000296
73.9440918	0.00029
73.95019531	0.000289
73.95629883	0.000293
73.96240234	0.000296
73.96850586	0.000295
73.97460938	0.000289
73.98071289	0.000286
73.98681641	0.000288
73.99291992	0.000289
73.99902344	0.00029
74.00512695	0.000291
74.01123047	0.000288
74.01733398	0.000284
74.0234375	0.000281
74.02954102	0.000279
74.03564453	0.000278
74.04174805	0.000278
74.04785156	0.000278
74.05395508	0.000275
74.06005859	0.000272
74.06616211	0.000274
74.07226563	0.000277
74.07836914	0.00028

Time (s)	Acceleration (g)
60.685	0.040677
60.69	0.043542
60.695	0.045673
60.7	0.046776
60.705	0.046763
60.71	0.045979
60.715	0.044393
60.72	0.041602
60.725	0.037745
60.73	0.033572
60.735	0.029502
60.74	0.025415
60.745	0.021333
60.75	0.017505
60.755	0.014243
60.76	0.011415
60.765	0.009396
60.77	0.008975
60.775	0.00959
60.78	0.011083
60.785	0.013667
60.79	0.016262
60.795	0.01754
60.8	0.018367
60.805	0.019191
60.81	0.019707
60.815	0.019893
60.82	0.019804
60.825	0.019369
60.83	0.018538
60.835	0.017362
60.84	0.015865
60.845	0.01415
60.85	0.012357
60.855	0.010598
60.86	0.008978
60.865	0.007594
60.87	0.006429
60.875	0.005457
60.88	0.004625
60.885	0.00387
60.89	0.003164

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
74.08447266	0.000283
74.09057617	0.000285
74.09667969	0.000284
74.1027832	0.000283
74.10888672	0.000284
74.11499023	0.000289
74.12109375	0.000293
74.12719727	0.000293
74.13330078	0.00029
74.1394043	0.000288
74.14550781	0.000289
74.15161133	0.000291
74.15771484	0.000294
74.16381836	0.000299
74.16992188	0.000299
74.17602539	0.000296
74.18212891	0.000295
74.18823242	0.000297
74.19433594	0.000298
74.20043945	0.000303
74.20654297	0.000307
74.21264648	0.000307
74.21875	0.000304
74.22485352	0.000303
74.23095703	0.000303
74.23706055	0.000308
74.24316406	0.000313
74.24926758	0.000313
74.25537109	0.000313
74.26147461	0.000312
74.26757813	0.00031
74.27368164	0.00031
74.27978516	0.000312
74.28588867	0.000313
74.29199219	0.000312
74.2980957	0.00031
74.30419922	0.000306
74.31030273	0.000302
74.31640625	0.000301
74.32250977	0.000301
74.32861328	0.0003
74.3347168	0.000298

Input Motion

Time (s)	Acceleration (g)
60.895	0.002432
60.9	0.001565
60.905	0.000474
60.91	-0.00095
60.915	-0.002764
60.92	-0.004929
60.925	-0.00735
60.93	-0.009827
60.935	-0.012145
60.94	-0.014154
60.945	-0.015727
60.95	-0.01683
60.955	-0.017472
60.96	-0.017638
60.965	-0.017345
60.97	-0.016637
60.975	-0.015568
60.98	-0.014254
60.985	-0.012822
60.99	-0.011393
60.995	-0.010082
61	-0.00896
61.005	-0.008076
61.01	-0.007473
61.015	-0.00716
61.02	-0.007144
61.025	-0.007433
61.03	-0.007974
61.035	-0.008697
61.04	-0.00954
61.045	-0.010427
61.05	-0.011298
61.055	-0.01212
61.06	-0.012852
61.065	-0.013462
61.07	-0.013906
61.075	-0.014154
61.08	-0.014231
61.085	-0.014177
61.09	-0.014047
61.095	-0.013913
61.1	-0.013821

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
74.34082031	0.000292
74.34692383	0.00029
74.35302734	0.000293
74.35913086	0.000295
74.36523438	0.000295
74.37133789	0.000294
74.37744141	0.00029
74.38354492	0.00029
74.38964844	0.000293
74.39575195	0.000293
74.40185547	0.000296
74.40795898	0.000299
74.4140625	0.0003
74.42016602	0.000297
74.42626953	0.000294
74.43237305	0.000296
74.43847656	0.000302
74.44458008	0.000305
74.45068359	0.000305
74.45678711	0.000304
74.46289063	0.0003
74.46899414	0.000299
74.47509766	0.000301
74.48120117	0.000303
74.48730469	0.000303
74.4934082	0.000303
74.49951172	0.000299
74.50561523	0.000296
74.51171875	0.000296
74.51782227	0.000297
74.52392578	0.000301
74.5300293	0.000306
74.53613281	0.000306
74.54223633	0.000305
74.54833984	0.000309
74.55444336	0.000313
74.56054688	0.000315
74.56665039	0.000319
74.57275391	0.000318
74.57885742	0.000314
74.58496094	0.000313
74.59106445	0.000311

Time (s)	Acceleration (g)
61.105	-0.013821
61.11	-0.013973
61.115	-0.014323
61.12	-0.014935
61.125	-0.015849
61.13	-0.017032
61.135	-0.018418
61.14	-0.019909
61.145	-0.021383
61.15	-0.022733
61.155	-0.023867
61.16	-0.024715
61.165	-0.025243
61.17	-0.025439
61.175	-0.025317
61.18	-0.024913
61.185	-0.024263
61.19	-0.023409
61.195	-0.022385
61.2	-0.021172
61.205	-0.019744
61.21	-0.018068
61.215	-0.016127
61.22	-0.013929
61.225	-0.011518
61.23	-0.008975
61.235	-0.006382
61.24	-0.003842
61.245	-0.001396
61.25	0.000995
61.255	0.003367
61.26	0.005742
61.265	0.008125
61.27	0.010482
61.275	0.012746
61.28	0.014836
61.285	0.016651
61.29	0.018093
61.295	0.01907
61.3	0.019495
61.305	0.019302
61.31	0.018448

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
74.59716797	0.000311
74.60327148	0.000314
74.609375	0.000312
74.61547852	0.000309
74.62158203	0.000307
74.62768555	0.000301
74.63378906	0.0003
74.63989258	0.000303
74.64599609	0.000303
74.65209961	0.000302
74.65820313	0.000302
74.66430664	0.000297
74.67041016	0.000294
74.67651367	0.000296
74.68261719	0.000296
74.6887207	0.000296
74.69482422	0.000296
74.70092773	0.000292
74.70703125	0.00029
74.71313477	0.000291
74.71923828	0.000292
74.7253418	0.000294
74.73144531	0.000293
74.73754883	0.000291
74.74365234	0.000294
74.74975586	0.000295
74.75585938	0.000293
74.76196289	0.000298
74.76806641	0.000302
74.77416992	0.000298
74.78027344	0.000296
74.78637695	0.000297
74.79248047	0.000296
74.79858398	0.000297
74.8046875	0.000298
74.81079102	0.000299
74.81689453	0.0003
74.82299805	0.000299
74.82910156	0.000299
74.83520508	0.000303
74.84130859	0.000305
74.84741211	0.000308

Input Motion

Time (s)	Acceleration (g)
61.315	0.016917
61.32	0.014713
61.325	0.011871
61.33	0.008451
61.335	0.00454
61.34	0.000256
61.345	-0.004266
61.35	-0.008875
61.355	-0.013424
61.36	-0.017766
61.365	-0.021761
61.37	-0.025313
61.375	-0.028339
61.38	-0.030738
61.385	-0.032432
61.39	-0.033372
61.395	-0.033517
61.4	-0.032894
61.405	-0.03154
61.41	-0.02947
61.415	-0.026711
61.42	-0.023292
61.425	-0.019257
61.43	-0.0147
61.435	-0.009746
61.44	-0.004552
61.445	0.000708
61.45	0.005848
61.455	0.010694
61.46	0.015109
61.465	0.018989
61.47	0.022262
61.475	0.024894
61.48	0.026855
61.485	0.028136
61.49	0.028754
61.495	0.028736
61.5	0.028115
61.505	0.026922
61.51	0.025193
61.515	0.022966
61.52	0.02026

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
74.85351563	0.00031
74.85961914	0.000311
74.86572266	0.000309
74.87182617	0.000309
74.87792969	0.00031
74.8840332	0.000314
74.89013672	0.000316
74.89624023	0.000314
74.90234375	0.000311
74.90844727	0.000312
74.91455078	0.000314
74.9206543	0.000315
74.92675781	0.000317
74.93286133	0.000317
74.93896484	0.000314
74.94506836	0.000311
74.95117188	0.000309
74.95727539	0.000312
74.96337891	0.000314
74.96948242	0.000311
74.97558594	0.000309
74.98168945	0.000308
74.98779297	0.000305
74.99389648	0.000304
75	0.000305
75.00610352	0.000304
75.01220703	0.000304
75.01831055	0.000302
75.02441406	0.000297
75.03051758	0.000295
75.03662109	0.000298
75.04272461	0.000298
75.04882813	0.000295
75.05493164	0.000293
75.06103516	0.000291
75.06713867	0.000289
75.07324219	0.000289
75.0793457	0.000289
75.08544922	0.00029
75.09155273	0.000292
75.09765625	0.00029
75.10375977	0.000288

Input Motion

Time (s)	Acceleration (g)
61.525	0.01712
61.53	0.013626
61.535	0.009879
61.54	0.006035
61.545	0.002253
61.55	-0.001334
61.555	-0.004595
61.56	-0.007441
61.565	-0.009786
61.57	-0.011512
61.575	-0.012497
61.58	-0.012616
61.585	-0.011762
61.59	-0.009843
61.595	-0.006831
61.6	-0.002797
61.605	0.002123
61.61	0.007695
61.615	0.013646
61.62	0.019727
61.625	0.025697
61.63	0.031336
61.635	0.036457
61.64	0.040907
61.645	0.044556
61.65	0.047289
61.655	0.049024
61.66	0.049705
61.665	0.049321
61.67	0.047927
61.675	0.045625
61.68	0.042564
61.685	0.038927
61.69	0.034901
61.695	0.030674
61.7	0.026432
61.705	0.022326
61.71	0.018458
61.715	0.014893
61.72	0.011639
61.725	0.008665
61.73	0.005943

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
75.10986328	0.000289
75.1159668	0.000291
75.12207031	0.000294
75.12817383	0.000296
75.13427734	0.000294
75.14038086	0.000291
75.14648438	0.000288
75.15258789	0.000288
75.15869141	0.00029
75.16479492	0.00029
75.17089844	0.000289
75.17700195	0.000289
75.18310547	0.000289
75.18920898	0.000288
75.1953125	0.000292
75.20141602	0.000295
75.20751953	0.000298
75.21362305	0.000302
75.21972656	0.000304
75.22583008	0.000302
75.23193359	0.000302
75.23803711	0.000304
75.24414063	0.000307
75.25024414	0.000309
75.25634766	0.000308
75.26245117	0.000307
75.26855469	0.000307
75.2746582	0.000308
75.28076172	0.000308
75.28686523	0.000309
75.29296875	0.000309
75.29907227	0.000307
75.30517578	0.000308
75.3112793	0.000308
75.31738281	0.000306
75.32348633	0.000305
75.32958984	0.000306
75.33569336	0.000305
75.34179688	0.000304
75.34790039	0.000302
75.35400391	0.000298
75.36010742	0.000295

Time (s)	Acceleration (g)
61.735	0.003428
61.74	0.001055
61.745	-0.001232
61.75	-0.003478
61.755	-0.005702
61.76	-0.007888
61.765	-0.009986
61.77	-0.011908
61.775	-0.013548
61.78	-0.014777
61.785	-0.015471
61.79	-0.015534
61.795	-0.014904
61.8	-0.013563
61.805	-0.011536
61.81	-0.008901
61.815	-0.005769
61.82	-0.002273
61.825	0.001431
61.83	0.005189
61.835	0.008823
61.84	0.012143
61.845	0.014971
61.85	0.017102
61.855	0.018393
61.86	0.018814
61.865	0.018406
61.87	0.017293
61.875	0.015632
61.88	0.013538
61.885	0.011105
61.89	0.008393
61.895	0.00542
61.9	0.002184
61.905	-0.001329
61.91	-0.005153
61.915	-0.009307
61.92	-0.013768
61.925	-0.018483
61.93	-0.023364
61.935	-0.028278
61.94	-0.033077

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
75.36621094	0.000296
75.37231445	0.000297
75.37841797	0.000296
75.38452148	0.000294
75.390625	0.000293
75.39672852	0.000292
75.40283203	0.000292
75.40893555	0.000292
75.41503906	0.000292
75.42114258	0.000292
75.42724609	0.00029
75.43334961	0.000288
75.43945313	0.000286
75.44555664	0.000287
75.45166016	0.000287
75.45776367	0.000283
75.46386719	0.000282
75.4699707	0.000282
75.47607422	0.000281
75.48217773	0.000282
75.48828125	0.000284
75.49438477	0.000285
75.50048828	0.000286
75.5065918	0.000286
75.51269531	0.000285
75.51879883	0.000287
75.52490234	0.000288
75.53100586	0.000289
75.53710938	0.000289
75.54321289	0.000289
75.54931641	0.00029
75.55541992	0.000292
75.56152344	0.000292
75.56762695	0.000293
75.57373047	0.000295
75.57983398	0.000296
75.5859375	0.000296
75.59204102	0.000298
75.59814453	0.000299
75.60424805	0.000299
75.61035156	0.0003
75.61645508	0.0003

Time (s)	Acceleration (g)
61.945	-0.037587
61.95	-0.041602
61.955	-0.044924
61.96	-0.047389
61.965	-0.048843
61.97	-0.049193
61.975	-0.048371
61.98	-0.046315
61.985	-0.042997
61.99	-0.038424
61.995	-0.032652
62	-0.025809
62.005	-0.018115
62.01	-0.009901
62.015	-0.001589
62.02	0.006381
62.025	0.013576
62.03	0.019629
62.035	0.024302
62.04	0.02751
62.045	0.02933
62.05	0.030011
62.055	0.029895
62.06	0.029356
62.065	0.02873
62.07	0.02825
62.075	0.028027
62.08	0.028044
62.085	0.028215
62.09	0.028431
62.095	0.028614
62.1	0.028787
62.105	0.029056
62.11	0.029561
62.115	0.030484
62.12	0.032016
62.125	0.034283
62.13	0.037302
62.135	0.040975
62.14	0.045092
62.145	0.04936
62.15	0.053472

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
75.62255859	0.000297
75.62866211	0.000295
75.63476563	0.000295
75.64086914	0.000294
75.64697266	0.000296
75.65307617	0.000299
75.65917969	0.000299
75.6652832	0.000298
75.67138672	0.000296
75.67749023	0.000295
75.68359375	0.000295
75.68969727	0.000294
75.69580078	0.000292
75.7019043	0.00029
75.70800781	0.000285
75.71411133	0.000281
75.72021484	0.00028
75.72631836	0.000279
75.73242188	0.000279
75.73852539	0.000279
75.74462891	0.000277
75.75073242	0.000274
75.75683594	0.000274
75.76293945	0.000275
75.76904297	0.000276
75.77514648	0.000275
75.78125	0.000273
75.78735352	0.000274
75.79345703	0.000273
75.79956055	0.000271
75.80566406	0.000272
75.81176758	0.000274
75.81787109	0.000273
75.82397461	0.000272
75.83007813	0.000271
75.83618164	0.00027
75.84228516	0.000272
75.84838867	0.000273
75.85449219	0.000271
75.8605957	0.000271
75.86669922	0.000272
75.87280273	0.000271

Input Motion

Time (s)	Acceleration (g)
62.155	0.057151
62.16	0.060157
62.165	0.062329
62.17	0.063579
62.175	0.063862
62.18	0.063194
62.185	0.061622
62.19	0.059148
62.195	0.055747
62.2	0.05135
62.205	0.045932
62.21	0.039635
62.215	0.03272
62.22	0.025623
62.225	0.018968
62.23	0.013074
62.235	0.007974
62.24	0.00379
62.245	0.000386
62.25	-0.002769
62.255	-0.006067
62.26	-0.009849
62.265	-0.014698
62.27	-0.021219
62.275	-0.029779
62.28	-0.040234
62.285	-0.051726
62.29	-0.062747
62.295	-0.0715
62.3	-0.076554
62.305	-0.077067
62.31	-0.072804
62.315	-0.064468
62.32	-0.053322
62.325	-0.040305
62.33	-0.026113
62.335	-0.011637
62.34	0.002042
62.345	0.013689
62.35	0.022154
62.355	0.027066
62.36	0.029226

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
75.87890625	0.000273
75.88500977	0.000277
75.89111328	0.000277
75.8972168	0.000277
75.90332031	0.000278
75.90942383	0.000278
75.91552734	0.000278
75.92163086	0.000279
75.92773438	0.000281
75.93383789	0.000283
75.93994141	0.000283
75.94604492	0.000284
75.95214844	0.000287
75.95825195	0.000287
75.96435547	0.000288
75.97045898	0.000291
75.9765625	0.000294
75.98266602	0.000292
75.98876953	0.00029
75.99487305	0.000291
76.00097656	0.000291
76.00708008	0.000287
76.01318359	0.000282
76.01928711	0.00028
76.02539063	0.00028
76.03149414	0.000278
76.03759766	0.000276
76.04370117	0.000274
76.04980469	0.000272
76.0559082	0.000272
76.06201172	0.000272
76.06811523	0.000271
76.07421875	0.000271
76.08032227	0.000272
76.08642578	0.000269
76.0925293	0.000269
76.09863281	0.000268
76.10473633	0.000265
76.11083984	0.000264
76.11694336	0.000265
76.12304688	0.000264
76.12915039	0.000262

Input Motion

Time (s)	Acceleration (g)
62.365	0.030084
62.37	0.030662
62.375	0.030887
62.38	0.029966
62.385	0.027508
62.39	0.024039
62.395	0.020071
62.4	0.014874
62.405	0.006816
62.41	-0.004846
62.415	-0.018875
62.42	-0.033025
62.425	-0.04567
62.43	-0.056153
62.435	-0.064118
62.44	-0.069371
62.445	-0.072576
62.45	-0.075459
62.455	-0.07947
62.46	-0.084176
62.465	-0.087645
62.47	-0.088518
62.475	-0.087191
62.48	-0.084871
62.485	-0.082392
62.49	-0.080244
62.495	-0.078249
62.5	-0.074421
62.505	-0.065314
62.51	-0.048952
62.515	-0.027936
62.52	-0.008412
62.525	0.005305
62.53	0.014179
62.535	0.02223
62.54	0.032157
62.545	0.043549
62.55	0.054637
62.555	0.064344
62.56	0.071509
62.565	0.074008
62.57	0.072235

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
76.13525391	0.000262
76.14135742	0.00026
76.14746094	0.000259
76.15356445	0.000259
76.15966797	0.000259
76.16577148	0.000259
76.171875	0.000259
76.17797852	0.000258
76.18408203	0.000258
76.19018555	0.000257
76.19628906	0.000255
76.20239258	0.000253
76.20849609	0.000254
76.21459961	0.000255
76.22070313	0.000256
76.22680664	0.000257
76.23291016	0.000258
76.23901367	0.000262
76.24511719	0.000265
76.2512207	0.000264
76.25732422	0.000265
76.26342773	0.000268
76.26953125	0.00027
76.27563477	0.000272
76.28173828	0.000272
76.2878418	0.000269
76.29394531	0.000269
76.30004883	0.000272
76.30615234	0.000271
76.31225586	0.00027
76.31835938	0.00027
76.32446289	0.000269
76.33056641	0.000271
76.33666992	0.000271
76.34277344	0.000269
76.34887695	0.000267
76.35498047	0.000267
76.36108398	0.000264
76.3671875	0.000263
76.37329102	0.000261
76.37939453	0.000258
76.38549805	0.000257

Input Motion

Time (s)	Acceleration (g)
62.575	0.071037
62.58	0.073468
62.585	0.075143
62.59	0.068093
62.595	0.049748
62.6	0.027675
62.605	0.01325
62.61	0.008783
62.615	0.005953
62.62	-0.00116
62.625	-0.01137
62.63	-0.02361
62.635	-0.040076
62.64	-0.062528
62.645	-0.082115
62.65	-0.080451
62.655	-0.054601
62.66	-0.033708
62.665	-0.050763
62.67	-0.088407
62.675	-0.096857
62.68	-0.063449
62.685	-0.013927
62.69	0.017984
62.695	0.023914
62.7	0.02357
62.705	0.020594
62.71	0.00357
62.715	-0.029979
62.72	-0.056423
62.725	-0.068873
62.73	-0.099672
62.735	-0.118907
62.74	-0.112968
62.745	-0.112362
62.75	-0.070047
62.755	-0.019242
62.76	0.004165
62.765	0.065806
62.77	0.101445
62.775	0.100687
62.78	0.125029

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
76.39160156	0.000255
76.39770508	0.000251
76.40380859	0.000249
76.40991211	0.000249
76.41601563	0.000248
76.42211914	0.000249
76.42822266	0.000248
76.43432617	0.000246
76.44042969	0.000245
76.4465332	0.000244
76.45263672	0.000242
76.45874023	0.000241
76.46484375	0.000239
76.47094727	0.000237
76.47705078	0.000235
76.4831543	0.000235
76.48925781	0.000235
76.49536133	0.000234
76.50146484	0.000234
76.50756836	0.000236
76.51367188	0.000235
76.51977539	0.000233
76.52587891	0.000232
76.53198242	0.000235
76.53808594	0.000237
76.54418945	0.000237
76.55029297	0.000238
76.55639648	0.000236
76.5625	0.000236
76.56860352	0.000239
76.57470703	0.000241
76.58081055	0.000241
76.58691406	0.000241
76.59301758	0.000242
76.59912109	0.000244
76.60522461	0.000247
76.61132813	0.000249
76.61743164	0.000252
76.62353516	0.000255
76.62963867	0.000256
76.63574219	0.000257
76.6418457	0.00026

Input Motion

Time (s)	Acceleration (g)
62.785	0.125342
62.79	0.107172
62.795	0.086609
62.8	0.055196
62.805	0.04329
62.81	0.050952
62.815	0.03914
62.82	0.01706
62.825	0.010545
62.83	-0.006071
62.835	-0.052243
62.84	-0.097401
62.845	-0.101312
62.85	-0.073664
62.855	-0.050357
62.86	-0.010022
62.865	0.060244
62.87	0.088613
62.875	0.063993
62.88	0.07321
62.885	0.106889
62.89	0.092115
62.895	0.080291
62.9	0.102788
62.905	0.092024
62.91	0.055129
62.915	0.033382
62.92	0.024333
62.925	0.021127
62.93	0.021737
62.935	0.021995
62.94	0.021253
62.945	0.020818
62.95	0.020508
62.955	0.020656
62.96	0.02151
62.965	0.022482
62.97	0.023369
62.975	0.024537
62.98	0.026098
62.985	0.028132
62.99	0.030505

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
76.64794922	0.000261
76.65405273	0.000263
76.66015625	0.000266
76.66625977	0.000264
76.67236328	0.000258
76.6784668	0.000257
76.68457031	0.000258
76.69067383	0.000258
76.69677734	0.000256
76.70288086	0.000253
76.70898438	0.000252
76.71508789	0.00025
76.72119141	0.000249
76.72729492	0.000248
76.73339844	0.000246
76.73950195	0.000241
76.74560547	0.000242
76.75170898	0.000242
76.7578125	0.000238
76.76391602	0.000234
76.77001953	0.000232
76.77612305	0.000231
76.78222656	0.000231
76.78833008	0.00023
76.79443359	0.000227
76.80053711	0.000225
76.80664063	0.000225
76.81274414	0.000226
76.81884766	0.000227
76.82495117	0.000224
76.83105469	0.00022
76.8371582	0.000219
76.84326172	0.000217
76.84936523	0.000214
76.85546875	0.000213
76.86157227	0.000211
76.86767578	0.000211
76.8737793	0.000213
76.87988281	0.000211
76.88598633	0.000208
76.89208984	0.00021
76.89819336	0.000212

Input Motion

Time (s)	Acceleration (g)
62.995	0.032778
63	0.035078
63.005	0.037598
63.01	0.039474
63.015	0.04024
63.02	0.040657
63.025	0.040848
63.03	0.040105
63.035	0.038377
63.04	0.03607
63.045	0.033399
63.05	0.030141
63.055	0.025976
63.06	0.021062
63.065	0.01578
63.07	0.010464
63.075	0.00522
63.08	-0.000246
63.085	-0.005908
63.09	-0.011261
63.095	-0.016296
63.1	-0.021474
63.105	-0.026607
63.11	-0.031278
63.115	-0.03563
63.12	-0.039536
63.125	-0.042609
63.13	-0.044951
63.135	-0.046693
63.14	-0.04779
63.145	-0.048223
63.15	-0.047922
63.155	-0.04693
63.16	-0.045298
63.165	-0.042873
63.17	-0.039684
63.175	-0.036044
63.18	-0.032086
63.185	-0.027828
63.19	-0.023456
63.195	-0.019126
63.2	-0.01489

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
76.90429688	0.000213
76.91040039	0.000215
76.91650391	0.000216
76.92260742	0.000217
76.92871094	0.000219
76.93481445	0.00022
76.94091797	0.000221
76.94702148	0.000223
76.953125	0.000223
76.95922852	0.000224
76.96533203	0.000227
76.97143555	0.000227
76.97753906	0.000226
76.98364258	0.000228
76.98974609	0.00023
76.99584961	0.000231
77.00195313	0.000232
77.00805664	0.00023
77.01416016	0.000229
77.02026367	0.00023
77.02636719	0.00023
77.0324707	0.000228
77.03857422	0.000226
77.04467773	0.000226
77.05078125	0.000225
77.05688477	0.000225
77.06298828	0.000224
77.0690918	0.000223
77.07519531	0.000223
77.08129883	0.000225
77.08740234	0.000225
77.09350586	0.000223
77.09960938	0.000222
77.10571289	0.000222
77.11181641	0.000221
77.11791992	0.000217
77.12402344	0.000215
77.13012695	0.000213
77.13623047	0.000209
77.14233398	0.000208
77.1484375	0.000209
77.15454102	0.000205

Time (s)	Acceleration (g)
63.205	-0.010784
63.21	-0.006733
63.215	-0.002701
63.22	0.001238
63.225	0.005086
63.23	0.008858
63.235	0.012451
63.24	0.015703
63.245	0.01848
63.25	0.020623
63.255	0.022024
63.26	0.022753
63.265	0.022827
63.27	0.022131
63.275	0.020939
63.28	0.01974
63.285	0.018531
63.29	0.0172
63.295	0.015933
63.3	0.014828
63.305	0.013909
63.31	0.013253
63.315	0.012904
63.32	0.012932
63.325	0.013308
63.33	0.013825
63.335	0.014415
63.34	0.015073
63.345	0.015661
63.35	0.016099
63.355	0.016394
63.36	0.016499
63.365	0.016411
63.37	0.016235
63.375	0.016011
63.38	0.015764
63.385	0.01568
63.39	0.015906
63.395	0.016419
63.4	0.017271
63.405	0.018525
63.41	0.020132

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
77.16064453	0.000202
77.16674805	0.000201
77.17285156	0.000202
77.17895508	0.000202
77.18505859	0.000202
77.19116211	0.000201
77.19726563	0.000202
77.20336914	0.000202
77.20947266	0.000199
77.21557617	0.000197
77.22167969	0.000199
77.2277832	0.000199
77.23388672	0.000199
77.23999023	0.000199
77.24609375	0.000198
77.25219727	0.000198
77.25830078	0.0002
77.2644043	0.0002
77.27050781	0.0002
77.27661133	0.000201
77.28271484	0.000201
77.28881836	0.000203
77.29492188	0.000206
77.30102539	0.000207
77.30712891	0.000209
77.31323242	0.00021
77.31933594	0.000209
77.32543945	0.00021
77.33154297	0.00021
77.33764648	0.00021
77.34375	0.000212
77.34985352	0.000214
77.35595703	0.000213
77.36206055	0.000212
77.36816406	0.000213
77.37426758	0.000213
77.38037109	0.000215
77.38647461	0.000215
77.39257813	0.000212
77.39868164	0.000209
77.40478516	0.000209
77.41088867	0.000208

Input Motion

Time (s)	Acceleration (g)
63.415	0.022061
63.42	0.024233
63.425	0.026503
63.43	0.028796
63.435	0.031001
63.44	0.032964
63.445	0.03466
63.45	0.036033
63.455	0.036838
63.46	0.036923
63.465	0.036323
63.47	0.03504
63.475	0.033017
63.48	0.030185
63.485	0.026539
63.49	0.022063
63.495	0.016751
63.5	0.010788
63.505	0.004371
63.51	-0.002352
63.515	-0.009167
63.52	-0.015902
63.525	-0.022443
63.53	-0.028622
63.535	-0.034204
63.54	-0.039008
63.545	-0.042892
63.55	-0.04575
63.555	-0.047531
63.56	-0.048268
63.565	-0.048114
63.57	-0.047223
63.575	-0.04566
63.58	-0.043653
63.585	-0.041477
63.59	-0.039228
63.595	-0.03697
63.6	-0.034673
63.605	-0.032379
63.61	-0.03032
63.615	-0.028104
63.62	-0.025265

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
77.41699219	0.000207
77.4230957	0.000203
77.42919922	0.000199
77.43530273	0.000198
77.44140625	0.000195
77.44750977	0.000192
77.45361328	0.000191
77.4597168	0.000189
77.46582031	0.000189
77.47192383	0.00019
77.47802734	0.000187
77.48413086	0.000184
77.49023438	0.000184
77.49633789	0.000183
77.50244141	0.000183
77.50854492	0.000182
77.51464844	0.000179
77.52075195	0.000179
77.52685547	0.000178
77.53295898	0.000175
77.5390625	0.000176
77.54516602	0.000175
77.55126953	0.000173
77.55737305	0.000174
77.56347656	0.000173
77.56958008	0.000169
77.57568359	0.000169
77.58178711	0.000171
77.58789063	0.000172
77.59399414	0.000172
77.60009766	0.000171
77.60620117	0.000168
77.61230469	0.000169
77.6184082	0.000174
77.62451172	0.000178
77.63061523	0.000181
77.63671875	0.000182
77.64282227	0.000184
77.64892578	0.000189
77.6550293	0.000192
77.66113281	0.000193
77.66723633	0.000196

Time (s)	Acceleration (g)
63.625	-0.022305
63.63	-0.01927
63.635	-0.015514
63.64	-0.011401
63.645	-0.007536
63.65	-0.003787
63.655	-0.000196
63.66	0.003023
63.665	0.005719
63.67	0.007708
63.675	0.009319
63.68	0.010836
63.685	0.011797
63.69	0.011835
63.695	0.01108
63.7	0.009991
63.705	0.008823
63.71	0.007289
63.715	0.005299
63.72	0.002958
63.725	0.000233
63.73	-0.002778
63.735	-0.005804
63.74	-0.008966
63.745	-0.01243
63.75	-0.01597
63.755	-0.019478
63.76	-0.022971
63.765	-0.026215
63.77	-0.029075
63.775	-0.031692
63.78	-0.034037
63.785	-0.036011
63.79	-0.037579
63.795	-0.038716
63.8	-0.039401
63.805	-0.03963
63.81	-0.039409
63.815	-0.038744
63.82	-0.0376
63.825	-0.035935
63.83	-0.033712

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
77.67333984	0.000198
77.67944336	0.000199
77.68554688	0.0002
77.69165039	0.000199
77.69775391	0.000197
77.70385742	0.000198
77.70996094	0.000199
77.71606445	0.000197
77.72216797	0.000194
77.72827148	0.000192
77.734375	0.000191
77.74047852	0.000192
77.74658203	0.000193
77.75268555	0.000192
77.75878906	0.00019
77.76489258	0.000188
77.77099609	0.000186
77.77709961	0.000185
77.78320313	0.000183
77.78930664	0.000183
77.79541016	0.000182
77.80151367	0.000178
77.80761719	0.000175
77.8137207	0.000173
77.81982422	0.000171
77.82592773	0.000171
77.83203125	0.000171
77.83813477	0.000168
77.84423828	0.000165
77.8503418	0.000164
77.85644531	0.000163
77.86254883	0.000161
77.86865234	0.00016
77.87475586	0.000157
77.88085938	0.000154
77.88696289	0.000152
77.89306641	0.00015
77.89916992	0.000151
77.90527344	0.000153
77.91137695	0.00015
77.91748047	0.000149
77.92358398	0.000149

Input Motion

Time (s)	Acceleration (g)
63.835	-0.030896
63.84	-0.027467
63.845	-0.023415
63.85	-0.01876
63.855	-0.01358
63.86	-0.007902
63.865	-0.001805
63.87	0.004463
63.875	0.010832
63.88	0.017426
63.885	0.024093
63.89	0.03054
63.895	0.036632
63.9	0.042287
63.905	0.047341
63.91	0.051518
63.915	0.05475
63.92	0.05724
63.925	0.058935
63.93	0.059659
63.935	0.059523
63.94	0.058704
63.945	0.057246
63.95	0.055194
63.955	0.052588
63.96	0.049371
63.965	0.045523
63.97	0.04112
63.975	0.03618
63.98	0.030644
63.985	0.024592
63.99	0.018211
63.995	0.011647
64	0.005091
64.005	-0.001252
64.01	-0.007287
64.015	-0.012944
64.02	-0.018142
64.025	-0.022868
64.03	-0.027149
64.035	-0.030952
64.04	-0.034207

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
77.9296875	0.000149
77.93579102	0.000153
77.94189453	0.000157
77.94799805	0.000159
77.95410156	0.000162
77.96020508	0.000162
77.96630859	0.000159
77.97241211	0.000162
77.97851563	0.000166
77.98461914	0.000168
77.99072266	0.000171
77.99682617	0.00017
78.00292969	0.000168
78.0090332	0.00017
78.01513672	0.000172
78.02124023	0.000174
78.02734375	0.000178
78.03344727	0.000179
78.03955078	0.000179
78.0456543	0.00018
78.05175781	0.000179
78.05786133	0.000179
78.06396484	0.000182
78.07006836	0.000183
78.07617188	0.000181
78.08227539	0.000178
78.08837891	0.000174
78.09448242	0.000173
78.10058594	0.000175
78.10668945	0.000174
78.11279297	0.000171
78.11889648	0.000169
78.125	0.000164
78.13110352	0.00016
78.13720703	0.000159
78.14331055	0.000159
78.14941406	0.000157
78.15551758	0.000155
78.16162109	0.000152
78.16772461	0.000148
78.17382813	0.000145
78.17993164	0.000142

Input Motion

Time (s)	Acceleration (g)
64.045	-0.036889
64.05	-0.038993
64.055	-0.040504
64.06	-0.041402
64.065	-0.041676
64.07	-0.041329
64.075	-0.04037
64.08	-0.038812
64.085	-0.036683
64.09	-0.03401
64.095	-0.030827
64.1	-0.027174
64.105	-0.023077
64.11	-0.018558
64.115	-0.013623
64.12	-0.008249
64.125	-0.002421
64.13	0.00386
64.135	0.01055
64.14	0.017534
64.145	0.024645
64.15	0.031685
64.155	0.038445
64.16	0.044729
64.165	0.050378
64.17	0.055296
64.175	0.059429
64.18	0.062734
64.185	0.065164
64.19	0.066703
64.195	0.06729
64.2	0.066807
64.205	0.065616
64.21	0.06393
64.215	0.061352
64.22	0.058423
64.225	0.055907
64.23	0.052613
64.235	0.047583
64.24	0.041943
64.245	0.036199
64.25	0.030277

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
78.18603516	0.000143
78.19213867	0.000145
78.19824219	0.000144
78.2043457	0.000141
78.21044922	0.00014
78.21655273	0.000138
78.22265625	0.000139
78.22875977	0.000141
78.23486328	0.00014
78.2409668	0.000139
78.24707031	0.000137
78.25317383	0.000135
78.25927734	0.000135
78.26538086	0.000135
78.27148438	0.000135
78.27758789	0.000135
78.28369141	0.000135
78.28979492	0.000134
78.29589844	0.000135
78.30200195	0.000139
78.30810547	0.000143
78.31420898	0.000146
78.3203125	0.000147
78.32641602	0.000146
78.33251953	0.000149
78.33862305	0.000154
78.34472656	0.000157
78.35083008	0.000161
78.35693359	0.000162
78.36303711	0.00016
78.36914063	0.000161
78.37524414	0.000163
78.38134766	0.000165
78.38745117	0.000169
78.39355469	0.000172
78.3996582	0.000172
78.40576172	0.00017
78.41186523	0.000166
78.41796875	0.000164
78.42407227	0.000166
78.43017578	0.000167
78.4362793	0.000164

Time (s)	Acceleration (g)
64.255	0.024406
64.26	0.018641
64.265	0.012996
64.27	0.007495
64.275	0.002123
64.28	-0.003131
64.285	-0.008273
64.29	-0.013322
64.295	-0.018281
64.3	-0.023131
64.305	-0.027837
64.31	-0.032341
64.315	-0.036564
64.32	-0.040411
64.325	-0.043773
64.33	-0.046522
64.335	-0.048531
64.34	-0.049678
64.345	-0.049853
64.35	-0.048987
64.355	-0.047076
64.36	-0.0441
64.365	-0.040023
64.37	-0.034926
64.375	-0.028944
64.38	-0.022241
64.385	-0.015093
64.39	-0.007716
64.395	-0.0002
64.4	0.007245
64.405	0.014398
64.41	0.021248
64.415	0.027632
64.42	0.033164
64.425	0.037748
64.43	0.041446
64.435	0.044193
64.44	0.045983
64.445	0.04689
64.45	0.046964
64.455	0.046219
64.46	0.044661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
78.44238281	0.00016
78.44848633	0.000156
78.45458984	0.000153
78.46069336	0.000153
78.46679688	0.000151
78.47290039	0.000149
78.47900391	0.000148
78.48510742	0.000146
78.49121094	0.000143
78.49731445	0.000144
78.50341797	0.000143
78.50952148	0.000142
78.515625	0.000142
78.52172852	0.000139
78.52783203	0.000135
78.53393555	0.000133
78.54003906	0.000131
78.54614258	0.000131
78.55224609	0.00013
78.55834961	0.000127
78.56445313	0.000122
78.57055664	0.000119
78.57666016	0.000118
78.58276367	0.00012
78.58886719	0.00012
78.5949707	0.00012
78.60107422	0.00012
78.60717773	0.000119
78.61328125	0.000118
78.61938477	0.00012
78.62548828	0.000124
78.6315918	0.000124
78.63769531	0.000125
78.64379883	0.000127
78.64990234	0.000127
78.65600586	0.000128
78.66210938	0.000131
78.66821289	0.000134
78.67431641	0.000138
78.68041992	0.00014
78.68652344	0.000139
78.69262695	0.000141

Input Motion

Time (s)	Acceleration (g)
64.465	0.042421
64.47	0.039553
64.475	0.035794
64.48	0.031185
64.485	0.02638
64.49	0.021356
64.495	0.015927
64.5	0.010385
64.505	0.004585
64.51	0.000059
64.515	-0.002148
64.52	-0.003491
64.525	-0.004585
64.53	-0.005577
64.535	-0.006404
64.54	-0.00649
64.545	-0.006278
64.55	-0.005935
64.555	-0.005077
64.56	-0.003496
64.565	-0.001137
64.57	0.001684
64.575	0.004629
64.58	0.007246
64.585	0.0092
64.59	0.010843
64.595	0.012353
64.6	0.013488
64.605	0.014693
64.61	0.016282
64.615	0.017549
64.62	0.018232
64.625	0.018817
64.63	0.019342
64.635	0.019392
64.64	0.018902
64.645	0.018312
64.65	0.017845
64.655	0.017282
64.66	0.01649
64.665	0.015493
64.67	0.014285

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
78.69873047	0.000144
78.70483398	0.000148
78.7109375	0.000151
78.71704102	0.000152
78.72314453	0.00015
78.72924805	0.000149
78.73535156	0.00015
78.74145508	0.00015
78.74755859	0.000152
78.75366211	0.000155
78.75976563	0.000154
78.76586914	0.000152
78.77197266	0.00015
78.77807617	0.00015
78.78417969	0.000151
78.7902832	0.000153
78.79638672	0.000153
78.80249023	0.00015
78.80859375	0.000144
78.81469727	0.000141
78.82080078	0.000141
78.8269043	0.00014
78.83300781	0.000137
78.83911133	0.000135
78.84521484	0.000133
78.85131836	0.000128
78.85742188	0.000126
78.86352539	0.000126
78.86962891	0.000124
78.87573242	0.000124
78.88183594	0.000122
78.88793945	0.000119
78.89404297	0.000117
78.90014648	0.000115
78.90625	0.000115
78.91235352	0.000115
78.91845703	0.000113
78.92456055	0.000112
78.93066406	0.000112
78.93676758	0.000111
78.94287109	0.000112
78.94897461	0.000115

Input Motion

Time (s)	Acceleration (g)
64.675	0.012868
64.68	0.011329
64.685	0.009777
64.69	0.008273
64.695	0.006864
64.7	0.005573
64.705	0.004391
64.71	0.003335
64.715	0.002434
64.72	0.001714
64.725	0.001227
64.73	0.000958
64.735	0.000862
64.74	0.000905
64.745	0.00099
64.75	0.000988
64.755	0.000793
64.76	0.000366
64.765	-0.000364
64.77	-0.00145
64.775	-0.002916
64.78	-0.004751
64.785	-0.006916
64.79	-0.009397
64.795	-0.012173
64.8	-0.01521
64.805	-0.018449
64.81	-0.021801
64.815	-0.025156
64.82	-0.02835
64.825	-0.031226
64.83	-0.03364
64.835	-0.035448
64.84	-0.036531
64.845	-0.036815
64.85	-0.036298
64.855	-0.03503
64.86	-0.033115
64.865	-0.030695
64.87	-0.027905
64.875	-0.024879
64.88	-0.021757

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
78.95507813	0.000116
78.96118164	0.000116
78.96728516	0.000118
78.97338867	0.000118
78.97949219	0.000119
78.9855957	0.000122
78.99169922	0.000125
78.99780273	0.000126
79.00390625	0.000127
79.01000977	0.000126
79.01611328	0.000126
79.0222168	0.000129
79.02832031	0.000132
79.03442383	0.000135
79.04052734	0.000137
79.04663086	0.000136
79.05273438	0.000137
79.05883789	0.00014
79.06494141	0.000143
79.07104492	0.000148
79.07714844	0.00015
79.08325195	0.000148
79.08935547	0.000148
79.09545898	0.000147
79.1015625	0.000145
79.10766602	0.000146
79.11376953	0.000147
79.11987305	0.000146
79.12597656	0.000144
79.13208008	0.00014
79.13818359	0.000135
79.14428711	0.000135
79.15039063	0.000136
79.15649414	0.000134
79.16259766	0.000131
79.16870117	0.000129
79.17480469	0.000125
79.1809082	0.000124
79.18701172	0.000123
79.19311523	0.00012
79.19921875	0.000119
79.20532227	0.000117

Time (s)	Acceleration (g)
64.885	-0.018639
64.89	-0.015581
64.895	-0.012609
64.9	-0.009703
64.905	-0.006831
64.91	-0.003996
64.915	-0.001213
64.92	0.001484
64.925	0.004032
64.93	0.006364
64.935	0.0084
64.94	0.010037
64.945	0.01118
64.95	0.011762
64.955	0.011738
64.96	0.011098
64.965	0.009864
64.97	0.00807
64.975	0.005786
64.98	0.003118
64.985	0.00021
64.99	-0.002757
64.995	-0.005582
65	-0.008046
65.005	-0.009956
65.01	-0.011175
65.015	-0.011633
65.02	-0.011341
65.025	-0.01037
65.03	-0.00884
65.035	-0.00689
65.04	-0.004608
65.045	-0.002051
65.05	0.000769
65.055	0.003883
65.06	0.007342
65.065	0.011191
65.07	0.015469
65.075	0.020172
65.08	0.025218
65.085	0.03048
65.09	0.035788

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
79.21142578	0.000112
79.2175293	0.000111
79.22363281	0.000111
79.22973633	0.00011
79.23583984	0.000109
79.24194336	0.000108
79.24804688	0.000106
79.25415039	0.000103
79.26025391	0.000102
79.26635742	0.000103
79.27246094	0.000104
79.27856445	0.000104
79.28466797	0.000102
79.29077148	0.000101
79.296875	0.000101
79.30297852	0.000101
79.30908203	0.000104
79.31518555	0.000107
79.32128906	0.000109
79.32739258	0.00011
79.33349609	0.000112
79.33959961	0.000113
79.34570313	0.000117
79.35180664	0.000122
79.35791016	0.000126
79.36401367	0.000129
79.37011719	0.000131
79.3762207	0.000132
79.38232422	0.000134
79.38842773	0.000138
79.39453125	0.000141
79.40063477	0.000142
79.40673828	0.000142
79.4128418	0.000143
79.41894531	0.000143
79.42504883	0.000144
79.43115234	0.000145
79.43725586	0.000145
79.44335938	0.000144
79.44946289	0.000144
79.45556641	0.000143
79.46166992	0.000141

Time (s)	Acceleration (g)
65.095	0.040961
65.1	0.045813
65.105	0.050183
65.11	0.05397
65.115	0.057086
65.12	0.059457
65.125	0.061011
65.13	0.061632
65.135	0.061226
65.14	0.059742
65.145	0.057187
65.15	0.053706
65.155	0.049509
65.16	0.04484
65.165	0.03996
65.17	0.035091
65.175	0.030421
65.18	0.026078
65.185	0.02216
65.19	0.018757
65.195	0.015891
65.2	0.013567
65.205	0.011755
65.21	0.010341
65.215	0.009162
65.22	0.008017
65.225	0.006696
65.23	0.005015
65.235	0.002833
65.24	0.000114
65.245	-0.003093
65.25	-0.006693
65.255	-0.010589
65.26	-0.014631
65.265	-0.018618
65.27	-0.022395
65.275	-0.025812
65.28	-0.028745
65.285	-0.031083
65.29	-0.032732
65.295	-0.033616
65.3	-0.033771

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
79.46777344	0.000142
79.47387695	0.000142
79.47998047	0.00014
79.48608398	0.000138
79.4921875	0.000134
79.49829102	0.00013
79.50439453	0.000131
79.51049805	0.000132
79.51660156	0.00013
79.52270508	0.000129
79.52880859	0.000126
79.53491211	0.000122
79.54101563	0.000121
79.54711914	0.000119
79.55322266	0.000116
79.55932617	0.000116
79.56542969	0.000113
79.5715332	0.000107
79.57763672	0.000104
79.58374023	0.000103
79.58984375	0.0001
79.59594727	0.000101
79.60205078	0.000101
79.6081543	9.8E-05
79.61425781	9.57E-05
79.62036133	9.53E-05
79.62646484	9.68E-05
79.63256836	9.97E-05
79.63867188	0.000101
79.64477539	0.0001
79.65087891	0.0001
79.65698242	9.99E-05
79.66308594	0.000101
79.66918945	0.000105
79.67529297	0.000108
79.68139648	0.00011
79.6875	0.000113
79.69360352	0.000114
79.69970703	0.000114
79.70581055	0.000117
79.71191406	0.000122
79.71801758	0.000126

Time (s)	Acceleration (g)
65.305	-0.03335
65.31	-0.032452
65.315	-0.031142
65.32	-0.029545
65.325	-0.027792
65.33	-0.025989
65.335	-0.02424
65.34	-0.022653
65.345	-0.02131
65.35	-0.020253
65.355	-0.01949
65.36	-0.018991
65.365	-0.018695
65.37	-0.018526
65.375	-0.018394
65.38	-0.018197
65.385	-0.017843
65.39	-0.017251
65.395	-0.016365
65.4	-0.015174
65.405	-0.013699
65.41	-0.011967
65.415	-0.010028
65.42	-0.007967
65.425	-0.005863
65.43	-0.003787
65.435	-0.001794
65.44	0.000104
65.445	0.001897
65.45	0.003574
65.455	0.005114
65.46	0.006446
65.465	0.007491
65.47	0.008197
65.475	0.008521
65.48	0.008462
65.485	0.008056
65.49	0.007334
65.495	0.00637
65.5	0.005269
65.505	0.004148
65.51	0.003178

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
79.72412109	0.00013
79.73022461	0.000131
79.73632813	0.00013
79.74243164	0.000132
79.74853516	0.000134
79.75463867	0.000137
79.76074219	0.000139
79.7668457	0.000139
79.77294922	0.000138
79.77905273	0.000138
79.78515625	0.000139
79.79125977	0.000139
79.79736328	0.000141
79.8034668	0.000141
79.80957031	0.00014
79.81567383	0.000139
79.82177734	0.000136
79.82788086	0.000135
79.83398438	0.000136
79.84008789	0.000135
79.84619141	0.000132
79.85229492	0.000129
79.85839844	0.000124
79.86450195	0.000121
79.87060547	0.000121
79.87670898	0.000121
79.8828125	0.000119
79.88891602	0.000116
79.89501953	0.000111
79.90112305	0.00011
79.90722656	0.000109
79.91333008	0.000108
79.91943359	0.000108
79.92553711	0.000108
79.93164063	0.000104
79.93774414	0.000101
79.94384766	9.98E-05
79.94995117	9.9E-05
79.95605469	0.000101
79.9621582	0.000103
79.96826172	0.000102
79.97436523	0.0001

Time (s)	Acceleration (g)
65.515	0.002512
65.52	0.002236
65.525	0.00239
65.53	0.002946
65.535	0.003822
65.54	0.004917
65.545	0.00612
65.55	0.007332
65.555	0.008472
65.56	0.009513
65.565	0.010452
65.57	0.011272
65.575	0.011964
65.58	0.012545
65.585	0.013029
65.59	0.013439
65.595	0.013813
65.6	0.014203
65.605	0.014667
65.61	0.015279
65.615	0.016094
65.62	0.017133
65.625	0.018381
65.63	0.019786
65.635	0.021264
65.64	0.022715
65.645	0.024032
65.65	0.025124
65.655	0.025912
65.66	0.026329
65.665	0.026335
65.67	0.025918
65.675	0.025097
65.68	0.023924
65.685	0.022479
65.69	0.020865
65.695	0.019204
65.7	0.017637
65.705	0.016297
65.71	0.015326
65.715	0.014833
65.72	0.014859

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
79.98046875	9.85E-05
79.98657227	9.89E-05
79.99267578	0.000101
79.9987793	0.000104
80.00488281	0.000106
80.01098633	0.000107
80.01708984	0.000107
80.02319336	0.000107
80.02929688	0.00011
80.03540039	0.000113
80.04150391	0.000117
80.04760742	0.00012
80.05371094	0.000123
80.05981445	0.000123
80.06591797	0.000124
80.07202148	0.000128
80.078125	0.000133
80.08422852	0.000138
80.09033203	0.000139
80.09643555	0.000138
80.10253906	0.000139
80.10864258	0.000141
80.11474609	0.000143
80.12084961	0.000146
80.12695313	0.000145
80.13305664	0.000143
80.13916016	0.000141
80.14526367	0.000139
80.15136719	0.000137
80.1574707	0.000138
80.16357422	0.000137
80.16967773	0.000134
80.17578125	0.00013
80.18188477	0.000127
80.18798828	0.000126
80.1940918	0.000126
80.20019531	0.000125
80.20629883	0.000123
80.21240234	0.00012
80.21850586	0.000115
80.22460938	0.000112
80.23071289	0.000112

Time (s)	Acceleration (g)
65.725	0.015413
65.73	0.016474
65.735	0.01799
65.74	0.019915
65.745	0.02219
65.75	0.024718
65.755	0.0274
65.76	0.030154
65.765	0.032862
65.77	0.035461
65.775	0.038005
65.78	0.040448
65.785	0.042639
65.79	0.044633
65.795	0.046584
65.8	0.048469
65.805	0.05021
65.81	0.051861
65.815	0.053507
65.82	0.055096
65.825	0.056546
65.83	0.057883
65.835	0.059143
65.84	0.060292
65.845	0.061251
65.85	0.061934
65.855	0.062262
65.86	0.062152
65.865	0.061521
65.87	0.060343
65.875	0.058605
65.88	0.056293
65.885	0.053402
65.89	0.049927
65.895	0.045924
65.9	0.041436
65.905	0.036464
65.91	0.031114
65.915	0.025551
65.92	0.019858
65.925	0.014138
65.93	0.008575

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
80.23681641	0.000111
80.24291992	0.000108
80.24902344	0.000106
80.25512695	0.000103
80.26123047	0.000101
80.26733398	1E-04
80.2734375	9.85E-05
80.27954102	9.94E-05
80.28564453	9.98E-05
80.29174805	9.73E-05
80.29785156	9.54E-05
80.30395508	9.38E-05
80.31005859	9.25E-05
80.31616211	9.43E-05
80.32226563	9.66E-05
80.32836914	9.65E-05
80.33447266	9.52E-05
80.34057617	9.39E-05
80.34667969	9.43E-05
80.3527832	9.76E-05
80.35888672	0.000102
80.36499023	0.000105
80.37109375	0.000108
80.37719727	0.000111
80.38330078	0.000112
80.3894043	0.000115
80.39550781	0.000119
80.40161133	0.000124
80.40771484	0.00013
80.41381836	0.000132
80.41992188	0.000131
80.42602539	0.000132
80.43212891	0.000133
80.43823242	0.000135
80.44433594	0.000139
80.45043945	0.00014
80.45654297	0.000139
80.46264648	0.000139
80.46875	0.000139
80.47485352	0.00014
80.48095703	0.000141
80.48706055	0.000141

Time (s)	Acceleration (g)
65.935	0.003336
65.94	-0.001413
65.945	-0.00548
65.95	-0.008744
65.955	-0.011167
65.96	-0.012704
65.965	-0.013336
65.97	-0.013128
65.975	-0.012179
65.98	-0.010618
65.985	-0.008612
65.99	-0.006333
65.995	-0.003968
66	-0.00171
66.005	0.00027
66.01	0.001824
66.015	0.002857
66.02	0.00336
66.025	0.003377
66.03	0.003012
66.035	0.002374
66.04	0.001594
66.045	0.000805
66.05	0.000002
66.055	-0.00085
66.06	-0.001703
66.065	-0.002449
66.07	-0.003146
66.075	-0.004018
66.08	-0.005121
66.085	-0.006388
66.09	-0.007891
66.095	-0.009611
66.1	-0.011345
66.105	-0.013151
66.11	-0.015157
66.115	-0.01704
66.12	-0.018625
66.125	-0.02013
66.13	-0.021508
66.135	-0.022597
66.14	-0.023466

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
80.49316406	0.000139
80.49926758	0.000138
80.50537109	0.000135
80.51147461	0.000133
80.51757813	0.000133
80.52368164	0.000133
80.52978516	0.000132
80.53588867	0.000128
80.54199219	0.000123
80.5480957	0.00012
80.55419922	0.00012
80.56030273	0.00012
80.56640625	0.000119
80.57250977	0.000116
80.57861328	0.00011
80.5847168	0.000106
80.59082031	0.000105
80.59692383	0.000103
80.60302734	0.000102
80.60913086	0.000101
80.61523438	9.87E-05
80.62133789	9.53E-05
80.62744141	9.39E-05
80.63354492	9.3E-05
80.63964844	9.33E-05
80.64575195	9.66E-05
80.65185547	9.82E-05
80.65795898	9.69E-05
80.6640625	9.55E-05
80.67016602	9.49E-05
80.67626953	9.76E-05
80.68237305	0.000102
80.68847656	0.000104
80.69458008	0.000106
80.70068359	0.000107
80.70678711	0.000107
80.71289063	0.000109
80.71899414	0.000113
80.72509766	0.000116
80.73120117	0.000119
80.73730469	0.000122
80.7434082	0.000122

Time (s)	Acceleration (g)
66.145	-0.024192
66.15	-0.024744
66.155	-0.02511
66.16	-0.025301
66.165	-0.025367
66.17	-0.025334
66.175	-0.025206
66.18	-0.025055
66.185	-0.024964
66.19	-0.024974
66.195	-0.02521
66.2	-0.025764
66.205	-0.02655
66.21	-0.027531
66.215	-0.028791
66.22	-0.030308
66.225	-0.031943
66.23	-0.033628
66.235	-0.035351
66.24	-0.037047
66.245	-0.038629
66.25	-0.040065
66.255	-0.04132
66.26	-0.042333
66.265	-0.043055
66.27	-0.043428
66.275	-0.043429
66.28	-0.04306
66.285	-0.042216
66.29	-0.040862
66.295	-0.039168
66.3	-0.037207
66.305	-0.034945
66.31	-0.032481
66.315	-0.029951
66.32	-0.027431
66.325	-0.02506
66.33	-0.022949
66.335	-0.021031
66.34	-0.019302
66.345	-0.017894
66.35	-0.016693

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
80.74951172	0.000123
80.75561523	0.000125
80.76171875	0.000127
80.76782227	0.000132
80.77392578	0.000135
80.7800293	0.000133
80.78613281	0.000132
80.79223633	0.000133
80.79833984	0.000135
80.80444336	0.000138
80.81054688	0.00014
80.81665039	0.000138
80.82275391	0.000137
80.82885742	0.000135
80.83496094	0.000135
80.84106445	0.000137
80.84716797	0.000137
80.85327148	0.000135
80.859375	0.000133
80.86547852	0.000129
80.87158203	0.000124
80.87768555	0.000122
80.88378906	0.000121
80.88989258	0.000119
80.89599609	0.000116
80.90209961	0.00011
80.90820313	0.000104
80.91430664	0.000103
80.92041016	0.000102
80.92651367	0.000102
80.93261719	0.000101
80.9387207	9.79E-05
80.94482422	9.52E-05
80.95092773	9.5E-05
80.95703125	9.36E-05
80.96313477	9.33E-05
80.96923828	9.51E-05
80.9753418	9.43E-05
80.98144531	9.29E-05
80.98754883	9.2E-05
80.99365234	9.03E-05
80.99975586	9.09E-05

Time (s)	Acceleration (g)
66.355	-0.015432
66.36	-0.013997
66.365	-0.012294
66.37	-0.01018
66.375	-0.00758
66.38	-0.004469
66.385	-0.000832
66.39	0.003224
66.395	0.007463
66.4	0.011698
66.405	0.015817
66.41	0.019624
66.415	0.022859
66.42	0.025305
66.425	0.026952
66.43	0.027949
66.435	0.028272
66.44	0.027856
66.445	0.026685
66.45	0.024697
66.455	0.022214
66.46	0.019646
66.465	0.016773
66.47	0.013481
66.475	0.010222
66.48	0.007094
66.485	0.003794
66.49	0.000424
66.495	-0.002725
66.5	-0.005716
66.505	-0.008707
66.51	-0.011639
66.515	-0.01444
66.52	-0.017119
66.525	-0.019631
66.53	-0.021868
66.535	-0.023764
66.54	-0.025288
66.545	-0.026345
66.55	-0.026817
66.555	-0.026654
66.56	-0.025873

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
81.00585938	9.38E-05
81.01196289	9.52E-05
81.01806641	9.57E-05
81.02416992	9.62E-05
81.03027344	9.65E-05
81.03637695	9.83E-05
81.04248047	0.000102
81.04858398	0.000105
81.0546875	0.000107
81.06079102	0.000109
81.06689453	0.00011
81.07299805	0.000112
81.07910156	0.000115
81.08520508	0.000118
81.09130859	0.000122
81.09741211	0.000125
81.10351563	0.000125
81.10961914	0.000125
81.11572266	0.000128
81.12182617	0.000131
81.12792969	0.000136
81.1340332	0.000139
81.14013672	0.000138
81.14624023	0.000137
81.15234375	0.000137
81.15844727	0.000137
81.16455078	0.000138
81.1706543	0.000138
81.17675781	0.000136
81.18286133	0.000133
81.18896484	0.00013
81.19506836	0.000127
81.20117188	0.000126
81.20727539	0.000126
81.21337891	0.000124
81.21948242	0.000122
81.22558594	0.000119
81.23168945	0.000115
81.23779297	0.000112
81.24389648	0.000112
81.25	0.000111
81.25610352	0.00011

Time (s)	Acceleration (g)
66.565	-0.024504
66.57	-0.022584
66.575	-0.020202
66.58	-0.01747
66.585	-0.014529
66.59	-0.011598
66.595	-0.008893
66.6	-0.006591
66.605	-0.004834
66.61	-0.003683
66.615	-0.003139
66.62	-0.003176
66.625	-0.00372
66.63	-0.004662
66.635	-0.005876
66.64	-0.007234
66.645	-0.008608
66.65	-0.009884
66.655	-0.010968
66.66	-0.01178
66.665	-0.012278
66.67	-0.012436
66.675	-0.01225
66.68	-0.011776
66.685	-0.011022
66.69	-0.01
66.695	-0.008889
66.7	-0.00771
66.705	-0.006257
66.71	-0.004607
66.715	-0.00297
66.72	-0.001328
66.725	0.000348
66.73	0.002007
66.735	0.003632
66.74	0.005172
66.745	0.006555
66.75	0.007709
66.755	0.008564
66.76	0.009068
66.765	0.009182
66.77	0.008894

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
81.26220703	0.000106
81.26831055	0.000101
81.27441406	9.94E-05
81.28051758	9.82E-05
81.28662109	9.72E-05
81.29272461	9.71E-05
81.29882813	9.53E-05
81.30493164	9.27E-05
81.31103516	9.12E-05
81.31713867	8.91E-05
81.32324219	8.85E-05
81.3293457	9.11E-05
81.33544922	9.22E-05
81.34155273	9.12E-05
81.34765625	9.05E-05
81.35375977	8.86E-05
81.35986328	8.84E-05
81.3659668	9.25E-05
81.37207031	9.65E-05
81.37817383	9.88E-05
81.38427734	0.0001
81.39038086	0.0001
81.39648438	0.000101
81.40258789	0.000106
81.40869141	0.00011
81.41479492	0.000114
81.42089844	0.000118
81.42700195	0.000118
81.43310547	0.000118
81.43920898	0.000119
81.4453125	0.000122
81.45141602	0.000124
81.45751953	0.000127
81.46362305	0.000127
81.46972656	0.000125
81.47583008	0.000125
81.48193359	0.000125
81.48803711	0.000127
81.49414063	0.00013
81.50024414	0.000129
81.50634766	0.000127
81.51245117	0.000126

Time (s)	Acceleration (g)
66.775	0.008208
66.78	0.00711
66.785	0.005605
66.79	0.003711
66.795	0.001463
66.8	-0.001059
66.805	-0.003763
66.81	-0.006559
66.815	-0.009351
66.82	-0.012075
66.825	-0.01467
66.83	-0.017051
66.835	-0.019147
66.84	-0.020901
66.845	-0.022273
66.85	-0.023274
66.855	-0.023936
66.86	-0.024257
66.865	-0.024246
66.87	-0.023912
66.875	-0.023262
66.88	-0.022325
66.885	-0.02113
66.89	-0.019721
66.895	-0.018145
66.9	-0.016422
66.905	-0.014581
66.91	-0.01266
66.915	-0.010704
66.92	-0.008775
66.925	-0.00694
66.93	-0.005257
66.935	-0.003774
66.94	-0.002504
66.945	-0.001445
66.95	-0.000589
66.955	0.000079
66.96	0.000578
66.965	0.000928
66.97	0.001148
66.975	0.001262
66.98	0.0013

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
81.51855469	0.000124
81.5246582	0.000125
81.53076172	0.000126
81.53686523	0.000124
81.54296875	0.000122
81.54907227	0.000119
81.55517578	0.000115
81.5612793	0.000113
81.56738281	0.000112
81.57348633	0.000111
81.57958984	0.000108
81.58569336	0.000105
81.59179688	9.95E-05
81.59790039	9.66E-05
81.60400391	9.6E-05
81.61010742	9.56E-05
81.61621094	9.49E-05
81.62231445	9.25E-05
81.62841797	8.83E-05
81.63452148	8.58E-05
81.640625	8.5E-05
81.64672852	8.5E-05
81.65283203	8.68E-05
81.65893555	8.71E-05
81.66503906	8.57E-05
81.67114258	8.5E-05
81.67724609	8.38E-05
81.68334961	8.42E-05
81.68945313	8.87E-05
81.69555664	9.27E-05
81.70166016	9.48E-05
81.70776367	9.66E-05
81.71386719	9.66E-05
81.7199707	9.72E-05
81.72607422	0.000101
81.73217773	0.000104
81.73828125	0.000106
81.74438477	0.000109
81.75048828	0.000109
81.7565918	0.000108
81.76269531	0.00011
81.76879883	0.000112

Time (s)	Acceleration (g)
66.985	0.001293
66.99	0.001271
66.995	0.00126
67	0.001277
67.005	0.001333
67.01	0.001438
67.015	0.00159
67.02	0.001789
67.025	0.002029
67.03	0.002273
67.035	0.002489
67.04	0.002677
67.045	0.002838
67.05	0.002994
67.055	0.003166
67.06	0.003334
67.065	0.003473
67.07	0.003559
67.075	0.003562
67.08	0.003478
67.085	0.0033
67.09	0.002991
67.095	0.002515
67.1	0.001813
67.105	0.000824
67.11	-0.000459
67.115	-0.002031
67.12	-0.003888
67.125	-0.006
67.13	-0.008318
67.135	-0.010773
67.14	-0.013262
67.145	-0.015668
67.15	-0.017879
67.155	-0.019787
67.16	-0.021308
67.165	-0.02239
67.17	-0.023016
67.175	-0.023202
67.18	-0.023015
67.185	-0.022546
67.19	-0.021874

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
81.77490234	0.000115
81.78100586	0.000119
81.78710938	0.00012
81.79321289	0.00012
81.79931641	0.000121
81.80541992	0.000123
81.81152344	0.000125
81.81762695	0.000129
81.82373047	0.000129
81.82983398	0.000127
81.8359375	0.000126
81.84204102	0.000125
81.84814453	0.000125
81.85424805	0.000127
81.86035156	0.000126
81.86645508	0.000123
81.87255859	0.00012
81.87866211	0.000115
81.88476563	0.000112
81.89086914	0.000113
81.89697266	0.000112
81.90307617	0.000109
81.90917969	0.000105
81.9152832	9.88E-05
81.92138672	9.52E-05
81.92749023	9.42E-05
81.93359375	9.31E-05
81.93969727	9.18E-05
81.94580078	8.96E-05
81.9519043	8.56E-05
81.95800781	8.28E-05
81.96411133	8.23E-05
81.97021484	8.23E-05
81.97631836	8.36E-05
81.98242188	8.48E-05
81.98852539	8.28E-05
81.99462891	7.98E-05
82.00073242	7.88E-05
82.00683594	7.93E-05
82.01293945	8.16E-05
82.01904297	8.47E-05
82.02514648	8.54E-05

Time (s)	Acceleration (g)
67.195	-0.021078
67.2	-0.020225
67.205	-0.019359
67.21	-0.018521
67.215	-0.017729
67.22	-0.016952
67.225	-0.016147
67.23	-0.015262
67.235	-0.014245
67.24	-0.013058
67.245	-0.011678
67.25	-0.010109
67.255	-0.008374
67.26	-0.006496
67.265	-0.004507
67.27	-0.002448
67.275	-0.00036
67.28	0.001721
67.285	0.003752
67.29	0.005686
67.295	0.00746
67.3	0.008981
67.305	0.010152
67.31	0.01085
67.315	0.010968
67.32	0.010458
67.325	0.009305
67.33	0.007531
67.335	0.005204
67.34	0.002429
67.345	-0.000654
67.35	-0.003866
67.355	-0.007019
67.36	-0.009924
67.365	-0.012419
67.37	-0.014387
67.375	-0.015764
67.38	-0.016567
67.385	-0.016861
67.39	-0.016724
67.395	-0.016255
67.4	-0.015537

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
82.03125	8.45E-05
82.03735352	8.38E-05
82.04345703	8.4E-05
82.04956055	8.63E-05
82.05566406	8.97E-05
82.06176758	9.24E-05
82.06787109	9.46E-05
82.07397461	9.52E-05
82.08007813	9.45E-05
82.08618164	9.63E-05
82.09228516	0.0001
82.09838867	0.000104
82.10449219	0.000107
82.1105957	0.000109
82.11669922	0.000109
82.12280273	0.00011
82.12890625	0.000112
82.13500977	0.000116
82.14111328	0.000121
82.1472168	0.000122
82.15332031	0.000121
82.15942383	0.000121
82.16552734	0.000121
82.17163086	0.000121
82.17773438	0.000123
82.18383789	0.000123
82.18994141	0.00012
82.19604492	0.000116
82.20214844	0.000112
82.20825195	0.00011
82.21435547	0.00011
82.22045898	0.000109
82.2265625	0.000107
82.23266602	0.000104
82.23876953	9.94E-05
82.24487305	9.67E-05
82.25097656	9.73E-05
82.25708008	9.8E-05
82.26318359	9.7E-05
82.26928711	9.48E-05
82.27539063	9.05E-05
82.28149414	8.7E-05

Time (s)	Acceleration (g)
67.405	-0.014636
67.41	-0.013611
67.415	-0.012496
67.42	-0.011293
67.425	-0.010003
67.43	-0.00861
67.435	-0.007105
67.44	-0.005526
67.445	-0.00391
67.45	-0.002296
67.455	-0.000719
67.46	0.000836
67.465	0.002364
67.47	0.003864
67.475	0.005311
67.48	0.006554
67.485	0.007538
67.49	0.008361
67.495	0.009004
67.5	0.009418
67.505	0.009684
67.51	0.009918
67.515	0.010209
67.52	0.010626
67.525	0.011249
67.53	0.012128
67.535	0.013222
67.54	0.01455
67.545	0.016182
67.55	0.018046
67.555	0.020037
67.56	0.02209
67.565	0.024032
67.57	0.025781
67.575	0.027435
67.58	0.028947
67.585	0.030152
67.59	0.031058
67.595	0.031721
67.6	0.032105
67.605	0.032234
67.61	0.032123

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
82.28759766	8.59E-05
82.29370117	8.44E-05
82.29980469	8.39E-05
82.3059082	8.35E-05
82.31201172	7.97E-05
82.31811523	7.59E-05
82.32421875	7.36E-05
82.33032227	7.23E-05
82.33642578	7.36E-05
82.3425293	7.54E-05
82.34863281	7.55E-05
82.35473633	7.47E-05
82.36083984	7.38E-05
82.36694336	7.41E-05
82.37304688	7.69E-05
82.37915039	8.07E-05
82.38525391	8.33E-05
82.39135742	8.5E-05
82.39746094	8.61E-05
82.40356445	8.64E-05
82.40966797	8.81E-05
82.41577148	9.19E-05
82.421875	9.51E-05
82.42797852	9.85E-05
82.43408203	0.000101
82.44018555	0.000102
82.44628906	0.000102
82.45239258	0.000105
82.45849609	0.000107
82.46459961	0.000111
82.47070313	0.000112
82.47680664	0.000111
82.48291016	0.000111
82.48901367	0.000111
82.49511719	0.000111
82.5012207	0.000112
82.50732422	0.000113
82.51342773	0.00011
82.51953125	0.000109
82.52563477	0.000108
82.53173828	0.000107
82.5378418	0.000108

Input Motion

Time (s)	Acceleration (g)
67.615	0.031736
67.62	0.031155
67.625	0.030475
67.63	0.029678
67.635	0.028858
67.64	0.028257
67.645	0.027952
67.65	0.027851
67.655	0.027959
67.66	0.028393
67.665	0.029173
67.67	0.03018
67.675	0.031295
67.68	0.032432
67.685	0.033543
67.69	0.034555
67.695	0.035283
67.7	0.035713
67.705	0.036021
67.71	0.036187
67.715	0.036094
67.72	0.035777
67.725	0.035309
67.73	0.034753
67.735	0.034205
67.74	0.033764
67.745	0.033511
67.75	0.033457
67.755	0.033637
67.76	0.034047
67.765	0.034524
67.77	0.035022
67.775	0.035678
67.78	0.036418
67.785	0.037041
67.79	0.037546
67.795	0.037941
67.8	0.038145
67.805	0.038112
67.81	0.037782
67.815	0.037092
67.82	0.036039

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
82.54394531	0.000109
82.55004883	0.000107
82.55615234	0.000105
82.56225586	0.000102
82.56835938	9.83E-05
82.57446289	9.79E-05
82.58056641	9.75E-05
82.58666992	9.56E-05
82.59277344	9.27E-05
82.59887695	8.78E-05
82.60498047	8.35E-05
82.61108398	8.18E-05
82.6171875	8.03E-05
82.62329102	7.84E-05
82.62939453	7.67E-05
82.63549805	7.35E-05
82.64160156	6.95E-05
82.64770508	6.74E-05
82.65380859	6.61E-05
82.65991211	6.55E-05
82.66601563	6.69E-05
82.67211914	6.75E-05
82.67822266	6.59E-05
82.68432617	6.53E-05
82.69042969	6.51E-05
82.6965332	6.68E-05
82.70263672	7.16E-05
82.70874023	7.49E-05
82.71484375	7.61E-05
82.72094727	7.78E-05
82.72705078	7.88E-05
82.7331543	8.06E-05
82.73925781	8.47E-05
82.74536133	8.76E-05
82.75146484	8.94E-05
82.75756836	9.14E-05
82.76367188	9.13E-05
82.76977539	9.04E-05
82.77587891	9.2E-05
82.78198242	9.41E-05
82.78808594	9.66E-05
82.79418945	9.94E-05

Time (s)	Acceleration (g)
67.825	0.034634
67.83	0.032906
67.835	0.030896
67.84	0.028638
67.845	0.026173
67.85	0.02355
67.855	0.020831
67.86	0.018105
67.865	0.015462
67.87	0.013007
67.875	0.010835
67.88	0.008986
67.885	0.007485
67.89	0.006354
67.895	0.005594
67.9	0.005215
67.905	0.005206
67.91	0.005492
67.915	0.005971
67.92	0.00651
67.925	0.006959
67.93	0.007184
67.935	0.007071
67.94	0.006539
67.945	0.005553
67.95	0.004135
67.955	0.002353
67.96	0.000306
67.965	-0.001889
67.97	-0.004093
67.975	-0.006179
67.98	-0.008042
67.985	-0.009598
67.99	-0.010804
67.995	-0.011644
68	-0.012112
68.005	-0.012221
68.01	-0.012008
68.015	-0.011522
68.02	-0.01083
68.025	-0.010014
68.03	-0.009135

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
82.80029297	9.87E-05
82.80639648	9.75E-05
82.8125	9.92E-05
82.81860352	0.000101
82.82470703	0.000105
82.83081055	0.000108
82.83691406	0.000107
82.84301758	0.000106
82.84912109	0.000106
82.85522461	0.000106
82.86132813	0.000107
82.86743164	0.000108
82.87353516	0.000105
82.87963867	0.000103
82.88574219	9.97E-05
82.8918457	9.65E-05
82.89794922	9.55E-05
82.90405273	9.49E-05
82.91015625	9.31E-05
82.91625977	8.96E-05
82.92236328	8.46E-05
82.9284668	8E-05
82.93457031	7.83E-05
82.94067383	7.83E-05
82.94677734	7.67E-05
82.95288086	7.39E-05
82.95898438	7.01E-05
82.96508789	6.55E-05
82.97119141	6.42E-05
82.97729492	6.42E-05
82.98339844	6.31E-05
82.98950195	6.38E-05
82.99560547	6.4E-05
83.00170898	6.24E-05
83.0078125	6.2E-05
83.01391602	6.17E-05
83.02001953	6.28E-05
83.02612305	6.7E-05
83.03222656	6.96E-05
83.03833008	7.03E-05
83.04443359	7.09E-05
83.05053711	7.03E-05

Time (s)	Acceleration (g)
68.035	-0.008251
68.04	-0.007436
68.045	-0.006745
68.05	-0.006191
68.055	-0.00577
68.06	-0.005447
68.065	-0.005178
68.07	-0.004941
68.075	-0.004719
68.08	-0.004504
68.085	-0.004292
68.09	-0.004073
68.095	-0.003849
68.1	-0.003614
68.105	-0.003376
68.11	-0.003194
68.115	-0.003129
68.12	-0.003227
68.125	-0.003533
68.13	-0.004033
68.135	-0.004708
68.14	-0.005568
68.145	-0.006612
68.15	-0.007862
68.155	-0.009332
68.16	-0.010966
68.165	-0.012697
68.17	-0.014449
68.175	-0.016152
68.18	-0.017748
68.185	-0.019153
68.19	-0.02032
68.195	-0.021295
68.2	-0.022084
68.205	-0.022664
68.21	-0.023097
68.215	-0.023447
68.22	-0.023714
68.225	-0.02389
68.23	-0.023956
68.235	-0.023881
68.24	-0.023628

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
83.05664063	7.02E-05
83.06274414	7.33E-05
83.06884766	7.65E-05
83.07495117	7.74E-05
83.08105469	7.81E-05
83.0871582	7.84E-05
83.09326172	7.8E-05
83.09936523	8.03E-05
83.10546875	8.37E-05
83.11157227	8.6E-05
83.11767578	8.93E-05
83.1237793	9.1E-05
83.12988281	9.06E-05
83.13598633	9.2E-05
83.14208984	9.45E-05
83.14819336	9.75E-05
83.15429688	0.000101
83.16040039	0.000101
83.16650391	9.89E-05
83.17260742	9.83E-05
83.17871094	9.84E-05
83.18481445	9.95E-05
83.19091797	0.000101
83.19702148	9.89E-05
83.203125	9.62E-05
83.20922852	9.4E-05
83.21533203	9.13E-05
83.22143555	9E-05
83.22753906	8.96E-05
83.23364258	8.75E-05
83.23974609	8.5E-05
83.24584961	8.18E-05
83.25195313	7.74E-05
83.25805664	7.57E-05
83.26416016	7.61E-05
83.27026367	7.53E-05
83.27636719	7.39E-05
83.2824707	7.08E-05
83.28857422	6.63E-05
83.29467773	6.44E-05
83.30078125	6.4E-05
83.30688477	6.28E-05

Time (s)	Acceleration (g)
68.245	-0.023223
68.25	-0.022776
68.255	-0.022314
68.26	-0.021786
68.265	-0.021207
68.27	-0.020547
68.275	-0.019789
68.28	-0.018977
68.285	-0.018045
68.29	-0.016915
68.295	-0.015587
68.3	-0.014022
68.305	-0.012174
68.31	-0.010076
68.315	-0.00778
68.32	-0.005374
68.325	-0.002954
68.33	-0.000566
68.335	0.001756
68.34	0.00397
68.345	0.006052
68.35	0.007971
68.355	0.009694
68.36	0.011207
68.365	0.012501
68.37	0.013564
68.375	0.014412
68.38	0.015067
68.385	0.015572
68.39	0.016029
68.395	0.016538
68.4	0.017165
68.405	0.01796
68.41	0.018919
68.415	0.020008
68.42	0.021206
68.425	0.022472
68.43	0.023743
68.435	0.024959
68.44	0.026048
68.445	0.026939
68.45	0.027582

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
83.31298828	6.23E-05
83.3190918	6.06E-05
83.32519531	5.67E-05
83.33129883	5.5E-05
83.33740234	5.5E-05
83.34350586	5.43E-05
83.34960938	5.52E-05
83.35571289	5.64E-05
83.36181641	5.6E-05
83.36791992	5.63E-05
83.37402344	5.61E-05
83.38012695	5.57E-05
83.38623047	5.89E-05
83.39233398	6.29E-05
83.3984375	6.49E-05
83.40454102	6.66E-05
83.41064453	6.71E-05
83.41674805	6.79E-05
83.42285156	7.17E-05
83.42895508	7.55E-05
83.43505859	7.77E-05
83.44116211	8.01E-05
83.44726563	8.17E-05
83.45336914	8.22E-05
83.45947266	8.42E-05
83.46557617	8.66E-05
83.47167969	8.87E-05
83.4777832	9.18E-05
83.48388672	9.29E-05
83.48999023	9.13E-05
83.49609375	9.08E-05
83.50219727	9.08E-05
83.50830078	9.17E-05
83.5144043	9.42E-05
83.52050781	9.38E-05
83.52661133	9.07E-05
83.53271484	8.83E-05
83.53881836	8.65E-05
83.54492188	8.66E-05
83.55102539	8.78E-05
83.55712891	8.66E-05
83.56323242	8.45E-05

Time (s)	Acceleration (g)
68.455	0.027936
68.46	0.027963
68.465	0.02765
68.47	0.026982
68.475	0.025961
68.48	0.024629
68.485	0.023033
68.49	0.021218
68.495	0.019221
68.5	0.017047
68.505	0.01468
68.51	0.012089
68.515	0.00924
68.52	0.006118
68.525	0.002728
68.53	-0.000877
68.535	-0.004597
68.54	-0.008381
68.545	-0.012152
68.55	-0.015738
68.555	-0.019076
68.56	-0.022113
68.565	-0.024757
68.57	-0.026988
68.575	-0.028806
68.58	-0.030172
68.585	-0.031129
68.59	-0.031846
68.595	-0.03241
68.6	-0.032852
68.605	-0.033282
68.61	-0.033785
68.615	-0.034399
68.62	-0.035175
68.625	-0.036131
68.63	-0.037263
68.635	-0.038601
68.64	-0.040113
68.645	-0.041739
68.65	-0.043499
68.655	-0.045402
68.66	-0.047418

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
83.56933594	8.31E-05
83.57543945	8.06E-05
83.58154297	7.88E-05
83.58764648	7.87E-05
83.59375	7.78E-05
83.59985352	7.6E-05
83.60595703	7.3E-05
83.61206055	6.78E-05
83.61816406	6.35E-05
83.62426758	6.16E-05
83.63037109	6E-05
83.63647461	5.86E-05
83.64257813	5.58E-05
83.64868164	5.08E-05
83.65478516	4.77E-05
83.66088867	4.67E-05
83.66699219	4.61E-05
83.6730957	4.73E-05
83.67919922	4.86E-05
83.68530273	4.81E-05
83.69140625	4.82E-05
83.69750977	4.9E-05
83.70361328	4.94E-05
83.7097168	5.16E-05
83.71582031	5.49E-05
83.72192383	5.69E-05
83.72802734	5.8E-05
83.73413086	5.86E-05
83.74023438	5.81E-05
83.74633789	6.01E-05
83.75244141	6.44E-05
83.75854492	6.65E-05
83.76464844	6.77E-05
83.77075195	6.87E-05
83.77685547	6.78E-05
83.78295898	6.9E-05
83.7890625	7.17E-05
83.79516602	7.29E-05
83.80126953	7.47E-05
83.80737305	7.61E-05
83.81347656	7.5E-05
83.81958008	7.5E-05

Input Motion

Time (s)	Acceleration (g)
68.665	-0.049522
68.67	-0.051648
68.675	-0.053717
68.68	-0.055691
68.685	-0.057535
68.69	-0.059179
68.695	-0.060572
68.7	-0.061678
68.705	-0.062468
68.71	-0.062943
68.715	-0.063113
68.72	-0.062982
68.725	-0.062552
68.73	-0.061836
68.735	-0.060833
68.74	-0.059522
68.745	-0.057887
68.75	-0.05592
68.755	-0.053625
68.76	-0.051059
68.765	-0.048296
68.77	-0.045383
68.775	-0.042369
68.78	-0.039282
68.785	-0.036133
68.79	-0.03291
68.795	-0.029593
68.8	-0.026167
68.805	-0.022618
68.81	-0.018943
68.815	-0.015157
68.82	-0.011294
68.825	-0.007407
68.83	-0.003594
68.835	0.00001
68.84	0.003296
68.845	0.006167
68.85	0.008465
68.855	0.010103
68.86	0.011041
68.865	0.011119
68.87	0.01043

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
83.82568359	7.58E-05
83.83178711	7.68E-05
83.83789063	7.99E-05
83.84399414	8.18E-05
83.85009766	8.08E-05
83.85620117	8.02E-05
83.86230469	8E-05
83.8684082	8.07E-05
83.87451172	8.29E-05
83.88061523	8.32E-05
83.88671875	8.09E-05
83.89282227	7.88E-05
83.89892578	7.65E-05
83.9050293	7.41E-05
83.91113281	7.35E-05
83.91723633	7.2E-05
83.92333984	6.89E-05
83.92944336	6.66E-05
83.93554688	6.3E-05
83.94165039	5.88E-05
83.94775391	5.74E-05
83.95385742	5.65E-05
83.95996094	5.54E-05
83.96606445	5.39E-05
83.97216797	4.97E-05
83.97827148	4.62E-05
83.984375	4.6E-05
83.99047852	4.57E-05
83.99658203	4.6E-05
84.00268555	4.68E-05
84.00878906	4.52E-05
84.01489258	4.4E-05
84.02099609	4.54E-05
84.02709961	4.6E-05
84.03320313	4.71E-05
84.03930664	5.04E-05
84.04541016	5.23E-05
84.05151367	5.34E-05
84.05761719	5.46E-05
84.0637207	5.38E-05
84.06982422	5.42E-05
84.07592773	5.7E-05

Time (s)	Acceleration (g)
68.875	0.009301
68.88	0.007755
68.885	0.005731
68.89	0.003397
68.895	0.000906
68.9	-0.001635
68.905	-0.004078
68.91	-0.00632
68.915	-0.008281
68.92	-0.009869
68.925	-0.011027
68.93	-0.011758
68.935	-0.012085
68.94	-0.012067
68.945	-0.011764
68.95	-0.011204
68.955	-0.010398
68.96	-0.009301
68.965	-0.007864
68.97	-0.006084
68.975	-0.003975
68.98	-0.001605
68.985	0.000935
68.99	0.003544
68.995	0.006125
69	0.00861
69.005	0.010935
69.01	0.013074
69.015	0.014999
69.02	0.016655
69.025	0.018052
69.03	0.019271
69.035	0.020348
69.04	0.021257
69.045	0.021978
69.05	0.022627
69.055	0.023439
69.06	0.024523
69.065	0.025836
69.07	0.027427
69.075	0.029317
69.08	0.031372

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
84.08203125	5.9E-05
84.08813477	6.02E-05
84.09423828	6.1E-05
84.1003418	5.98E-05
84.10644531	5.98E-05
84.11254883	6.29E-05
84.11865234	6.53E-05
84.12475586	6.7E-05
84.13085938	6.85E-05
84.13696289	6.85E-05
84.14306641	6.97E-05
84.14916992	7.25E-05
84.15527344	7.39E-05
84.16137695	7.67E-05
84.16748047	7.95E-05
84.17358398	7.85E-05
84.1796875	7.67E-05
84.18579102	7.6E-05
84.19189453	7.53E-05
84.19799805	7.64E-05
84.20410156	7.72E-05
84.21020508	7.46E-05
84.21630859	7.11E-05
84.22241211	6.83E-05
84.22851563	6.64E-05
84.23461914	6.66E-05
84.24072266	6.63E-05
84.24682617	6.38E-05
84.25292969	6.14E-05
84.2590332	5.91E-05
84.26513672	5.65E-05
84.27124023	5.54E-05
84.27734375	5.46E-05
84.28344727	5.31E-05
84.28955078	5.18E-05
84.2956543	4.8E-05
84.30175781	4.32E-05
84.30786133	4.18E-05
84.31396484	4.11E-05
84.32006836	4.02E-05
84.32617188	4.09E-05
84.33227539	3.92E-05

Time (s)	Acceleration (g)
69.085	0.033492
69.09	0.0357
69.095	0.037934
69.1	0.040056
69.105	0.041918
69.11	0.043354
69.115	0.044423
69.12	0.045099
69.125	0.04517
69.13	0.044729
69.135	0.04392
69.14	0.04276
69.145	0.041511
69.15	0.04017
69.155	0.038657
69.16	0.037149
69.165	0.035786
69.17	0.034682
69.175	0.033935
69.18	0.033497
69.185	0.033316
69.19	0.033469
69.195	0.033966
69.2	0.034597
69.205	0.035244
69.21	0.035973
69.215	0.036601
69.22	0.036916
69.225	0.037191
69.23	0.037408
69.235	0.037398
69.24	0.037657
69.245	0.037979
69.25	0.037661
69.255	0.036763
69.26	0.035561
69.265	0.034091
69.27	0.032516
69.275	0.030902
69.28	0.029228
69.285	0.027602
69.29	0.026127

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
84.33837891	3.64E-05
84.34448242	3.6E-05
84.35058594	3.62E-05
84.35668945	3.68E-05
84.36279297	3.88E-05
84.36889648	3.98E-05
84.375	3.99E-05
84.38110352	4.07E-05
84.38720703	4.11E-05
84.39331055	4.13E-05
84.39941406	4.33E-05
84.40551758	4.61E-05
84.41162109	4.79E-05
84.41772461	4.97E-05
84.42382813	5.03E-05
84.42993164	5.07E-05
84.43603516	5.44E-05
84.44213867	5.81E-05
84.44824219	6.06E-05
84.4543457	6.27E-05
84.46044922	6.22E-05
84.46655273	6.19E-05
84.47265625	6.46E-05
84.47875977	6.65E-05
84.48486328	6.79E-05
84.4909668	6.91E-05
84.49707031	6.8E-05
84.50317383	6.68E-05
84.50927734	6.64E-05
84.51538086	6.58E-05
84.52148438	6.68E-05
84.52758789	6.84E-05
84.53369141	6.77E-05
84.53979492	6.61E-05
84.54589844	6.45E-05
84.55200195	6.34E-05
84.55810547	6.43E-05
84.56420898	6.58E-05
84.5703125	6.49E-05
84.57641602	6.27E-05
84.58251953	6.02E-05
84.58862305	5.8E-05

Time (s)	Acceleration (g)
69.295	0.024784
69.3	0.023517
69.305	0.022314
69.31	0.021153
69.315	0.02
69.32	0.018837
69.325	0.017648
69.33	0.016401
69.335	0.015075
69.34	0.013669
69.345	0.012189
69.35	0.010671
69.355	0.009161
69.36	0.007662
69.365	0.006173
69.37	0.004702
69.375	0.003245
69.38	0.001792
69.385	0.000334
69.39	-0.001139
69.395	-0.00263
69.4	-0.004133
69.405	-0.005638
69.41	-0.007105
69.415	-0.008511
69.42	-0.009846
69.425	-0.011116
69.43	-0.012388
69.435	-0.013723
69.44	-0.015131
69.445	-0.016599
69.45	-0.018072
69.455	-0.019469
69.46	-0.020728
69.465	-0.021804
69.47	-0.02266
69.475	-0.023285
69.48	-0.023715
69.485	-0.023981
69.49	-0.024089
69.495	-0.02404
69.5	-0.02381

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
84.59472656	5.8E-05
84.60083008	5.81E-05
84.60693359	5.58E-05
84.61303711	5.33E-05
84.61914063	5.01E-05
84.62524414	4.59E-05
84.63134766	4.37E-05
84.63745117	4.21E-05
84.64355469	3.98E-05
84.6496582	3.83E-05
84.65576172	3.56E-05
84.66186523	3.08E-05
84.66796875	2.77E-05
84.67407227	2.75E-05
84.68017578	2.81E-05
84.6862793	2.94E-05
84.69238281	3E-05
84.69848633	2.9E-05
84.70458984	2.92E-05
84.71069336	3.07E-05
84.71679688	3.22E-05
84.72290039	3.55E-05
84.72900391	3.92E-05
84.73510742	4.11E-05
84.74121094	4.31E-05
84.74731445	4.44E-05
84.75341797	4.5E-05
84.75952148	4.69E-05
84.765625	4.98E-05
84.77172852	5.24E-05
84.77783203	5.43E-05
84.78393555	5.42E-05
84.79003906	5.32E-05
84.79614258	5.42E-05
84.80224609	5.62E-05
84.80834961	5.8E-05
84.81445313	5.99E-05
84.82055664	5.97E-05
84.82666016	5.82E-05
84.83276367	5.87E-05
84.83886719	5.96E-05
84.8449707	6.06E-05

Time (s)	Acceleration (g)
69.505	-0.02338
69.51	-0.022784
69.515	-0.022065
69.52	-0.021311
69.525	-0.020612
69.53	-0.020014
69.535	-0.019548
69.54	-0.019217
69.545	-0.018997
69.55	-0.018885
69.555	-0.018874
69.56	-0.018938
69.565	-0.019066
69.57	-0.019251
69.575	-0.01949
69.58	-0.0198
69.585	-0.020193
69.59	-0.020646
69.595	-0.021135
69.6	-0.021608
69.605	-0.021998
69.61	-0.022288
69.615	-0.022451
69.62	-0.022428
69.625	-0.022184
69.63	-0.021788
69.635	-0.021326
69.64	-0.020478
69.645	-0.01968
69.65	-0.01963
69.655	-0.019184
69.66	-0.01767
69.665	-0.015726
69.67	-0.014199
69.675	-0.012676
69.68	-0.010836
69.685	-0.009882
69.69	-0.009638
69.695	-0.00963
69.7	-0.009883
69.705	-0.01034
69.71	-0.010951

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
84.85107422	6.21E-05
84.85717773	6.14E-05
84.86328125	6E-05
84.86938477	5.98E-05
84.87548828	5.9E-05
84.8815918	5.96E-05
84.88769531	6.2E-05
84.89379883	6.18E-05
84.89990234	5.94E-05
84.90600586	5.74E-05
84.91210938	5.49E-05
84.91821289	5.42E-05
84.92431641	5.49E-05
84.93041992	5.32E-05
84.93652344	5E-05
84.94262695	4.67E-05
84.94873047	4.25E-05
84.95483398	4.03E-05
84.9609375	3.95E-05
84.96704102	3.69E-05
84.97314453	3.52E-05
84.97924805	3.36E-05
84.98535156	2.96E-05
84.99145508	2.68E-05
84.99755859	2.62E-05
85.00366211	2.59E-05
85.00976563	2.66E-05
85.01586914	2.65E-05
85.02197266	2.47E-05
85.02807617	2.37E-05
85.03417969	2.4E-05
85.0402832	2.47E-05
85.04638672	2.68E-05
85.05249023	2.95E-05
85.05859375	3.06E-05
85.06469727	3.09E-05
85.07080078	3.2E-05
85.0769043	3.25E-05
85.08300781	3.43E-05
85.08911133	3.8E-05
85.09521484	3.98E-05
85.10131836	4.11E-05

Time (s)	Acceleration (g)
69.715	-0.011646
69.72	-0.012304
69.725	-0.012834
69.73	-0.013351
69.735	-0.01336
69.74	-0.012748
69.745	-0.012605
69.75	-0.012778
69.755	-0.012743
69.76	-0.012673
69.765	-0.012541
69.77	-0.012297
69.775	-0.01214
69.78	-0.012184
69.785	-0.012295
69.79	-0.012352
69.795	-0.012542
69.8	-0.012887
69.805	-0.012965
69.81	-0.012917
69.815	-0.012859
69.82	-0.01274
69.825	-0.012902
69.83	-0.013023
69.835	-0.012249
69.84	-0.011016
69.845	-0.009702
69.85	-0.008162
69.855	-0.006343
69.86	-0.004333
69.865	-0.002479
69.87	-0.0006
69.875	0.001364
69.88	0.003207
69.885	0.004896
69.89	0.006398
69.895	0.007654
69.9	0.008651
69.905	0.009387
69.91	0.009851
69.915	0.010026
69.92	0.009884

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
85.10742188	4.3E-05
85.11352539	4.25E-05
85.11962891	4.3E-05
85.12573242	4.57E-05
85.13183594	4.73E-05
85.13793945	4.91E-05
85.14404297	5E-05
85.15014648	4.91E-05
85.15625	5.01E-05
85.16235352	5.24E-05
85.16845703	5.4E-05
85.17456055	5.58E-05
85.18066406	5.61E-05
85.18676758	5.49E-05
85.19287109	5.52E-05
85.19897461	5.56E-05
85.20507813	5.56E-05
85.21118164	5.66E-05
85.21728516	5.64E-05
85.22338867	5.46E-05
85.22949219	5.31E-05
85.2355957	5.09E-05
85.24169922	4.91E-05
85.24780273	5.01E-05
85.25390625	4.99E-05
85.26000977	4.73E-05
85.26611328	4.54E-05
85.2722168	4.3E-05
85.27832031	4.15E-05
85.28442383	4.21E-05
85.29052734	4.06E-05
85.29663086	3.83E-05
85.30273438	3.65E-05
85.30883789	3.29E-05
85.31494141	2.99E-05
85.32104492	2.85E-05
85.32714844	2.64E-05
85.33325195	2.51E-05
85.33935547	2.47E-05
85.34545898	2.24E-05
85.3515625	1.94E-05
85.35766602	1.86E-05

Input Motion

Time (s)	Acceleration (g)
69.925	0.009406
69.93	0.008584
69.935	0.00742
69.94	0.005934
69.945	0.004161
69.95	0.002174
69.955	0.000005
69.96	-0.002204
69.965	-0.004303
69.97	-0.006425
69.975	-0.008506
69.98	-0.010355
69.985	-0.011908
69.99	-0.013153
69.995	-0.014115
70	-0.014865
70.005	-0.015494
70.01	-0.016086
70.015	-0.016712
70.02	-0.017365
70.025	-0.018053
70.03	-0.018767
70.035	-0.019376
70.04	-0.019888
70.045	-0.020324
70.05	-0.020664
70.055	-0.020917
70.06	-0.0211
70.065	-0.021227
70.07	-0.021287
70.075	-0.021251
70.08	-0.021108
70.085	-0.02083
70.09	-0.020362
70.095	-0.019654
70.1	-0.018651
70.105	-0.01731
70.11	-0.015628
70.115	-0.01362
70.12	-0.011326
70.125	-0.008802
70.13	-0.00611

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
85.36376953	1.85E-05
85.36987305	1.95E-05
85.37597656	2.22E-05
85.38208008	2.28E-05
85.38818359	2.24E-05
85.39428711	2.34E-05
85.40039063	2.39E-05
85.40649414	2.55E-05
85.41259766	2.9E-05
85.41870117	3.11E-05
85.42480469	3.23E-05
85.4309082	3.35E-05
85.43701172	3.4E-05
85.44311523	3.52E-05
85.44921875	3.82E-05
85.45532227	4.05E-05
85.46142578	4.23E-05
85.4675293	4.4E-05
85.47363281	4.37E-05
85.47973633	4.36E-05
85.48583984	4.59E-05
85.49194336	4.76E-05
85.49804688	4.9E-05
85.50415039	4.99E-05
85.51025391	4.84E-05
85.51635742	4.74E-05
85.52246094	4.77E-05
85.52856445	4.75E-05
85.53466797	4.87E-05
85.54077148	4.94E-05
85.546875	4.78E-05
85.55297852	4.7E-05
85.55908203	4.67E-05
85.56518555	4.6E-05
85.57128906	4.69E-05
85.57739258	4.76E-05
85.58349609	4.64E-05
85.58959961	4.5E-05
85.59570313	4.31E-05
85.60180664	4.12E-05
85.60791016	4.13E-05
85.61401367	4.08E-05

Time (s)	Acceleration (g)
70.135	-0.003318
70.14	-0.000485
70.145	0.002337
70.15	0.005082
70.155	0.007686
70.16	0.010122
70.165	0.012361
70.17	0.014368
70.175	0.016113
70.18	0.017564
70.185	0.018699
70.19	0.019503
70.195	0.019978
70.2	0.02017
70.205	0.020136
70.21	0.019935
70.215	0.019623
70.22	0.019236
70.225	0.01878
70.23	0.018256
70.235	0.017645
70.24	0.016908
70.245	0.016006
70.25	0.014913
70.255	0.013619
70.26	0.012135
70.265	0.010485
70.27	0.008706
70.275	0.006836
70.28	0.004893
70.285	0.002888
70.29	0.000831
70.295	-0.001278
70.3	-0.003438
70.305	-0.005644
70.31	-0.007874
70.315	-0.010094
70.32	-0.012247
70.325	-0.014267
70.33	-0.016073
70.335	-0.017591
70.34	-0.01875

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
85.62011719	3.84E-05
85.6262207	3.6E-05
85.63232422	3.27E-05
85.63842773	2.97E-05
85.64453125	2.9E-05
85.65063477	2.78E-05
85.65673828	2.53E-05
85.6628418	2.34E-05
85.66894531	2.05E-05
85.67504883	1.75E-05
85.68115234	1.64E-05
85.68725586	1.49E-05
85.69335938	1.42E-05
85.69946289	1.5E-05
85.70556641	1.46E-05
85.71166992	1.37E-05
85.71777344	1.39E-05
85.72387695	1.43E-05
85.72998047	1.57E-05
85.73608398	1.9E-05
85.7421875	2.17E-05
85.74829102	2.31E-05
85.75439453	2.47E-05
85.76049805	2.57E-05
85.76660156	2.68E-05
85.77270508	3.04E-05
85.77880859	3.3E-05
85.78491211	3.41E-05
85.79101563	3.6E-05
85.79711914	3.61E-05
85.80322266	3.56E-05
85.80932617	3.7E-05
85.81542969	3.78E-05
85.8215332	3.91E-05
85.82763672	4.09E-05
85.83374023	4E-05
85.83984375	3.94E-05
85.84594727	4.03E-05
85.85205078	4.08E-05
85.8581543	4.28E-05
85.86425781	4.47E-05
85.87036133	4.35E-05

Time (s)	Acceleration (g)
70.345	-0.01949
70.35	-0.019806
70.355	-0.019702
70.36	-0.019187
70.365	-0.018282
70.37	-0.017004
70.375	-0.015383
70.38	-0.013493
70.385	-0.011421
70.39	-0.009283
70.395	-0.007201
70.4	-0.005283
70.405	-0.003611
70.41	-0.00222
70.415	-0.001104
70.42	-0.000186
70.425	0.000638
70.43	0.001472
70.435	0.002413
70.44	0.003519
70.445	0.004815
70.45	0.006293
70.455	0.007922
70.46	0.009666
70.465	0.011474
70.47	0.013292
70.475	0.015056
70.48	0.016677
70.485	0.018066
70.49	0.019122
70.495	0.019763
70.5	0.019966
70.505	0.019741
70.51	0.019136
70.515	0.01822
70.52	0.017063
70.525	0.015732
70.53	0.014255
70.535	0.012653
70.54	0.010957
70.545	0.009191
70.55	0.007407

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
85.87646484	4.25E-05
85.88256836	4.28E-05
85.88867188	4.3E-05
85.89477539	4.43E-05
85.90087891	4.49E-05
85.90698242	4.34E-05
85.91308594	4.27E-05
85.91918945	4.18E-05
85.92529297	4.02E-05
85.93139648	4.02E-05
85.9375	3.99E-05
85.94360352	3.79E-05
85.94970703	3.64E-05
85.95581055	3.37E-05
85.96191406	3.06E-05
85.96801758	3E-05
85.97412109	2.89E-05
85.98022461	2.66E-05
85.98632813	2.46E-05
85.99243164	2.13E-05
85.99853516	1.84E-05
86.00463867	1.77E-05
86.01074219	1.64E-05
86.0168457	1.5E-05
86.02294922	1.43E-05
86.02905273	1.25E-05
86.03515625	9.94E-06
86.04125977	8.95E-06
86.04736328	8.89E-06
86.0534668	8.96E-06
86.05957031	1.12E-05
86.06567383	1.4E-05
86.07177734	1.5E-05
86.07788086	1.65E-05
86.08398438	1.79E-05
86.09008789	1.79E-05
86.09619141	2.04E-05
86.10229492	2.42E-05
86.10839844	2.55E-05
86.11450195	2.66E-05
86.12060547	2.76E-05
86.12670898	2.75E-05

Time (s)	Acceleration (g)
70.555	0.00565
70.56	0.003966
70.565	0.002386
70.57	0.000894
70.575	-0.000544
70.58	-0.001972
70.585	-0.003433
70.59	-0.004935
70.595	-0.006467
70.6	-0.007987
70.605	-0.009439
70.61	-0.010794
70.615	-0.012022
70.62	-0.013101
70.625	-0.01401
70.63	-0.01473
70.635	-0.015233
70.64	-0.015474
70.645	-0.015413
70.65	-0.015002
70.655	-0.014216
70.66	-0.013068
70.665	-0.011599
70.67	-0.00985
70.675	-0.007886
70.68	-0.005766
70.685	-0.003549
70.69	-0.001306
70.695	0.000903
70.7	0.003032
70.705	0.005056
70.71	0.006979
70.715	0.008819
70.72	0.01062
70.725	0.01242
70.73	0.014229
70.735	0.016047
70.74	0.017843
70.745	0.019576
70.75	0.021252
70.755	0.022872
70.76	0.024426

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
86.1328125	2.92E-05
86.13891602	3.12E-05
86.14501953	3.23E-05
86.15112305	3.4E-05
86.15722656	3.44E-05
86.16333008	3.38E-05
86.16943359	3.49E-05
86.17553711	3.6E-05
86.18164063	3.71E-05
86.18774414	3.89E-05
86.19384766	3.87E-05
86.19995117	3.79E-05
86.20605469	3.83E-05
86.2121582	3.87E-05
86.21826172	4.01E-05
86.22436523	4.18E-05
86.23046875	4.11E-05
86.23657227	3.96E-05
86.24267578	3.89E-05
86.2487793	3.83E-05
86.25488281	3.84E-05
86.26098633	3.84E-05
86.26708984	3.68E-05
86.27319336	3.53E-05
86.27929688	3.37E-05
86.28540039	3.15E-05
86.29150391	3.09E-05
86.29760742	3.08E-05
86.30371094	2.97E-05
86.30981445	2.86E-05
86.31591797	2.63E-05
86.32202148	2.34E-05
86.328125	2.31E-05
86.33422852	2.27E-05
86.34033203	2.04E-05
86.34643555	1.87E-05
86.35253906	1.61E-05
86.35864258	1.26E-05
86.36474609	1.1E-05
86.37084961	9.08E-06
86.37695313	6.9E-06
86.38305664	6.39E-06

Time (s)	Acceleration (g)
70.765	0.025909
70.77	0.027292
70.775	0.028545
70.78	0.029646
70.785	0.030574
70.79	0.031309
70.795	0.031841
70.8	0.032139
70.805	0.032183
70.81	0.031978
70.815	0.031536
70.82	0.030893
70.825	0.030089
70.83	0.029132
70.835	0.028034
70.84	0.02682
70.845	0.025514
70.85	0.024159
70.855	0.022804
70.86	0.021493
70.865	0.020267
70.87	0.019145
70.875	0.018137
70.88	0.017229
70.885	0.016395
70.89	0.015609
70.895	0.014829
70.9	0.013995
70.905	0.013037
70.91	0.011864
70.915	0.010395
70.92	0.008585
70.925	0.006424
70.93	0.003944
70.935	0.00121
70.94	-0.00169
70.945	-0.004655
70.95	-0.007629
70.955	-0.010565
70.96	-0.013417
70.965	-0.016164
70.97	-0.018789

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
86.38916016	6.15E-06
86.39526367	5.77E-06
86.40136719	6.42E-06
86.4074707	7.97E-06
86.41357422	8.55E-06
86.41967773	1.08E-05
86.42578125	1.47E-05
86.43188477	1.65E-05
86.43798828	1.81E-05
86.4440918	1.95E-05
86.45019531	1.94E-05
86.45629883	2.14E-05
86.46240234	2.4E-05
86.46850586	2.49E-05
86.47460938	2.64E-05
86.48071289	2.72E-05
86.48681641	2.7E-05
86.49291992	2.89E-05
86.49902344	3.04E-05
86.50512695	3.11E-05
86.51123047	3.32E-05
86.51733398	3.44E-05
86.5234375	3.4E-05
86.52954102	3.4E-05
86.53564453	3.42E-05
86.54174805	3.51E-05
86.54785156	3.66E-05
86.55395508	3.62E-05
86.56005859	3.45E-05
86.56616211	3.43E-05
86.57226563	3.39E-05
86.57836914	3.4E-05
86.58447266	3.56E-05
86.59057617	3.49E-05
86.59667969	3.34E-05
86.6027832	3.37E-05
86.60888672	3.29E-05
86.61499023	3.25E-05
86.62109375	3.33E-05
86.62719727	3.22E-05
86.63330078	3.14E-05
86.6394043	3.02E-05

Time (s)	Acceleration (g)
70.975	-0.021286
70.98	-0.023692
70.985	-0.026052
70.99	-0.028397
70.995	-0.030762
71	-0.033169
71.005	-0.03561
71.01	-0.038088
71.015	-0.040576
71.02	-0.042986
71.025	-0.045222
71.03	-0.047182
71.035	-0.048768
71.04	-0.049935
71.045	-0.050673
71.05	-0.050965
71.055	-0.050829
71.06	-0.050309
71.065	-0.049455
71.07	-0.048336
71.075	-0.047025
71.08	-0.04556
71.085	-0.04397
71.09	-0.042271
71.095	-0.04047
71.1	-0.038561
71.105	-0.036553
71.11	-0.034479
71.115	-0.032397
71.12	-0.03039
71.125	-0.028554
71.13	-0.02698
71.135	-0.02574
71.14	-0.02486
71.145	-0.024329
71.15	-0.024082
71.155	-0.024025
71.16	-0.024046
71.165	-0.024032
71.17	-0.023867
71.175	-0.023461
71.18	-0.022766

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
86.64550781	2.72E-05
86.65161133	2.65E-05
86.65771484	2.63E-05
86.66381836	2.45E-05
86.66992188	2.31E-05
86.67602539	2.06E-05
86.68212891	1.74E-05
86.68823242	1.66E-05
86.69433594	1.55E-05
86.70043945	1.35E-05
86.70654297	1.17E-05
86.71264648	8.61E-06
86.71875	5.85E-06
86.72485352	5.14E-06
86.73095703	3.43E-06
86.73706055	1.56E-06
86.74316406	1.94E-06
86.74926758	4.24E-06
86.75537109	5.92E-06
86.76147461	7.18E-06
86.76757813	8.81E-06
86.77368164	9.6E-06
86.77978516	1.11E-05
86.78588867	1.46E-05
86.79199219	1.72E-05
86.7980957	1.88E-05
86.80419922	2.01E-05
86.81030273	2.05E-05
86.81640625	2.18E-05
86.82250977	2.44E-05
86.82861328	2.55E-05
86.8347168	2.62E-05
86.84082031	2.72E-05
86.84692383	2.64E-05
86.85302734	2.67E-05
86.85913086	2.81E-05
86.86523438	2.77E-05
86.87133789	2.9E-05
86.87744141	3.05E-05
86.88354492	2.92E-05
86.88964844	2.92E-05
86.89575195	3E-05

Time (s)	Acceleration (g)
71.185	-0.021772
71.19	-0.0205
71.195	-0.019004
71.2	-0.017367
71.205	-0.015672
71.21	-0.014016
71.215	-0.012477
71.22	-0.011076
71.225	-0.00981
71.23	-0.008684
71.235	-0.007688
71.24	-0.006815
71.245	-0.006059
71.25	-0.005414
71.255	-0.004867
71.26	-0.004397
71.265	-0.003977
71.27	-0.003562
71.275	-0.003111
71.28	-0.002614
71.285	-0.002074
71.29	-0.001515
71.295	-0.00098
71.3	-0.00053
71.305	-0.000228
71.31	-0.000124
71.315	-0.000252
71.32	-0.000627
71.325	-0.001244
71.33	-0.002077
71.335	-0.003092
71.34	-0.004256
71.345	-0.005531
71.35	-0.006869
71.355	-0.008209
71.36	-0.009511
71.365	-0.010714
71.37	-0.011705
71.375	-0.012458
71.38	-0.012983
71.385	-0.013251
71.39	-0.013257

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
86.90185547	3.05E-05
86.90795898	3.29E-05
86.9140625	3.33E-05
86.92016602	3.18E-05
86.92626953	3.2E-05
86.93237305	3.18E-05
86.93847656	3.19E-05
86.94458008	3.29E-05
86.95068359	3.16E-05
86.95678711	3.02E-05
86.96289063	2.97E-05
86.96899414	2.84E-05
86.97509766	2.79E-05
86.98120117	2.74E-05
86.98730469	2.56E-05
86.9934082	2.47E-05
86.99951172	2.3E-05
87.00561523	1.99E-05
87.01171875	1.9E-05
87.01782227	1.88E-05
87.02392578	1.75E-05
87.0300293	1.63E-05
87.03613281	1.42E-05
87.04223633	1.16E-05
87.04833984	1.11E-05
87.05444336	1.07E-05
87.06054688	9.1E-06
87.06665039	7.84E-06
87.07275391	6E-06
87.07885742	3.38E-06
87.08496094	2.84E-06
87.09106445	4.27E-06
87.09716797	5.38E-06
87.10327148	6.45E-06
87.109375	8.94E-06
87.11547852	1.11E-05
87.12158203	1.25E-05
87.12768555	1.38E-05
87.13378906	1.36E-05
87.13989258	1.37E-05
87.14599609	1.61E-05
87.15209961	1.76E-05

Time (s)	Acceleration (g)
71.395	-0.013022
71.4	-0.012556
71.405	-0.011898
71.41	-0.011102
71.415	-0.010233
71.42	-0.009394
71.425	-0.00863
71.43	-0.007973
71.435	-0.007463
71.44	-0.007015
71.445	-0.006644
71.45	-0.006463
71.455	-0.006488
71.46	-0.006754
71.465	-0.007313
71.47	-0.008141
71.475	-0.009204
71.48	-0.010464
71.485	-0.011862
71.49	-0.013345
71.495	-0.014857
71.5	-0.016328
71.505	-0.017687
71.51	-0.018862
71.515	-0.019778
71.52	-0.020376
71.525	-0.020624
71.53	-0.020508
71.535	-0.020053
71.54	-0.019371
71.545	-0.018561
71.55	-0.017769
71.555	-0.017184
71.56	-0.016749
71.565	-0.016416
71.57	-0.016458
71.575	-0.016966
71.58	-0.01775
71.585	-0.018726
71.59	-0.019897
71.595	-0.021209
71.6	-0.022596

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
87.15820313	1.88E-05
87.16430664	1.98E-05
87.17041016	1.96E-05
87.17651367	2.1E-05
87.18261719	2.31E-05
87.1887207	2.36E-05
87.19482422	2.47E-05
87.20092773	2.55E-05
87.20703125	2.54E-05
87.21313477	2.67E-05
87.21923828	2.77E-05
87.2253418	2.82E-05
87.23144531	3E-05
87.23754883	3.09E-05
87.24365234	3E-05
87.24975586	2.98E-05
87.25585938	2.97E-05
87.26196289	2.98E-05
87.26806641	3.08E-05
87.27416992	3.04E-05
87.28027344	2.86E-05
87.28637695	2.76E-05
87.29248047	2.69E-05
87.29858398	2.67E-05
87.3046875	2.73E-05
87.31079102	2.63E-05
87.31689453	2.52E-05
87.32299805	2.5E-05
87.32910156	2.36E-05
87.33520508	2.32E-05
87.34130859	2.4E-05
87.34741211	2.3E-05
87.35351563	2.21E-05
87.35961914	2.1E-05
87.36572266	1.82E-05
87.37182617	1.69E-05
87.37792969	1.64E-05
87.3840332	1.45E-05
87.39013672	1.29E-05
87.39624023	1.03E-05
87.40234375	6.61E-06
87.40844727	5.21E-06

Time (s)	Acceleration (g)
71.605	-0.023996
71.61	-0.025338
71.615	-0.026547
71.62	-0.027584
71.625	-0.028412
71.63	-0.029006
71.635	-0.029327
71.64	-0.029321
71.645	-0.028974
71.65	-0.028284
71.655	-0.02728
71.66	-0.026004
71.665	-0.024503
71.67	-0.022826
71.675	-0.021034
71.68	-0.019173
71.685	-0.017281
71.69	-0.015435
71.695	-0.0137
71.7	-0.012142
71.705	-0.010787
71.71	-0.009582
71.715	-0.008609
71.72	-0.007861
71.725	-0.007273
71.73	-0.006866
71.735	-0.006612
71.74	-0.00637
71.745	-0.006037
71.75	-0.005702
71.755	-0.005425
71.76	-0.005036
71.765	-0.004506
71.77	-0.003902
71.775	-0.003234
71.78	-0.002566
71.785	-0.001967
71.79	-0.001399
71.795	-0.000872
71.8	-0.0005
71.805	-0.000187
71.81	0.00015

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
87.41455078	4.22E-06
87.4206543	2.11E-06
87.42675781	1.09E-06
87.43286133	2.23E-06
87.43896484	3.32E-06
87.44506836	4.13E-06
87.45117188	6.26E-06
87.45727539	7.33E-06
87.46337891	7.63E-06
87.46948242	1.03E-05
87.47558594	1.26E-05
87.48168945	1.4E-05
87.48779297	1.59E-05
87.49389648	1.66E-05
87.5	1.71E-05
87.50610352	1.98E-05
87.51220703	2.2E-05
87.51831055	2.32E-05
87.52441406	2.43E-05
87.53051758	2.44E-05
87.53662109	2.49E-05
87.54272461	2.68E-05
87.54882813	2.76E-05
87.55493164	2.86E-05
87.56103516	2.98E-05
87.56713867	2.92E-05
87.57324219	2.87E-05
87.5793457	2.9E-05
87.58544922	2.86E-05
87.59155273	2.97E-05
87.59765625	3.06E-05
87.60375977	2.97E-05
87.60986328	2.92E-05
87.6159668	2.9E-05
87.62207031	2.91E-05
87.62817383	3.06E-05
87.63427734	3.09E-05
87.64038086	2.99E-05
87.64648438	2.97E-05
87.65258789	2.92E-05
87.65869141	2.86E-05
87.66479492	2.83E-05

Time (s)	Acceleration (g)
71.815	0.000476
71.82	0.000783
71.825	0.001078
71.83	0.001356
71.835	0.001551
71.84	0.001569
71.845	0.001478
71.85	0.001421
71.855	0.001372
71.86	0.001291
71.865	0.001207
71.87	0.001098
71.875	0.000921
71.88	0.000632
71.885	0.000172
71.89	-0.000475
71.895	-0.001312
71.9	-0.002363
71.905	-0.003611
71.91	-0.004913
71.915	-0.00619
71.92	-0.007595
71.925	-0.00922
71.93	-0.010933
71.935	-0.012601
71.94	-0.014179
71.945	-0.015657
71.95	-0.016997
71.955	-0.01815
71.96	-0.019101
71.965	-0.019841
71.97	-0.020342
71.975	-0.020581
71.98	-0.020543
71.985	-0.020224
71.99	-0.019628
71.995	-0.018775
72	-0.017708
72.005	-0.016484
72.01	-0.015164
72.015	-0.013782
72.02	-0.012372

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
87.67089844	2.69E-05
87.67700195	2.55E-05
87.68310547	2.45E-05
87.68920898	2.25E-05
87.6953125	2.08E-05
87.70141602	2.04E-05
87.70751953	1.92E-05
87.71362305	1.82E-05
87.71972656	1.69E-05
87.72583008	1.42E-05
87.73193359	1.33E-05
87.73803711	1.29E-05
87.74414063	1.08E-05
87.75024414	9.34E-06
87.75634766	7.73E-06
87.76245117	4.72E-06
87.76855469	3.63E-06
87.7746582	2.94E-06
87.78076172	1.31E-06
87.78686523	1.62E-06
87.79296875	3.89E-06
87.79907227	6.24E-06
87.80517578	7.3E-06
87.8112793	9.1E-06
87.81738281	1.06E-05
87.82348633	1.08E-05
87.82958984	1.3E-05
87.83569336	1.55E-05
87.84179688	1.63E-05
87.84790039	1.76E-05
87.85400391	1.8E-05
87.86010742	1.77E-05
87.86621094	1.95E-05
87.87231445	2.07E-05
87.87841797	2.11E-05
87.88452148	2.27E-05
87.890625	2.28E-05
87.89672852	2.28E-05
87.90283203	2.44E-05
87.90893555	2.5E-05
87.91503906	2.62E-05
87.92114258	2.8E-05

Time (s)	Acceleration (g)
72.025	-0.011066
72.03	-0.009915
72.035	-0.008811
72.04	-0.007782
72.045	-0.006916
72.05	-0.006164
72.055	-0.005545
72.06	-0.005134
72.065	-0.004862
72.07	-0.00467
72.075	-0.004597
72.08	-0.004659
72.085	-0.004816
72.09	-0.005001
72.095	-0.005138
72.1	-0.005161
72.105	-0.005014
72.11	-0.004645
72.115	-0.004015
72.12	-0.003129
72.125	-0.002006
72.13	-0.000663
72.135	0.00081
72.14	0.002301
72.145	0.003866
72.15	0.005617
72.155	0.007458
72.16	0.009227
72.165	0.010891
72.17	0.012407
72.175	0.013697
72.18	0.014822
72.185	0.015851
72.19	0.016751
72.195	0.017635
72.2	0.018715
72.205	0.019976
72.21	0.02136
72.215	0.022965
72.22	0.024782
72.225	0.026745
72.23	0.028834

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
87.92724609	2.8E-05
87.93334961	2.8E-05
87.93945313	2.83E-05
87.94555664	2.82E-05
87.95166016	2.95E-05
87.95776367	3.04E-05
87.96386719	2.93E-05
87.9699707	2.87E-05
87.97607422	2.83E-05
87.98217773	2.75E-05
87.98828125	2.81E-05
87.99438477	2.8E-05
88.00048828	2.69E-05
88.0065918	2.66E-05
88.01269531	2.56E-05
88.01879883	2.49E-05
88.02490234	2.57E-05
88.03100586	2.49E-05
88.03710938	2.38E-05
88.04321289	2.35E-05
88.04931641	2.13E-05
88.05541992	1.91E-05
88.06152344	1.89E-05
88.06762695	1.8E-05
88.07373047	1.72E-05
88.07983398	1.6E-05
88.0859375	1.26E-05
88.09204102	1.02E-05
88.09814453	9.7E-06
88.10424805	8.51E-06
88.11035156	7.55E-06
88.11645508	7.06E-06
88.12255859	5.67E-06
88.12866211	4.63E-06
88.13476563	5.71E-06
88.14086914	6.36E-06
88.14697266	6.22E-06
88.15307617	7.95E-06
88.15917969	9.73E-06
88.1652832	1.05E-05
88.17138672	1.22E-05
88.17749023	1.31E-05

Time (s)	Acceleration (g)
72.235	0.030895
72.24	0.03286
72.245	0.034822
72.25	0.036655
72.255	0.038138
72.26	0.039212
72.265	0.03984
72.27	0.039995
72.275	0.039698
72.28	0.038934
72.285	0.037744
72.29	0.036188
72.295	0.034196
72.3	0.031848
72.305	0.029416
72.31	0.026949
72.315	0.024364
72.32	0.021731
72.325	0.019123
72.33	0.016555
72.335	0.014073
72.34	0.011695
72.345	0.009425
72.35	0.007285
72.355	0.005282
72.36	0.003388
72.365	0.00158
72.37	-0.00019
72.375	-0.00199
72.38	-0.003806
72.385	-0.005631
72.39	-0.00756
72.395	-0.00954
72.4	-0.011367
72.405	-0.013047
72.41	-0.014718
72.415	-0.016378
72.42	-0.017972
72.425	-0.019496
72.43	-0.020943
72.435	-0.022293
72.44	-0.023527

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
88.18359375	1.34E-05
88.18969727	1.58E-05
88.19580078	1.77E-05
88.2019043	1.87E-05
88.20800781	2.05E-05
88.21411133	2.08E-05
88.22021484	2.09E-05
88.22631836	2.34E-05
88.23242188	2.44E-05
88.23852539	2.47E-05
88.24462891	2.64E-05
88.25073242	2.63E-05
88.25683594	2.57E-05
88.26293945	2.65E-05
88.26904297	2.63E-05
88.27514648	2.66E-05
88.28125	2.77E-05
88.28735352	2.69E-05
88.29345703	2.63E-05
88.29956055	2.69E-05
88.30566406	2.68E-05
88.31176758	2.74E-05
88.31787109	2.84E-05
88.32397461	2.75E-05
88.33007813	2.67E-05
88.33618164	2.68E-05
88.34228516	2.67E-05
88.34838867	2.68E-05
88.35449219	2.65E-05
88.3605957	2.58E-05
88.36669922	2.56E-05
88.37280273	2.44E-05
88.37890625	2.25E-05
88.38500977	2.18E-05
88.39111328	2.08E-05
88.3972168	1.93E-05
88.40332031	1.86E-05
88.40942383	1.61E-05
88.41552734	1.29E-05
88.42163086	1.22E-05
88.42773438	1.1E-05
88.43383789	9.46E-06

Time (s)	Acceleration (g)
72.445	-0.024623
72.45	-0.025534
72.455	-0.026218
72.46	-0.026666
72.465	-0.026879
72.47	-0.026871
72.475	-0.026669
72.48	-0.026315
72.485	-0.025857
72.49	-0.025328
72.495	-0.024757
72.5	-0.024184
72.505	-0.023636
72.51	-0.02315
72.515	-0.022799
72.52	-0.022581
72.525	-0.022513
72.53	-0.022777
72.535	-0.023362
72.54	-0.024009
72.545	-0.024687
72.55	-0.025445
72.555	-0.026147
72.56	-0.026677
72.565	-0.026995
72.57	-0.02708
72.575	-0.026934
72.58	-0.026556
72.585	-0.025948
72.59	-0.02511
72.595	-0.024034
72.6	-0.022739
72.605	-0.021244
72.61	-0.019547
72.615	-0.017663
72.62	-0.0156
72.625	-0.013386
72.63	-0.011091
72.635	-0.008785
72.64	-0.006536
72.645	-0.004393
72.65	-0.002364

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
88.43994141	8.8E-06
88.44604492	6.39E-06
88.45214844	4.42E-06
88.45825195	4.91E-06
88.46435547	4.51E-06
88.47045898	4.24E-06
88.4765625	5.67E-06
88.48266602	6.91E-06
88.48876953	7.17E-06
88.49487305	8.9E-06
88.50097656	1.1E-05
88.50708008	1.14E-05
88.51318359	1.35E-05
88.51928711	1.6E-05
88.52539063	1.69E-05
88.53149414	1.87E-05
88.53759766	1.98E-05
88.54370117	1.96E-05
88.54980469	2.12E-05
88.5559082	2.28E-05
88.56201172	2.33E-05
88.56811523	2.46E-05
88.57421875	2.47E-05
88.58032227	2.39E-05
88.58642578	2.52E-05
88.5925293	2.65E-05
88.59863281	2.66E-05
88.60473633	2.74E-05
88.61083984	2.76E-05
88.61694336	2.7E-05
88.62304688	2.78E-05
88.62915039	2.85E-05
88.63525391	2.88E-05
88.64135742	3.04E-05
88.64746094	3.1E-05
88.65356445	3.01E-05
88.65966797	2.99E-05
88.66577148	2.96E-05
88.671875	3E-05
88.67797852	3.09E-05
88.68408203	2.97E-05
88.69018555	2.86E-05

Input Motion

Time (s)	Acceleration (g)
72.655	-0.000423
72.66	0.001488
72.665	0.003426
72.67	0.005454
72.675	0.00761
72.68	0.009855
72.685	0.012136
72.69	0.014413
72.695	0.016639
72.7	0.018821
72.705	0.020967
72.71	0.023061
72.715	0.025076
72.72	0.026952
72.725	0.028625
72.73	0.030038
72.735	0.03115
72.74	0.031975
72.745	0.032538
72.75	0.032874
72.755	0.033018
72.76	0.032975
72.765	0.032741
72.77	0.032332
72.775	0.031758
72.78	0.031051
72.785	0.030243
72.79	0.029342
72.795	0.028348
72.8	0.027245
72.805	0.026014
72.81	0.02463
72.815	0.023088
72.82	0.021414
72.825	0.01966
72.83	0.017924
72.835	0.016316
72.84	0.014931
72.845	0.013864
72.85	0.013175
72.855	0.012897
72.86	0.013076

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
88.69628906	2.78E-05
88.70239258	2.57E-05
88.70849609	2.51E-05
88.71459961	2.46E-05
88.72070313	2.26E-05
88.72680664	2.21E-05
88.73291016	2.11E-05
88.73901367	1.87E-05
88.74511719	1.81E-05
88.7512207	1.75E-05
88.75732422	1.63E-05
88.76342773	1.59E-05
88.76953125	1.44E-05
88.77563477	1.23E-05
88.78173828	1.13E-05
88.7878418	1.05E-05
88.79394531	9.23E-06
88.80004883	8.34E-06
88.80615234	7.74E-06
88.81225586	6.54E-06
88.81835938	6.42E-06
88.82446289	7.53E-06
88.83056641	8.19E-06
88.83666992	9.74E-06
88.84277344	1.18E-05
88.84887695	1.25E-05
88.85498047	1.37E-05
88.86108398	1.54E-05
88.8671875	1.57E-05
88.87329102	1.7E-05
88.87939453	1.91E-05
88.88549805	1.99E-05
88.89160156	2.16E-05
88.89770508	2.26E-05
88.90380859	2.18E-05
88.90991211	2.29E-05
88.91601563	2.46E-05
88.92211914	2.5E-05
88.92822266	2.65E-05
88.93432617	2.72E-05
88.94042969	2.7E-05
88.9465332	2.85E-05

Input Motion

Time (s)	Acceleration (g)
72.865	0.013722
72.87	0.014803
72.875	0.016256
72.88	0.017966
72.885	0.019791
72.89	0.021607
72.895	0.023287
72.9	0.02471
72.905	0.025788
72.91	0.026457
72.915	0.02669
72.92	0.026505
72.925	0.025929
72.93	0.025003
72.935	0.023759
72.94	0.022194
72.945	0.020284
72.95	0.018003
72.955	0.015326
72.96	0.012244
72.965	0.008773
72.97	0.004981
72.975	0.00096
72.98	-0.003189
72.985	-0.007361
72.99	-0.011454
72.995	-0.015383
73	-0.019078
73.005	-0.022485
73.01	-0.025574
73.015	-0.028331
73.02	-0.030744
73.025	-0.032803
73.03	-0.03451
73.035	-0.035861
73.04	-0.036822
73.045	-0.037363
73.05	-0.037449
73.055	-0.037051
73.06	-0.036172
73.065	-0.034825
73.07	-0.032993

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
88.95263672	2.93E-05
88.95874023	2.93E-05
88.96484375	3.03E-05
88.97094727	3.04E-05
88.97705078	2.98E-05
88.9831543	3.01E-05
88.98925781	2.98E-05
88.99536133	2.94E-05
89.00146484	2.96E-05
89.00756836	2.9E-05
89.01367188	2.83E-05
89.01977539	2.79E-05
89.02587891	2.69E-05
89.03198242	2.67E-05
89.03808594	2.73E-05
89.04418945	2.63E-05
89.05029297	2.54E-05
89.05639648	2.5E-05
89.0625	2.36E-05
89.06860352	2.32E-05
89.07470703	2.28E-05
89.08081055	2.1E-05
89.08691406	2.05E-05
89.09301758	1.97E-05
89.09912109	1.71E-05
89.10522461	1.61E-05
89.11132813	1.52E-05
89.11743164	1.31E-05
89.12353516	1.25E-05
89.12963867	1.14E-05
89.13574219	9.02E-06
89.1418457	7.94E-06
89.14794922	7.44E-06
89.15405273	6.67E-06
89.16015625	6.73E-06
89.16625977	7.68E-06
89.17236328	8.09E-06
89.1784668	8.5E-06
89.18457031	1.01E-05
89.19067383	1.07E-05
89.19677734	1.17E-05
89.20288086	1.4E-05

Input Motion

Time (s)	Acceleration (g)
73.075	-0.030674
73.08	-0.027868
73.085	-0.024586
73.09	-0.020894
73.095	-0.01687
73.1	-0.012608
73.105	-0.008212
73.11	-0.003771
73.115	0.000629
73.12	0.004899
73.125	0.008956
73.13	0.012708
73.135	0.016082
73.14	0.019035
73.145	0.021537
73.15	0.023622
73.155	0.025331
73.16	0.026698
73.165	0.027763
73.17	0.028562
73.175	0.029134
73.18	0.029547
73.185	0.029875
73.19	0.030191
73.195	0.030562
73.2	0.031027
73.205	0.031609
73.21	0.032295
73.215	0.033054
73.22	0.03386
73.225	0.03468
73.23	0.035471
73.235	0.036199
73.24	0.03684
73.245	0.03738
73.25	0.037802
73.255	0.038094
73.26	0.038237
73.265	0.038211
73.27	0.038009
73.275	0.037634
73.28	0.037101

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
89.20898438	1.49E-05
89.21508789	1.63E-05
89.22119141	1.85E-05
89.22729492	1.9E-05
89.23339844	2.01E-05
89.23950195	2.19E-05
89.24560547	2.27E-05
89.25170898	2.41E-05
89.2578125	2.51E-05
89.26391602	2.47E-05
89.27001953	2.55E-05
89.27612305	2.66E-05
89.28222656	2.65E-05
89.28833008	2.74E-05
89.29443359	2.8E-05
89.30053711	2.67E-05
89.30664063	2.72E-05
89.31274414	2.79E-05
89.31884766	2.72E-05
89.32495117	2.87E-05
89.33105469	2.94E-05
89.3371582	2.83E-05
89.34326172	2.9E-05
89.34936523	2.86E-05
89.35546875	2.78E-05
89.36157227	2.94E-05
89.36767578	2.9E-05
89.3737793	2.75E-05
89.37988281	2.72E-05
89.38598633	2.53E-05
89.39208984	2.45E-05
89.39819336	2.53E-05
89.40429688	2.4E-05
89.41040039	2.26E-05
89.41650391	2.18E-05
89.42260742	1.98E-05
89.42871094	1.87E-05
89.43481445	1.78E-05
89.44091797	1.63E-05
89.44702148	1.55E-05
89.453125	1.44E-05
89.45922852	1.27E-05

Time (s)	Acceleration (g)
73.285	0.036426
73.29	0.035642
73.295	0.034778
73.3	0.033815
73.305	0.032728
73.31	0.03149
73.315	0.030068
73.32	0.028439
73.325	0.026619
73.33	0.024596
73.335	0.02222
73.34	0.019534
73.345	0.016801
73.35	0.013878
73.355	0.010543
73.36	0.007205
73.365	0.004227
73.37	0.001666
73.375	-0.000668
73.38	-0.003148
73.385	-0.005499
73.39	-0.007558
73.395	-0.009031
73.4	-0.009737
73.405	-0.010462
73.41	-0.011125
73.415	-0.011319
73.42	-0.011361
73.425	-0.011277
73.43	-0.010949
73.435	-0.010541
73.44	-0.010162
73.445	-0.009857
73.45	-0.009699
73.455	-0.009721
73.46	-0.009896
73.465	-0.010196
73.47	-0.010617
73.475	-0.011142
73.48	-0.011772
73.485	-0.012498
73.49	-0.013254

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
89.46533203	1.14E-05
89.47143555	1.05E-05
89.47753906	9.23E-06
89.48364258	8.76E-06
89.48974609	9E-06
89.49584961	8.04E-06
89.50195313	7.71E-06
89.50805664	9.45E-06
89.51416016	1.02E-05
89.52026367	1.11E-05
89.52636719	1.31E-05
89.5324707	1.44E-05
89.53857422	1.59E-05
89.54467773	1.78E-05
89.55078125	1.84E-05
89.55688477	1.91E-05
89.56298828	2.08E-05
89.5690918	2.16E-05
89.57519531	2.23E-05
89.58129883	2.33E-05
89.58740234	2.31E-05
89.59350586	2.35E-05
89.59960938	2.51E-05
89.60571289	2.56E-05
89.61181641	2.63E-05
89.61791992	2.73E-05
89.62402344	2.69E-05
89.63012695	2.73E-05
89.63623047	2.88E-05
89.64233398	2.89E-05
89.6484375	2.93E-05
89.65454102	2.98E-05
89.66064453	2.95E-05
89.66674805	2.99E-05
89.67285156	2.99E-05
89.67895508	2.91E-05
89.68505859	2.97E-05
89.69116211	2.97E-05
89.69726563	2.83E-05
89.70336914	2.8E-05
89.70947266	2.72E-05
89.71557617	2.62E-05

Input Motion

Time (s)	Acceleration (g)
73.495	-0.01397
73.5	-0.014592
73.505	-0.015072
73.51	-0.0154
73.515	-0.01559
73.52	-0.015666
73.525	-0.015657
73.53	-0.015587
73.535	-0.01547
73.54	-0.015294
73.545	-0.015038
73.55	-0.014683
73.555	-0.014219
73.56	-0.013634
73.565	-0.012931
73.57	-0.012147
73.575	-0.011323
73.58	-0.010482
73.585	-0.009639
73.59	-0.008792
73.595	-0.007926
73.6	-0.00704
73.605	-0.006146
73.61	-0.005265
73.615	-0.004435
73.62	-0.003726
73.625	-0.003203
73.63	-0.002904
73.635	-0.002855
73.64	-0.003045
73.645	-0.003448
73.65	-0.004062
73.655	-0.004881
73.66	-0.005901
73.665	-0.007124
73.67	-0.008543
73.675	-0.010144
73.68	-0.011918
73.685	-0.013841
73.69	-0.015864
73.695	-0.017934
73.7	-0.019997

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
89.72167969	2.64E-05
89.7277832	2.55E-05
89.73388672	2.39E-05
89.73999023	2.34E-05
89.74609375	2.19E-05
89.75219727	2.07E-05
89.75830078	2.07E-05
89.7644043	1.92E-05
89.77050781	1.78E-05
89.77661133	1.72E-05
89.78271484	1.53E-05
89.78881836	1.41E-05
89.79492188	1.4E-05
89.80102539	1.2E-05
89.80712891	1.07E-05
89.81323242	1.06E-05
89.81933594	8.92E-06
89.82543945	7.59E-06
89.83154297	7.96E-06
89.83764648	8.47E-06
89.84375	9.13E-06
89.84985352	1.08E-05
89.85595703	1.19E-05
89.86206055	1.18E-05
89.86816406	1.29E-05
89.87426758	1.42E-05
89.88037109	1.5E-05
89.88647461	1.68E-05
89.89257813	1.8E-05
89.89868164	1.87E-05
89.90478516	2.04E-05
89.91088867	2.13E-05
89.91699219	2.15E-05
89.9230957	2.27E-05
89.92919922	2.37E-05
89.93530273	2.49E-05
89.94140625	2.62E-05
89.94750977	2.61E-05
89.95361328	2.59E-05
89.9597168	2.71E-05
89.96582031	2.79E-05
89.97192383	2.84E-05

Time (s)	Acceleration (g)
73.705	-0.021995
73.71	-0.023883
73.715	-0.02562
73.72	-0.027157
73.725	-0.028453
73.73	-0.029454
73.735	-0.030114
73.74	-0.030425
73.745	-0.030386
73.75	-0.030012
73.755	-0.029339
73.76	-0.02839
73.765	-0.027196
73.77	-0.025834
73.775	-0.024368
73.78	-0.022845
73.785	-0.021295
73.79	-0.019693
73.795	-0.018003
73.8	-0.016185
73.805	-0.014202
73.81	-0.012054
73.815	-0.009755
73.82	-0.007312
73.825	-0.004749
73.83	-0.002069
73.835	0.000722
73.84	0.003575
73.845	0.006438
73.85	0.009274
73.855	0.012038
73.86	0.014683
73.865	0.017162
73.87	0.019433
73.875	0.021455
73.88	0.023207
73.885	0.024679
73.89	0.025883
73.895	0.026848
73.9	0.027595
73.905	0.028156
73.91	0.02858

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
89.97802734	2.9E-05
89.98413086	2.87E-05
89.99023438	2.87E-05
89.99633789	2.96E-05
90.00244141	2.9E-05
90.00854492	2.89E-05
90.01464844	2.94E-05
90.02075195	2.82E-05
90.02685547	2.8E-05
90.03295898	2.82E-05
90.0390625	2.69E-05
90.04516602	2.71E-05
90.05126953	2.73E-05
90.05737305	2.56E-05
90.06347656	2.53E-05
90.06958008	2.51E-05
90.07568359	2.4E-05
90.08178711	2.43E-05
90.08789063	2.35E-05
90.09399414	2.14E-05
90.10009766	2.04E-05
90.10620117	1.9E-05
90.11230469	1.74E-05
90.1184082	1.71E-05
90.12451172	1.58E-05
90.13061523	1.38E-05
90.13671875	1.28E-05
90.14282227	1.15E-05
90.14892578	9.63E-06
90.1550293	8.96E-06
90.16113281	8.28E-06
90.16723633	7.66E-06
90.17333984	8.74E-06
90.17944336	9.43E-06
90.18554688	9.01E-06
90.19165039	9.93E-06
90.19775391	1.11E-05
90.20385742	1.16E-05
90.20996094	1.37E-05
90.21606445	1.58E-05
90.22216797	1.63E-05
90.22827148	1.74E-05

Input Motion

Time (s)	Acceleration (g)
73.915	0.028917
73.92	0.029207
73.925	0.029493
73.93	0.029814
73.935	0.030199
73.94	0.030677
73.945	0.031268
73.95	0.031946
73.955	0.03268
73.96	0.03346
73.965	0.034277
73.97	0.035132
73.975	0.036042
73.98	0.036993
73.985	0.037972
73.99	0.038967
73.995	0.03996
74	0.040931
74.005	0.041868
74.01	0.042774
74.015	0.043653
74.02	0.044522
74.025	0.045388
74.03	0.046224
74.035	0.047001
74.04	0.047677
74.045	0.048215
74.05	0.048595
74.055	0.048802
74.06	0.048836
74.065	0.048689
74.07	0.048325
74.075	0.047711
74.08	0.046831
74.085	0.045678
74.09	0.044316
74.095	0.042811
74.1	0.041188
74.105	0.03947
74.11	0.037646
74.115	0.035695
74.12	0.033639

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
90.234375	1.86E-05
90.24047852	1.9E-05
90.24658203	2.06E-05
90.25268555	2.19E-05
90.25878906	2.24E-05
90.26489258	2.39E-05
90.27099609	2.43E-05
90.27709961	2.41E-05
90.28320313	2.56E-05
90.28930664	2.63E-05
90.29541016	2.66E-05
90.30151367	2.76E-05
90.30761719	2.71E-05
90.3137207	2.64E-05
90.31982422	2.71E-05
90.32592773	2.71E-05
90.33203125	2.72E-05
90.33813477	2.75E-05
90.34423828	2.64E-05
90.3503418	2.6E-05
90.35644531	2.69E-05
90.36254883	2.67E-05
90.36865234	2.67E-05
90.37475586	2.73E-05
90.38085938	2.67E-05
90.38696289	2.58E-05
90.39306641	2.52E-05
90.39916992	2.4E-05
90.40527344	2.37E-05
90.41137695	2.38E-05
90.41748047	2.22E-05
90.42358398	2.12E-05
90.4296875	2.04E-05
90.43579102	1.82E-05
90.44189453	1.77E-05
90.44799805	1.74E-05
90.45410156	1.54E-05
90.46020508	1.44E-05
90.46630859	1.34E-05
90.47241211	1.13E-05
90.47851563	1.06E-05
90.48461914	9.83E-06

Input Motion

Time (s)	Acceleration (g)
74.125	0.03151
74.13	0.029345
74.135	0.027194
74.14	0.025101
74.145	0.023099
74.15	0.021235
74.155	0.019552
74.16	0.018056
74.165	0.016747
74.17	0.015643
74.175	0.014752
74.18	0.014051
74.185	0.013514
74.19	0.013118
74.195	0.01284
74.2	0.012666
74.205	0.012581
74.21	0.012567
74.215	0.0126
74.22	0.012648
74.225	0.012676
74.23	0.012623
74.235	0.012437
74.24	0.01209
74.245	0.011556
74.25	0.01082
74.255	0.009881
74.26	0.008727
74.265	0.007357
74.27	0.005787
74.275	0.004044
74.28	0.002177
74.285	0.000249
74.29	-0.00167
74.295	-0.003513
74.3	-0.005222
74.305	-0.00676
74.31	-0.008115
74.315	-0.009287
74.32	-0.010285
74.325	-0.011114
74.33	-0.011749

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
90.49072266	8.53E-06
90.49682617	8.47E-06
90.50292969	8.81E-06
90.5090332	8.52E-06
90.51513672	8.69E-06
90.52124023	9.6E-06
90.52734375	9.94E-06
90.53344727	1.14E-05
90.53955078	1.37E-05
90.5456543	1.41E-05
90.55175781	1.46E-05
90.55786133	1.63E-05
90.56396484	1.72E-05
90.57006836	1.86E-05
90.57617188	2.02E-05
90.58227539	2.06E-05
90.58837891	2.12E-05
90.59448242	2.25E-05
90.60058594	2.27E-05
90.60668945	2.36E-05
90.61279297	2.49E-05
90.61889648	2.52E-05
90.625	2.59E-05
90.63110352	2.66E-05
90.63720703	2.59E-05
90.64331055	2.64E-05
90.64941406	2.74E-05
90.65551758	2.73E-05
90.66162109	2.82E-05
90.66772461	2.81E-05
90.67382813	2.7E-05
90.67993164	2.77E-05
90.68603516	2.76E-05
90.69213867	2.67E-05
90.69824219	2.72E-05
90.7043457	2.61E-05
90.71044922	2.47E-05
90.71655273	2.52E-05
90.72265625	2.47E-05
90.72875977	2.38E-05
90.73486328	2.4E-05
90.7409668	2.29E-05

Time (s)	Acceleration (g)
74.335	-0.012155
74.34	-0.01229
74.345	-0.012112
74.35	-0.011608
74.355	-0.010789
74.36	-0.009688
74.365	-0.008353
74.37	-0.006866
74.375	-0.005289
74.38	-0.003625
74.385	-0.001921
74.39	-0.000268
74.395	0.001283
74.4	0.002688
74.405	0.003892
74.41	0.004861
74.415	0.005557
74.42	0.005926
74.425	0.005919
74.43	0.005505
74.435	0.004659
74.44	0.003387
74.445	0.001708
74.45	-0.000367
74.455	-0.002822
74.46	-0.005593
74.465	-0.008614
74.47	-0.011848
74.475	-0.015189
74.48	-0.018478
74.485	-0.021655
74.49	-0.02471
74.495	-0.027543
74.5	-0.030081
74.505	-0.032316
74.51	-0.034207
74.515	-0.035763
74.52	-0.037073
74.525	-0.038065
74.53	-0.038699
74.535	-0.039128
74.54	-0.039376

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
90.74707031	2.19E-05
90.75317383	2.13E-05
90.75927734	1.97E-05
90.76538086	1.92E-05
90.77148438	1.93E-05
90.77758789	1.79E-05
90.78369141	1.68E-05
90.78979492	1.61E-05
90.79589844	1.43E-05
90.80200195	1.32E-05
90.80810547	1.28E-05
90.81420898	1.14E-05
90.8203125	1.02E-05
90.82641602	9.53E-06
90.83251953	8.4E-06
90.83862305	7.93E-06
90.84472656	8.12E-06
90.85083008	8.04E-06
90.85693359	8.93E-06
90.86303711	1.01E-05
90.86914063	1.05E-05
90.87524414	1.11E-05
90.88134766	1.24E-05
90.88745117	1.33E-05
90.89355469	1.44E-05
90.8996582	1.65E-05
90.90576172	1.77E-05
90.91186523	1.85E-05
90.91796875	1.97E-05
90.92407227	1.99E-05
90.93017578	2.09E-05
90.9362793	2.31E-05
90.94238281	2.35E-05
90.94848633	2.41E-05
90.95458984	2.54E-05
90.96069336	2.52E-05
90.96679688	2.57E-05
90.97290039	2.68E-05
90.97900391	2.67E-05
90.98510742	2.73E-05
90.99121094	2.75E-05
90.99731445	2.61E-05

Input Motion

Time (s)	Acceleration (g)
74.545	-0.039378
74.55	-0.039214
74.555	-0.038978
74.56	-0.038719
74.565	-0.038463
74.57	-0.038222
74.575	-0.03805
74.58	-0.037949
74.585	-0.037849
74.59	-0.037718
74.595	-0.037549
74.6	-0.037329
74.605	-0.03706
74.61	-0.036773
74.615	-0.0365
74.62	-0.036241
74.625	-0.035977
74.63	-0.0357
74.635	-0.0354
74.64	-0.035063
74.645	-0.034722
74.65	-0.034438
74.655	-0.034229
74.66	-0.034117
74.665	-0.034088
74.67	-0.034099
74.675	-0.034163
74.68	-0.034234
74.685	-0.034177
74.69	-0.033925
74.695	-0.03342
74.7	-0.032585
74.705	-0.031396
74.71	-0.029869
74.715	-0.028022
74.72	-0.025913
74.725	-0.023615
74.73	-0.021202
74.735	-0.018753
74.74	-0.016314
74.745	-0.013922
74.75	-0.011602

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
91.00341797	2.62E-05
91.00952148	2.68E-05
91.015625	2.64E-05
91.02172852	2.64E-05
91.02783203	2.59E-05
91.03393555	2.5E-05
91.04003906	2.52E-05
91.04614258	2.52E-05
91.05224609	2.47E-05
91.05834961	2.45E-05
91.06445313	2.36E-05
91.07055664	2.23E-05
91.07666016	2.21E-05
91.08276367	2.13E-05
91.08886719	2.02E-05
91.0949707	2.05E-05
91.10107422	1.97E-05
91.10717773	1.83E-05
91.11328125	1.79E-05
91.11938477	1.64E-05
91.12548828	1.5E-05
91.1315918	1.54E-05
91.13769531	1.4E-05
91.14379883	1.23E-05
91.14990234	1.19E-05
91.15600586	1.01E-05
91.16210938	8.93E-06
91.16821289	9.1E-06
91.17431641	8.38E-06
91.18041992	7.91E-06
91.18652344	8.49E-06
91.19262695	8.6E-06
91.19873047	8.67E-06
91.20483398	9.86E-06
91.2109375	1.05E-05
91.21704102	1.09E-05
91.22314453	1.31E-05
91.22924805	1.46E-05
91.23535156	1.49E-05
91.24145508	1.58E-05
91.24755859	1.65E-05
91.25366211	1.71E-05

Time (s)	Acceleration (g)
74.755	-0.009361
74.76	-0.00719
74.765	-0.005067
74.77	-0.002959
74.775	-0.000832
74.78	0.001332
74.785	0.003577
74.79	0.005911
74.795	0.008243
74.8	0.010628
74.805	0.013047
74.81	0.015148
74.815	0.016864
74.82	0.018305
74.825	0.019372
74.83	0.020073
74.835	0.02052
74.84	0.020585
74.845	0.020126
74.85	0.019186
74.855	0.017919
74.86	0.016385
74.865	0.014642
74.87	0.012799
74.875	0.010943
74.88	0.009184
74.885	0.007605
74.89	0.00626
74.895	0.005213
74.9	0.004476
74.905	0.004045
74.91	0.003919
74.915	0.004091
74.92	0.004569
74.925	0.005325
74.93	0.006335
74.935	0.007551
74.94	0.008787
74.945	0.009964
74.95	0.011178
74.955	0.012401
74.96	0.013586

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
91.25976563	1.9E-05
91.26586914	2.02E-05
91.27197266	2.05E-05
91.27807617	2.12E-05
91.28417969	2.13E-05
91.2902832	2.19E-05
91.29638672	2.33E-05
91.30249023	2.34E-05
91.30859375	2.34E-05
91.31469727	2.43E-05
91.32080078	2.42E-05
91.3269043	2.37E-05
91.33300781	2.43E-05
91.33911133	2.44E-05
91.34521484	2.44E-05
91.35131836	2.47E-05
91.35742188	2.36E-05
91.36352539	2.29E-05
91.36962891	2.3E-05
91.37573242	2.26E-05
91.38183594	2.28E-05
91.38793945	2.26E-05
91.39404297	2.12E-05
91.40014648	2.09E-05
91.40625	2.07E-05
91.41235352	1.96E-05
91.41845703	1.99E-05
91.42456055	1.99E-05
91.43066406	1.84E-05
91.43676758	1.75E-05
91.44287109	1.64E-05
91.44897461	1.49E-05
91.45507813	1.5E-05
91.46118164	1.46E-05
91.46728516	1.33E-05
91.47338867	1.24E-05
91.47949219	1.09E-05
91.4855957	9.68E-06
91.49169922	9.97E-06
91.49780273	9.52E-06
91.50390625	8.67E-06
91.51000977	8.87E-06

Time (s)	Acceleration (g)
74.965	0.014756
74.97	0.015877
74.975	0.016906
74.98	0.01785
74.985	0.018697
74.99	0.019394
74.995	0.019955
75	0.02046
75.005	0.020899
75.01	0.021202
75.015	0.021379
75.02	0.021498
75.025	0.021597
75.03	0.0217
75.035	0.021826
75.04	0.021931
75.045	0.021966
75.05	0.021928
75.055	0.021806
75.06	0.021601
75.065	0.021315
75.07	0.020894
75.075	0.02027
75.08	0.019403
75.085	0.018255
75.09	0.016783
75.095	0.014983
75.1	0.012886
75.105	0.010513
75.11	0.00791
75.115	0.005184
75.12	0.002389
75.125	-0.000397
75.13	-0.002958
75.135	-0.005303
75.14	-0.007627
75.145	-0.00981
75.15	-0.011643
75.155	-0.013178
75.16	-0.014561
75.165	-0.015867
75.17	-0.017186

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
91.51611328	8.5E-06
91.5222168	8.16E-06
91.52832031	9.05E-06
91.53442383	9.37E-06
91.54052734	9.43E-06
91.54663086	1.08E-05
91.55273438	1.21E-05
91.55883789	1.23E-05
91.56494141	1.32E-05
91.57104492	1.44E-05
91.57714844	1.49E-05
91.58325195	1.68E-05
91.58935547	1.84E-05
91.59545898	1.82E-05
91.6015625	1.92E-05
91.60766602	2.05E-05
91.61376953	2.07E-05
91.61987305	2.22E-05
91.62597656	2.3E-05
91.63208008	2.26E-05
91.63818359	2.38E-05
91.64428711	2.4E-05
91.65039063	2.34E-05
91.65649414	2.41E-05
91.66259766	2.4E-05
91.66870117	2.38E-05
91.67480469	2.46E-05
91.6809082	2.37E-05
91.68701172	2.29E-05
91.69311523	2.34E-05
91.69921875	2.33E-05
91.70532227	2.35E-05
91.71142578	2.36E-05
91.7175293	2.25E-05
91.72363281	2.19E-05
91.72973633	2.18E-05
91.73583984	2.1E-05
91.74194336	2.08E-05
91.74804688	2.06E-05
91.75415039	1.91E-05
91.76025391	1.84E-05
91.76635742	1.78E-05

Time (s)	Acceleration (g)
75.175	-0.018617
75.18	-0.0202
75.185	-0.021966
75.19	-0.023886
75.195	-0.025832
75.2	-0.027761
75.205	-0.029679
75.21	-0.0314
75.215	-0.032757
75.22	-0.033854
75.225	-0.034771
75.23	-0.035366
75.235	-0.035439
75.24	-0.034997
75.245	-0.034187
75.25	-0.03293
75.255	-0.03109
75.26	-0.028747
75.265	-0.026003
75.27	-0.022923
75.275	-0.019609
75.28	-0.016145
75.285	-0.012605
75.29	-0.009073
75.295	-0.005625
75.3	-0.002366
75.305	0.000606
75.31	0.003228
75.315	0.005449
75.32	0.007254
75.325	0.008656
75.33	0.009667
75.335	0.01033
75.34	0.010717
75.345	0.010914
75.35	0.011042
75.355	0.011215
75.36	0.011505
75.365	0.01196
75.37	0.012581
75.375	0.013342
75.38	0.014215

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
91.77246094	1.63E-05
91.77856445	1.56E-05
91.78466797	1.52E-05
91.79077148	1.4E-05
91.796875	1.33E-05
91.80297852	1.2E-05
91.80908203	1.01E-05
91.81518555	9.61E-06
91.82128906	9.17E-06
91.82739258	8.08E-06
91.83349609	7.62E-06
91.83959961	7.16E-06
91.84570313	6.21E-06
91.85180664	6.3E-06
91.85791016	7.18E-06
91.86401367	7.34E-06
91.87011719	7.82E-06
91.8762207	8.82E-06
91.88232422	9.09E-06
91.88842773	1E-05
91.89453125	1.15E-05
91.90063477	1.21E-05
91.90673828	1.36E-05
91.9128418	1.56E-05
91.91894531	1.61E-05
91.92504883	1.68E-05
91.93115234	1.81E-05
91.93725586	1.82E-05
91.94335938	1.93E-05
91.94946289	2.07E-05
91.95556641	2.06E-05
91.96166992	2.12E-05
91.96777344	2.19E-05
91.97387695	2.18E-05
91.97998047	2.29E-05
91.98608398	2.33E-05
91.9921875	2.26E-05
91.99829102	2.36E-05
92.00439453	2.36E-05
92.01049805	2.25E-05
92.01660156	2.31E-05
92.02270508	2.33E-05

Time (s)	Acceleration (g)
75.385	0.015161
75.39	0.016137
75.395	0.017116
75.4	0.018074
75.405	0.018999
75.41	0.019911
75.415	0.020827
75.42	0.02174
75.425	0.022636
75.43	0.023471
75.435	0.024189
75.44	0.024742
75.445	0.025095
75.45	0.025223
75.455	0.025123
75.46	0.024819
75.465	0.024341
75.47	0.023717
75.475	0.022976
75.48	0.022114
75.485	0.021127
75.49	0.020048
75.495	0.01891
75.5	0.017757
75.505	0.016645
75.51	0.015615
75.515	0.014707
75.52	0.013987
75.525	0.013502
75.53	0.013246
75.535	0.013193
75.54	0.013275
75.545	0.013399
75.55	0.013501
75.555	0.013522
75.56	0.01339
75.565	0.013053
75.57	0.012504
75.575	0.011754
75.58	0.010817
75.585	0.009725
75.59	0.008521

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
92.02880859	2.28E-05
92.03491211	2.33E-05
92.04101563	2.29E-05
92.04711914	2.2E-05
92.05322266	2.21E-05
92.05932617	2.18E-05
92.06542969	2.19E-05
92.0715332	2.17E-05
92.07763672	1.98E-05
92.08374023	1.88E-05
92.08984375	1.87E-05
92.09594727	1.76E-05
92.10205078	1.71E-05
92.1081543	1.71E-05
92.11425781	1.57E-05
92.12036133	1.44E-05
92.12646484	1.39E-05
92.13256836	1.24E-05
92.13867188	1.16E-05
92.14477539	1.16E-05
92.15087891	1.05E-05
92.15698242	9.55E-06
92.16308594	9.19E-06
92.16918945	7.49E-06
92.17529297	6.91E-06
92.18139648	7.64E-06
92.1875	7.05E-06
92.19360352	6.76E-06
92.19970703	7.23E-06
92.20581055	6.88E-06
92.21191406	6.83E-06
92.21801758	7.74E-06
92.22412109	8.06E-06
92.23022461	8.88E-06
92.23632813	1.08E-05
92.24243164	1.14E-05
92.24853516	1.19E-05
92.25463867	1.35E-05
92.26074219	1.36E-05
92.2668457	1.42E-05
92.27294922	1.64E-05
92.27905273	1.69E-05

Input Motion

Time (s)	Acceleration (g)
75.595	0.007251
75.6	0.005964
75.605	0.004716
75.61	0.003542
75.615	0.002472
75.62	0.00156
75.625	0.00084
75.63	0.000306
75.635	-0.00007
75.64	-0.000342
75.645	-0.000527
75.65	-0.000609
75.655	-0.000633
75.66	-0.000616
75.665	-0.000518
75.67	-0.000345
75.675	-0.000112
75.68	0.000212
75.685	0.000652
75.69	0.001205
75.695	0.001883
75.7	0.002707
75.705	0.00369
75.71	0.00487
75.715	0.006269
75.72	0.007863
75.725	0.009622
75.73	0.011471
75.735	0.013333
75.74	0.015186
75.745	0.017011
75.75	0.01879
75.755	0.020528
75.76	0.022214
75.765	0.023846
75.77	0.025473
75.775	0.027136
75.78	0.02886
75.785	0.030659
75.79	0.032488
75.795	0.034287
75.8	0.035993

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
92.28515625	1.73E-05
92.29125977	1.82E-05
92.29736328	1.8E-05
92.3034668	1.88E-05
92.30957031	2.01E-05
92.31567383	2E-05
92.32177734	2.03E-05
92.32788086	2.07E-05
92.33398438	2.04E-05
92.34008789	2.08E-05
92.34619141	2.12E-05
92.35229492	2.11E-05
92.35839844	2.17E-05
92.36450195	2.17E-05
92.37060547	2.06E-05
92.37670898	2.06E-05
92.3828125	2.08E-05
92.38891602	2E-05
92.39501953	2E-05
92.40112305	1.97E-05
92.40722656	1.81E-05
92.41333008	1.76E-05
92.41943359	1.73E-05
92.42553711	1.66E-05
92.43164063	1.7E-05
92.43774414	1.61E-05
92.44384766	1.47E-05
92.44995117	1.5E-05
92.45605469	1.41E-05
92.4621582	1.31E-05
92.46826172	1.34E-05
92.47436523	1.26E-05
92.48046875	1.17E-05
92.48657227	1.13E-05
92.49267578	9.64E-06
92.4987793	8.65E-06
92.50488281	8.67E-06
92.51098633	7.8E-06
92.51708984	6.89E-06
92.52319336	6.78E-06
92.52929688	6.17E-06
92.53540039	5.48E-06

Time (s)	Acceleration (g)
75.805	0.03754
75.81	0.038894
75.815	0.040022
75.82	0.040903
75.825	0.041513
75.83	0.041785
75.835	0.041668
75.84	0.04114
75.845	0.040205
75.85	0.038946
75.855	0.037463
75.86	0.035832
75.865	0.03413
75.87	0.032371
75.875	0.030533
75.88	0.028665
75.885	0.026798
75.89	0.0249
75.895	0.023043
75.9	0.021401
75.905	0.019962
75.91	0.018625
75.915	0.017399
75.92	0.016306
75.925	0.015328
75.93	0.014485
75.935	0.013795
75.94	0.013255
75.945	0.012877
75.95	0.01265
75.955	0.012488
75.96	0.012354
75.965	0.012303
75.97	0.012277
75.975	0.012185
75.98	0.012049
75.985	0.01189
75.99	0.011718
75.995	0.011558
76	0.011362
76.005	0.011068
76.01	0.01067

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
92.54150391	6.56E-06
92.54760742	7.07E-06
92.55371094	6.96E-06
92.55981445	8.36E-06
92.56591797	9.05E-06
92.57202148	8.85E-06
92.578125	9.92E-06
92.58422852	1.06E-05
92.59033203	1.15E-05
92.59643555	1.35E-05
92.60253906	1.43E-05
92.60864258	1.42E-05
92.61474609	1.54E-05
92.62084961	1.58E-05
92.62695313	1.62E-05
92.63305664	1.8E-05
92.63916016	1.85E-05
92.64526367	1.81E-05
92.65136719	1.9E-05
92.6574707	1.87E-05
92.66357422	1.82E-05
92.66967773	1.96E-05
92.67578125	1.98E-05
92.68188477	1.94E-05
92.68798828	1.95E-05
92.6940918	1.83E-05
92.70019531	1.8E-05
92.70629883	1.89E-05
92.71240234	1.81E-05
92.71850586	1.85E-05
92.72460938	1.91E-05
92.73071289	1.75E-05
92.73681641	1.7E-05
92.74291992	1.72E-05
92.74902344	1.69E-05
92.75512695	1.75E-05
92.76123047	1.69E-05
92.76733398	1.54E-05
92.7734375	1.52E-05
92.77954102	1.44E-05
92.78564453	1.36E-05
92.79174805	1.37E-05

Time (s)	Acceleration (g)
76.015	0.010112
76.02	0.009371
76.025	0.008634
76.03	0.007922
76.035	0.006906
76.04	0.005555
76.045	0.004109
76.05	0.002527
76.055	0.000776
76.06	-0.00109
76.065	-0.003051
76.07	-0.005046
76.075	-0.007044
76.08	-0.009033
76.085	-0.010995
76.09	-0.012953
76.095	-0.014797
76.1	-0.016481
76.105	-0.018207
76.11	-0.019842
76.115	-0.021025
76.12	-0.021794
76.125	-0.022308
76.13	-0.022546
76.135	-0.022487
76.14	-0.02216
76.145	-0.021648
76.15	-0.020991
76.155	-0.020146
76.16	-0.019163
76.165	-0.018147
76.17	-0.017131
76.175	-0.01612
76.18	-0.015114
76.185	-0.014114
76.19	-0.013138
76.195	-0.012201
76.2	-0.011333
76.205	-0.01058
76.21	-0.009938
76.215	-0.009427
76.22	-0.009144

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
92.79785156	1.26E-05
92.80395508	1.13E-05
92.81005859	1.07E-05
92.81616211	9.45E-06
92.82226563	8.35E-06
92.82836914	8.29E-06
92.83447266	7.54E-06
92.84057617	6.33E-06
92.84667969	6.21E-06
92.8527832	5.3E-06
92.85888672	3.71E-06
92.86499023	4.24E-06
92.87109375	4.62E-06
92.87719727	4.37E-06
92.88330078	5.32E-06
92.8894043	6.32E-06
92.89550781	6.59E-06
92.90161133	7.33E-06
92.90771484	8.5E-06
92.91381836	9.11E-06
92.91992188	1.07E-05
92.92602539	1.24E-05
92.93212891	1.3E-05
92.93823242	1.4E-05
92.94433594	1.47E-05
92.95043945	1.44E-05
92.95654297	1.58E-05
92.96264648	1.72E-05
92.96875	1.71E-05
92.97485352	1.74E-05
92.98095703	1.73E-05
92.98706055	1.7E-05
92.99316406	1.82E-05
92.99926758	1.88E-05
93.00537109	1.87E-05
93.01147461	1.92E-05
93.01757813	1.87E-05
93.02368164	1.84E-05
93.02978516	1.96E-05
93.03588867	1.96E-05
93.04199219	1.95E-05
93.0480957	2.03E-05

Time (s)	Acceleration (g)
76.225	-0.009103
76.23	-0.00922
76.235	-0.009443
76.24	-0.009715
76.245	-0.009962
76.25	-0.010162
76.255	-0.010314
76.26	-0.010415
76.265	-0.010442
76.27	-0.01037
76.275	-0.010176
76.28	-0.009815
76.285	-0.009246
76.29	-0.00845
76.295	-0.007427
76.3	-0.006206
76.305	-0.004833
76.31	-0.003376
76.315	-0.001904
76.32	-0.000448
76.325	0.000964
76.33	0.002313
76.335	0.003588
76.34	0.004752
76.345	0.005774
76.35	0.006647
76.355	0.007373
76.36	0.007989
76.365	0.008546
76.37	0.009086
76.375	0.009653
76.38	0.01029
76.385	0.011026
76.39	0.011877
76.395	0.012842
76.4	0.013907
76.405	0.015044
76.41	0.016221
76.415	0.0174
76.42	0.018547
76.425	0.019622
76.43	0.020602

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
93.05419922	1.96E-05
93.06030273	1.85E-05
93.06640625	1.87E-05
93.07250977	1.84E-05
93.07861328	1.82E-05
93.0847168	1.82E-05
93.09082031	1.63E-05
93.09692383	1.49E-05
93.10302734	1.44E-05
93.10913086	1.35E-05
93.11523438	1.39E-05
93.12133789	1.36E-05
93.12744141	1.19E-05
93.13354492	1.14E-05
93.13964844	1.07E-05
93.14575195	9.46E-06
93.15185547	9.96E-06
93.15795898	9.6E-06
93.1640625	8.13E-06
93.17016602	7.61E-06
93.17626953	6.7E-06
93.18237305	5.39E-06
93.18847656	5.27E-06
93.19458008	5.38E-06
93.20068359	4.72E-06
93.20678711	4.4E-06
93.21289063	4.7E-06
93.21899414	3.94E-06
93.22509766	4.16E-06
93.23120117	5.79E-06
93.23730469	6.21E-06
93.2434082	7.02E-06
93.24951172	8.52E-06
93.25561523	8.89E-06
93.26171875	9.31E-06
93.26782227	1.03E-05
93.27392578	1.03E-05
93.2800293	1.07E-05
93.28613281	1.21E-05
93.29223633	1.27E-05
93.29833984	1.34E-05
93.30444336	1.41E-05

Input Motion

Time (s)	Acceleration (g)
76.435	0.021465
76.44	0.022194
76.445	0.022784
76.45	0.023246
76.455	0.023598
76.46	0.023848
76.465	0.024001
76.47	0.024042
76.475	0.023956
76.48	0.02373
76.485	0.023327
76.49	0.022681
76.495	0.021728
76.5	0.020412
76.505	0.018699
76.51	0.016601
76.515	0.014133
76.52	0.011365
76.525	0.008371
76.53	0.005138
76.535	0.001703
76.54	-0.001824
76.545	-0.005386
76.55	-0.008891
76.555	-0.012257
76.56	-0.015462
76.565	-0.018396
76.57	-0.021017
76.575	-0.023409
76.58	-0.025553
76.585	-0.027407
76.59	-0.02902
76.595	-0.030415
76.6	-0.031583
76.605	-0.032544
76.61	-0.033318
76.615	-0.033929
76.62	-0.034465
76.625	-0.03499
76.63	-0.035508
76.635	-0.036011
76.64	-0.036502

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
93.31054688	1.38E-05
93.31665039	1.45E-05
93.32275391	1.57E-05
93.32885742	1.6E-05
93.33496094	1.65E-05
93.34106445	1.63E-05
93.34716797	1.56E-05
93.35327148	1.67E-05
93.359375	1.74E-05
93.36547852	1.7E-05
93.37158203	1.73E-05
93.37768555	1.67E-05
93.38378906	1.62E-05
93.38989258	1.69E-05
93.39599609	1.59E-05
93.40209961	1.5E-05
93.40820313	1.57E-05
93.41430664	1.45E-05
93.42041016	1.35E-05
93.42651367	1.39E-05
93.43261719	1.3E-05
93.4387207	1.27E-05
93.44482422	1.34E-05
93.45092773	1.23E-05
93.45703125	1.13E-05
93.46313477	1.13E-05
93.46923828	1.05E-05
93.4753418	1.06E-05
93.48144531	1.11E-05
93.48754883	9.8E-06
93.49365234	8.57E-06
93.49975586	8.3E-06
93.50585938	7.23E-06
93.51196289	6.83E-06
93.51806641	6.57E-06
93.52416992	5.19E-06
93.53027344	4.95E-06
93.53637695	4.99E-06
93.54248047	3.69E-06
93.54858398	3.04E-06
93.5546875	3.76E-06
93.56079102	3.66E-06

Time (s)	Acceleration (g)
76.645	-0.036954
76.65	-0.037284
76.655	-0.037382
76.66	-0.037185
76.665	-0.03668
76.67	-0.035845
76.675	-0.034663
76.68	-0.033138
76.685	-0.031278
76.69	-0.029092
76.695	-0.026595
76.7	-0.023833
76.705	-0.020857
76.71	-0.017708
76.715	-0.014437
76.72	-0.011121
76.725	-0.007832
76.73	-0.004648
76.735	-0.001628
76.74	0.00122
76.745	0.003911
76.75	0.006482
76.755	0.008978
76.76	0.011427
76.765	0.013845
76.77	0.016237
76.775	0.018595
76.78	0.02091
76.785	0.023173
76.79	0.025376
76.795	0.027515
76.8	0.029576
76.805	0.031534
76.81	0.033329
76.815	0.034889
76.82	0.036128
76.825	0.036956
76.83	0.037319
76.835	0.037175
76.84	0.036494
76.845	0.035272
76.85	0.033545

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
93.56689453	4.13E-06
93.57299805	5.92E-06
93.57910156	5.97E-06
93.58520508	5.42E-06
93.59130859	6.97E-06
93.59741211	7.68E-06
93.60351563	8.61E-06
93.60961914	1.03E-05
93.61572266	1.03E-05
93.62182617	1.07E-05
93.62792969	1.19E-05
93.6340332	1.18E-05
93.64013672	1.31E-05
93.64624023	1.47E-05
93.65234375	1.44E-05
93.65844727	1.5E-05
93.66455078	1.55E-05
93.6706543	1.46E-05
93.67675781	1.47E-05
93.68286133	1.53E-05
93.68896484	1.51E-05
93.69506836	1.55E-05
93.70117188	1.52E-05
93.70727539	1.4E-05
93.71337891	1.45E-05
93.71948242	1.5E-05
93.72558594	1.44E-05
93.73168945	1.45E-05
93.73779297	1.41E-05
93.74389648	1.31E-05
93.75	1.35E-05
93.75610352	1.34E-05
93.76220703	1.27E-05
93.76831055	1.31E-05
93.77441406	1.25E-05
93.78051758	1.12E-05
93.78662109	1.13E-05
93.79272461	1.05E-05
93.79882813	9.91E-06
93.80493164	1.03E-05
93.81103516	8.95E-06
93.81713867	7.72E-06

Time (s)	Acceleration (g)
76.855	0.031367
76.86	0.028815
76.865	0.025983
76.87	0.022961
76.875	0.019839
76.88	0.016706
76.885	0.013633
76.89	0.010675
76.895	0.007852
76.9	0.00516
76.905	0.002626
76.91	0.000256
76.915	-0.00199
76.92	-0.004065
76.925	-0.005884
76.93	-0.007424
76.935	-0.008671
76.94	-0.009603
76.945	-0.010221
76.95	-0.010525
76.955	-0.010518
76.96	-0.010225
76.965	-0.009672
76.97	-0.008883
76.975	-0.007873
76.98	-0.006658
76.985	-0.005252
76.99	-0.003644
76.995	-0.001843
77	0.000113
77.005	0.002168
77.01	0.004213
77.015	0.006131
77.02	0.007854
77.025	0.009326
77.03	0.010512
77.035	0.011412
77.04	0.012043
77.045	0.012443
77.05	0.012672
77.055	0.012797
77.06	0.012877

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
93.82324219	7.56E-06
93.8293457	5.83E-06
93.83544922	5E-06
93.84155273	5.29E-06
93.84765625	3.88E-06
93.85375977	3.01E-06
93.85986328	3.23E-06
93.8659668	2.16E-06
93.87207031	1.19E-06
93.87817383	1.96E-06
93.88427734	2.44E-06
93.89038086	2.14E-06
93.89648438	3.65E-06
93.90258789	4.52E-06
93.90869141	4.45E-06
93.91479492	5.6E-06
93.92089844	6.43E-06
93.92700195	7.3E-06
93.93310547	9.21E-06
93.93920898	9.79E-06
93.9453125	9.96E-06
93.95141602	1.08E-05
93.95751953	1.08E-05
93.96362305	1.15E-05
93.96972656	1.31E-05
93.97583008	1.32E-05
93.98193359	1.3E-05
93.98803711	1.37E-05
93.99414063	1.35E-05
94.00024414	1.33E-05
94.00634766	1.4E-05
94.01245117	1.39E-05
94.01855469	1.44E-05
94.0246582	1.48E-05
94.03076172	1.36E-05
94.03686523	1.39E-05
94.04296875	1.52E-05
94.04907227	1.51E-05
94.05517578	1.56E-05
94.0612793	1.55E-05
94.06738281	1.44E-05
94.07348633	1.49E-05

Time (s)	Acceleration (g)
77.065	0.012966
77.07	0.013108
77.075	0.013328
77.08	0.013642
77.085	0.014051
77.09	0.014547
77.095	0.015111
77.1	0.015713
77.105	0.016319
77.11	0.016897
77.115	0.017413
77.12	0.017838
77.125	0.018154
77.13	0.018342
77.135	0.018392
77.14	0.018324
77.145	0.01816
77.15	0.017938
77.155	0.017699
77.16	0.017471
77.165	0.017243
77.17	0.016982
77.175	0.0167
77.18	0.016469
77.185	0.01631
77.19	0.016192
77.195	0.016089
77.2	0.015952
77.205	0.015721
77.21	0.015355
77.215	0.014827
77.22	0.014113
77.225	0.013206
77.23	0.012122
77.235	0.010885
77.24	0.009517
77.245	0.008052
77.25	0.006506
77.255	0.004895
77.26	0.003263
77.265	0.001643
77.27	0.000071

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
94.07958984	1.47E-05
94.08569336	1.37E-05
94.09179688	1.39E-05
94.09790039	1.31E-05
94.10400391	1.18E-05
94.11010742	1.16E-05
94.11621094	1.07E-05
94.12231445	1.01E-05
94.12841797	1.04E-05
94.13452148	9.47E-06
94.140625	8.15E-06
94.14672852	7.64E-06
94.15283203	6.87E-06
94.15893555	6.6E-06
94.16503906	6.93E-06
94.17114258	6.21E-06
94.17724609	5.28E-06
94.18334961	4.87E-06
94.18945313	3.73E-06
94.19555664	3.29E-06
94.20166016	3.6E-06
94.20776367	2.85E-06
94.21386719	1.9E-06
94.2199707	2.03E-06
94.22607422	2.69E-06
94.23217773	2.58E-06
94.23828125	2.91E-06
94.24438477	4.11E-06
94.25048828	4.14E-06
94.2565918	5.33E-06
94.26269531	7.07E-06
94.26879883	6.7E-06
94.27490234	6.86E-06
94.28100586	7.88E-06
94.28710938	7.6E-06
94.29321289	8.62E-06
94.29931641	9.63E-06
94.30541992	9.27E-06
94.31152344	1.01E-05
94.31762695	1.05E-05
94.32373047	1.04E-05
94.32983398	1.18E-05

Time (s)	Acceleration (g)
77.275	-0.001424
77.28	-0.002853
77.285	-0.004225
77.29	-0.005537
77.295	-0.006789
77.3	-0.007942
77.305	-0.008957
77.31	-0.00984
77.315	-0.010597
77.32	-0.011232
77.325	-0.011756
77.33	-0.01216
77.335	-0.012436
77.34	-0.012595
77.345	-0.012649
77.35	-0.012624
77.355	-0.012546
77.36	-0.012426
77.365	-0.012274
77.37	-0.01211
77.375	-0.011949
77.38	-0.0118
77.385	-0.01167
77.39	-0.011558
77.395	-0.011461
77.4	-0.011381
77.405	-0.011315
77.41	-0.011253
77.415	-0.011185
77.42	-0.011095
77.425	-0.010972
77.43	-0.010826
77.435	-0.010675
77.44	-0.010526
77.445	-0.010391
77.45	-0.010273
77.455	-0.01017
77.46	-0.010087
77.465	-0.010026
77.47	-0.009984
77.475	-0.009956
77.48	-0.009933

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
94.3359375	1.22E-05
94.34204102	1.21E-05
94.34814453	1.32E-05
94.35424805	1.31E-05
94.36035156	1.27E-05
94.36645508	1.36E-05
94.37255859	1.4E-05
94.37866211	1.43E-05
94.38476563	1.46E-05
94.39086914	1.36E-05
94.39697266	1.27E-05
94.40307617	1.31E-05
94.40917969	1.28E-05
94.4152832	1.23E-05
94.42138672	1.21E-05
94.42749023	1.07E-05
94.43359375	9.88E-06
94.43969727	1.02E-05
94.44580078	9.5E-06
94.4519043	9.47E-06
94.45800781	9.86E-06
94.46411133	8.48E-06
94.47021484	8.15E-06
94.47631836	8.43E-06
94.48242188	7.44E-06
94.48852539	7.99E-06
94.49462891	8.14E-06
94.50073242	6.55E-06
94.50683594	6.25E-06
94.51293945	5.45E-06
94.51904297	4.24E-06
94.52514648	4.75E-06
94.53125	4.03E-06
94.53735352	2.86E-06
94.54345703	2.97E-06
94.54956055	2.25E-06
94.55566406	1.23E-06
94.56176758	1.77E-06
94.56787109	2.26E-06
94.57397461	1.83E-06
94.58007813	2.28E-06
94.58618164	3.46E-06

Input Motion

Time (s)	Acceleration (g)
77.485	-0.009904
77.49	-0.00987
77.495	-0.009841
77.5	-0.00983
77.505	-0.00985
77.51	-0.009919
77.515	-0.010046
77.52	-0.01021
77.525	-0.010388
77.53	-0.010547
77.535	-0.010665
77.54	-0.010743
77.545	-0.010788
77.55	-0.010812
77.555	-0.010825
77.56	-0.010793
77.565	-0.010684
77.57	-0.01047
77.575	-0.010125
77.58	-0.009685
77.585	-0.009181
77.59	-0.008606
77.595	-0.007949
77.6	-0.007172
77.605	-0.006235
77.61	-0.005141
77.615	-0.003901
77.62	-0.002543
77.625	-0.001112
77.63	0.000378
77.635	0.001903
77.64	0.003441
77.645	0.004973
77.65	0.006451
77.655	0.007833
77.66	0.009114
77.665	0.010292
77.67	0.011379
77.675	0.012393
77.68	0.013339
77.685	0.014216
77.69	0.01502

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
94.59228516	3.31E-06
94.59838867	3.32E-06
94.60449219	4.35E-06
94.6105957	4.5E-06
94.61669922	5.52E-06
94.62280273	6.95E-06
94.62890625	7.01E-06
94.63500977	7.26E-06
94.64111328	7.99E-06
94.6472168	8.15E-06
94.65332031	9.46E-06
94.65942383	1.05E-05
94.66552734	1E-05
94.67163086	1.06E-05
94.67773438	1.1E-05
94.68383789	1.02E-05
94.68994141	1.11E-05
94.69604492	1.15E-05
94.70214844	1.09E-05
94.70825195	1.15E-05
94.71435547	1.1E-05
94.72045898	9.92E-06
94.7265625	1.09E-05
94.73266602	1.1E-05
94.73876953	1.08E-05
94.74487305	1.12E-05
94.75097656	9.93E-06
94.75708008	9.42E-06
94.76318359	1E-05
94.76928711	9.42E-06
94.77539063	9.65E-06
94.78149414	9.85E-06
94.78759766	8.39E-06
94.79370117	7.94E-06
94.79980469	8.08E-06
94.8059082	7.1E-06
94.81201172	7.03E-06
94.81811523	7.12E-06
94.82421875	6.06E-06
94.83032227	5.54E-06
94.83642578	4.99E-06
94.8425293	3.58E-06

Input Motion

Time (s)	Acceleration (g)
77.695	0.015749
77.7	0.016401
77.705	0.016975
77.71	0.017496
77.715	0.01799
77.72	0.018447
77.725	0.01885
77.73	0.019187
77.735	0.019433
77.74	0.019558
77.745	0.019529
77.75	0.019314
77.755	0.018884
77.76	0.018224
77.765	0.017328
77.77	0.016208
77.775	0.014881
77.78	0.013388
77.785	0.011777
77.79	0.010083
77.795	0.008346
77.8	0.006628
77.805	0.004975
77.81	0.003403
77.815	0.001904
77.82	0.00043
77.825	-0.001088
77.83	-0.00272
77.835	-0.004521
77.84	-0.006519
77.845	-0.008703
77.85	-0.010999
77.855	-0.013304
77.86	-0.01551
77.865	-0.017503
77.87	-0.019194
77.875	-0.020503
77.88	-0.021355
77.885	-0.021698
77.89	-0.021491
77.895	-0.02072
77.9	-0.019418

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
94.84863281	3.82E-06
94.85473633	3.7E-06
94.86083984	2.29E-06
94.86694336	1.94E-06
94.87304688	1.52E-06
94.87915039	3.96E-07
94.88525391	1.14E-06
94.89135742	1.4E-06
94.89746094	8.27E-07
94.90356445	1.11E-06
94.90966797	2.21E-06
94.91577148	2.57E-06
94.921875	2.38E-06
94.92797852	3.53E-06
94.93408203	4.03E-06
94.94018555	4.23E-06
94.94628906	5.71E-06
94.95239258	6.25E-06
94.95849609	6.28E-06
94.96459961	7.18E-06
94.97070313	7.29E-06
94.97680664	7.72E-06
94.98291016	8.79E-06
94.98901367	8.71E-06
94.99511719	8.82E-06
95.0012207	9.13E-06
95.00732422	8.72E-06
95.01342773	9.49E-06
95.01953125	1.01E-05
95.02563477	9.71E-06
95.03173828	1.02E-05
95.0378418	1.07E-05
95.04394531	1.05E-05
95.05004883	1.11E-05
95.05615234	1.16E-05
95.06225586	1.15E-05
95.06835938	1.18E-05
95.07446289	1.13E-05
95.08056641	1.02E-05
95.08666992	1.05E-05
95.09277344	1.09E-05
95.09887695	1.05E-05

Input Motion

Time (s)	Acceleration (g)
77.905	-0.017636
77.91	-0.01546
77.915	-0.012994
77.92	-0.010308
77.925	-0.007487
77.93	-0.004624
77.935	-0.001805
77.94	0.000849
77.945	0.003242
77.95	0.005347
77.955	0.007174
77.96	0.00877
77.965	0.010202
77.97	0.011538
77.975	0.012835
77.98	0.014096
77.985	0.015304
77.99	0.016441
77.995	0.017471
78	0.018373
78.005	0.019126
78.01	0.019688
78.015	0.020022
78.02	0.020117
78.025	0.019962
78.03	0.019561
78.035	0.018927
78.04	0.018066
78.045	0.016995
78.05	0.015753
78.055	0.014382
78.06	0.01295
78.065	0.011526
78.07	0.010165
78.075	0.008917
78.08	0.007831
78.085	0.006935
78.09	0.006249
78.095	0.005778
78.1	0.005493
78.105	0.005354
78.11	0.005307

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
95.10498047	1.01E-05
95.11108398	9.19E-06
95.1171875	8.49E-06
95.12329102	8.78E-06
95.12939453	7.93E-06
95.13549805	7.59E-06
95.14160156	8.17E-06
95.14770508	7.17E-06
95.15380859	6.69E-06
95.15991211	6.74E-06
95.16601563	5.67E-06
95.17211914	6.12E-06
95.17822266	6.49E-06
95.18432617	5.34E-06
95.19042969	5E-06
95.1965332	4.02E-06
95.20263672	2.86E-06
95.20874023	3.51E-06
95.21484375	2.68E-06
95.22094727	1.32E-06
95.22705078	9.76E-07
95.2331543	7.15E-07
95.23925781	1.06E-06
95.24536133	9.76E-07
95.25146484	1.52E-06
95.25756836	2.06E-06
95.26367188	2.26E-06
95.26977539	3.68E-06
95.27587891	4.27E-06
95.28198242	4.08E-06
95.28808594	4.55E-06
95.29418945	4.49E-06
95.30029297	4.62E-06
95.30639648	6.24E-06
95.3125	6.78E-06
95.31860352	6.37E-06
95.32470703	6.86E-06
95.33081055	6.9E-06
95.33691406	7.24E-06
95.34301758	8.7E-06
95.34912109	8.9E-06
95.35522461	8.97E-06

Time (s)	Acceleration (g)
78.115	0.005289
78.12	0.005257
78.125	0.005165
78.13	0.00498
78.135	0.00467
78.14	0.004196
78.145	0.003528
78.15	0.002641
78.155	0.001531
78.16	0.000242
78.165	-0.001174
78.17	-0.002642
78.175	-0.004087
78.18	-0.00549
78.185	-0.006847
78.19	-0.008148
78.195	-0.009397
78.2	-0.010591
78.205	-0.01172
78.21	-0.012793
78.215	-0.013813
78.22	-0.014752
78.225	-0.015583
78.23	-0.016299
78.235	-0.016883
78.24	-0.017323
78.245	-0.017603
78.25	-0.017677
78.255	-0.017491
78.26	-0.017021
78.265	-0.016246
78.27	-0.015163
78.275	-0.013799
78.28	-0.012191
78.285	-0.010407
78.29	-0.008546
78.295	-0.006717
78.3	-0.005033
78.305	-0.003589
78.31	-0.002456
78.315	-0.00168
78.32	-0.001255

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
95.36132813	9.83E-06
95.36743164	9.48E-06
95.37353516	9.53E-06
95.37963867	1.03E-05
95.38574219	1E-05
95.3918457	1.04E-05
95.39794922	1.06E-05
95.40405273	9.41E-06
95.41015625	9.61E-06
95.41625977	9.79E-06
95.42236328	9E-06
95.4284668	9.33E-06
95.43457031	8.94E-06
95.44067383	7.87E-06
95.44677734	8.42E-06
95.45288086	8.55E-06
95.45898438	8.52E-06
95.46508789	8.87E-06
95.47119141	8.01E-06
95.47729492	7.66E-06
95.48339844	8.3E-06
95.48950195	7.73E-06
95.49560547	7.37E-06
95.50170898	7.32E-06
95.5078125	6.02E-06
95.51391602	5.26E-06
95.52001953	5.13E-06
95.52612305	3.82E-06
95.53222656	3.6E-06
95.53833008	3.86E-06
95.54443359	2.55E-06
95.55053711	2.1E-06
95.55664063	2E-06
95.56274414	1.24E-06
95.56884766	2.17E-06
95.57495117	1.43E-06
95.58105469	7.49E-07
95.5871582	9.28E-07
95.59326172	5.7E-07
95.59936523	1.87E-06
95.60546875	1.49E-06
95.61157227	1.2E-06

Input Motion

Time (s)	Acceleration (g)
78.325	-0.001156
78.33	-0.001371
78.335	-0.001865
78.34	-0.002611
78.345	-0.00357
78.35	-0.004643
78.355	-0.005722
78.36	-0.006706
78.365	-0.007498
78.37	-0.008043
78.375	-0.008319
78.38	-0.008317
78.385	-0.008063
78.39	-0.007612
78.395	-0.007027
78.4	-0.006363
78.405	-0.00567
78.41	-0.004952
78.415	-0.004206
78.42	-0.003436
78.425	-0.002642
78.43	-0.001855
78.435	-0.001105
78.44	-0.000403
78.445	0.00024
78.45	0.000841
78.455	0.00142
78.46	0.001993
78.465	0.002574
78.47	0.003148
78.475	0.003695
78.48	0.004192
78.485	0.004613
78.49	0.004963
78.495	0.005253
78.5	0.005466
78.505	0.005593
78.51	0.005641
78.515	0.005619
78.52	0.005524
78.525	0.005356
78.53	0.005106

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
95.61767578	2.19E-06
95.6237793	1.4E-06
95.62988281	2.54E-06
95.63598633	3.72E-06
95.64208984	3.54E-06
95.64819336	4.58E-06
95.65429688	4.92E-06
95.66040039	4.85E-06
95.66650391	6.49E-06
95.67260742	6.85E-06
95.67871094	6.78E-06
95.68481445	7.45E-06
95.69091797	6.58E-06
95.69702148	6.49E-06
95.703125	7.92E-06
95.70922852	7.7E-06
95.71533203	7.4E-06
95.72143555	7.9E-06
95.72753906	7.32E-06
95.73364258	7.52E-06
95.73974609	8.25E-06
95.74584961	7.85E-06
95.75195313	8.12E-06
95.75805664	8.54E-06
95.76416016	7.66E-06
95.77026367	7.86E-06
95.77636719	8.52E-06
95.7824707	8.29E-06
95.78857422	9.03E-06
95.79467773	9.01E-06
95.80078125	7.3E-06
95.80688477	7.44E-06
95.81298828	7.64E-06
95.8190918	6.96E-06
95.82519531	7.63E-06
95.83129883	6.87E-06
95.83740234	5.49E-06
95.84350586	5.92E-06
95.84960938	4.66E-06
95.85571289	3.66E-06
95.86181641	4.75E-06
95.86791992	4.03E-06

Input Motion

Time (s)	Acceleration (g)
78.535	0.004753
78.54	0.004267
78.545	0.003617
78.55	0.002763
78.555	0.001682
78.56	0.000396
78.565	-0.001053
78.57	-0.002613
78.575	-0.004219
78.58	-0.005824
78.585	-0.007392
78.59	-0.008885
78.595	-0.010274
78.6	-0.011563
78.605	-0.012752
78.61	-0.013828
78.615	-0.014769
78.62	-0.015549
78.625	-0.01614
78.63	-0.01652
78.635	-0.016684
78.64	-0.016655
78.645	-0.016469
78.65	-0.016174
78.655	-0.015814
78.66	-0.015412
78.665	-0.014989
78.67	-0.014535
78.675	-0.014045
78.68	-0.013562
78.685	-0.013137
78.69	-0.012855
78.695	-0.012804
78.7	-0.013007
78.705	-0.013471
78.71	-0.014165
78.715	-0.01502
78.72	-0.015981
78.725	-0.016987
78.73	-0.017946
78.735	-0.018779
78.74	-0.019451

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
95.87402344	3.34E-06
95.88012695	3.47E-06
95.88623047	2.37E-06
95.89233398	2.7E-06
95.8984375	2.97E-06
95.90454102	1.96E-06
95.91064453	1.71E-06
95.91674805	9.36E-07
95.92285156	2.94E-07
95.92895508	1.09E-06
95.93505859	3.02E-07
95.94116211	1.01E-06
95.94726563	6.82E-07
95.95336914	1.97E-06
95.95947266	3.35E-06
95.96557617	3.34E-06
95.97167969	4.25E-06
95.9777832	4.77E-06
95.98388672	3.88E-06
95.98999023	4.58E-06
95.99609375	5.68E-06
96.00219727	5.41E-06
96.00830078	5.92E-06
96.0144043	6.18E-06
96.02050781	5.29E-06
96.02661133	6.33E-06
96.03271484	7.37E-06
96.03881836	6.95E-06
96.04492188	7.32E-06
96.05102539	7.49E-06
96.05712891	7.32E-06
96.06323242	8.25E-06
96.06933594	8.35E-06
96.07543945	8.32E-06
96.08154297	8.96E-06
96.08764648	8.29E-06
96.09375	8.15E-06
96.09985352	8.91E-06
96.10595703	8.24E-06
96.11206055	8.24E-06
96.11816406	8.45E-06
96.12426758	7.26E-06

Time (s)	Acceleration (g)
78.745	-0.019945
78.75	-0.020271
78.755	-0.020458
78.76	-0.02054
78.765	-0.020553
78.77	-0.020514
78.775	-0.020431
78.78	-0.020291
78.785	-0.020074
78.79	-0.019753
78.795	-0.019315
78.8	-0.018764
78.805	-0.018114
78.81	-0.017438
78.815	-0.016803
78.82	-0.016247
78.825	-0.015787
78.83	-0.015411
78.835	-0.015093
78.84	-0.014802
78.845	-0.014513
78.85	-0.014242
78.855	-0.014021
78.86	-0.013868
78.865	-0.013808
78.87	-0.013852
78.875	-0.014001
78.88	-0.014251
78.885	-0.014589
78.89	-0.01499
78.895	-0.015434
78.9	-0.01588
78.905	-0.016282
78.91	-0.016612
78.915	-0.016831
78.92	-0.016885
78.925	-0.016724
78.93	-0.016283
78.935	-0.015507
78.94	-0.014379
78.945	-0.012908
78.95	-0.011097

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
96.13037109	7.43E-06
96.13647461	7.86E-06
96.14257813	7.24E-06
96.14868164	7.6E-06
96.15478516	7.06E-06
96.16088867	5.91E-06
96.16699219	6.59E-06
96.1730957	6.41E-06
96.17919922	5.65E-06
96.18530273	6.44E-06
96.19140625	6.17E-06
96.19750977	5.22E-06
96.20361328	5.2E-06
96.2097168	4.41E-06
96.21582031	4.17E-06
96.22192383	4.74E-06
96.22802734	4.15E-06
96.23413086	3.79E-06
96.24023438	3.8E-06
96.24633789	2.4E-06
96.25244141	2.91E-06
96.25854492	3.4E-06
96.26464844	1.89E-06
96.27075195	1.78E-06
96.27685547	1.4E-06
96.28295898	1.35E-06
96.2890625	2.02E-06
96.29516602	1.24E-06
96.30126953	2.19E-06
96.30737305	2.73E-06
96.31347656	2.09E-06
96.31958008	3.3E-06
96.32568359	3.34E-06
96.33178711	3.25E-06
96.33789063	3.99E-06
96.34399414	3.44E-06
96.35009766	4.24E-06
96.35620117	5.66E-06
96.36230469	5.59E-06
96.3684082	6.31E-06
96.37451172	6.44E-06
96.38061523	5.77E-06

Time (s)	Acceleration (g)
78.955	-0.008967
78.96	-0.006566
78.965	-0.003945
78.97	-0.00113
78.975	0.001847
78.98	0.00494
78.985	0.008105
78.99	0.011276
78.995	0.014384
79	0.017387
79.005	0.020242
79.01	0.022899
79.015	0.02531
79.02	0.02743
79.025	0.029228
79.03	0.030685
79.035	0.031801
79.04	0.032606
79.045	0.033143
79.05	0.033467
79.055	0.033626
79.06	0.033647
79.065	0.033547
79.07	0.03332
79.075	0.03295
79.08	0.032436
79.085	0.031776
79.09	0.030971
79.095	0.03003
79.1	0.028944
79.105	0.027696
79.11	0.026304
79.115	0.024787
79.12	0.023153
79.125	0.021421
79.13	0.019633
79.135	0.017827
79.14	0.016055
79.145	0.014363
79.15	0.012733
79.155	0.011141
79.16	0.00958

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
96.38671875	7.24E-06
96.39282227	8E-06
96.39892578	7.54E-06
96.4050293	8.06E-06
96.41113281	7.69E-06
96.41723633	7.18E-06
96.42333984	8.25E-06
96.42944336	7.88E-06
96.43554688	7.54E-06
96.44165039	8.53E-06
96.44775391	7.8E-06
96.45385742	7.31E-06
96.45996094	8.13E-06
96.46606445	7.65E-06
96.47216797	7.98E-06
96.47827148	8.81E-06
96.484375	7.55E-06
96.49047852	6.93E-06
96.49658203	7.3E-06
96.50268555	6.75E-06
96.50878906	7.06E-06
96.51489258	7.26E-06
96.52099609	6.3E-06
96.52709961	6.03E-06
96.53320313	5.37E-06
96.53930664	4.66E-06
96.54541016	5.29E-06
96.55151367	4.91E-06
96.55761719	4.2E-06
96.5637207	4.21E-06
96.56982422	3.09E-06
96.57592773	2.93E-06
96.58203125	3.71E-06
96.58813477	3.12E-06
96.59423828	2.81E-06
96.6003418	2.49E-06
96.60644531	1.09E-06
96.61254883	1.32E-06
96.61865234	1.47E-06
96.62475586	6.88E-07
96.63085938	9.15E-07
96.63696289	4.93E-07

Time (s)	Acceleration (g)
79.165	0.008034
79.17	0.006522
79.175	0.005071
79.18	0.003684
79.185	0.002357
79.19	0.001111
79.195	-0.000043
79.2	-0.001138
79.205	-0.002168
79.21	-0.003072
79.215	-0.003843
79.22	-0.004502
79.225	-0.005029
79.23	-0.005428
79.235	-0.005717
79.24	-0.005884
79.245	-0.005918
79.25	-0.005816
79.255	-0.005571
79.26	-0.005183
79.265	-0.004655
79.27	-0.004
79.275	-0.003222
79.28	-0.002326
79.285	-0.001308
79.29	-0.000145
79.295	0.001186
79.3	0.002677
79.305	0.004313
79.31	0.006058
79.315	0.007866
79.32	0.009707
79.325	0.011561
79.33	0.013425
79.335	0.015304
79.34	0.017228
79.345	0.019205
79.35	0.021229
79.355	0.023279
79.36	0.025249
79.365	0.02707
79.37	0.028786

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
96.64306641	1.91E-06
96.64916992	2.8E-06
96.65527344	2.68E-06
96.66137695	3.14E-06
96.66748047	3.18E-06
96.67358398	3.4E-06
96.6796875	4.3E-06
96.68579102	4.15E-06
96.69189453	4.35E-06
96.69799805	4.9E-06
96.70410156	4.4E-06
96.71020508	5.16E-06
96.71630859	6.31E-06
96.72241211	6.06E-06
96.72851563	6.76E-06
96.73461914	6.93E-06
96.74072266	5.68E-06
96.74682617	6.65E-06
96.75292969	7.43E-06
96.7590332	6.7E-06
96.76513672	7.41E-06
96.77124023	7.5E-06
96.77734375	6.82E-06
96.78344727	7.4E-06
96.78955078	7.21E-06
96.7956543	7.47E-06
96.80175781	8.36E-06
96.80786133	7.31E-06
96.81396484	6.78E-06
96.82006836	7.3E-06
96.82617188	6.4E-06
96.83227539	6.77E-06
96.83837891	7.11E-06
96.84448242	6.08E-06
96.85058594	6.34E-06
96.85668945	6.04E-06
96.86279297	5.01E-06
96.86889648	5.95E-06
96.875	5.73E-06
96.88110352	4.49E-06
96.88720703	4.9E-06
96.89331055	4.32E-06

Input Motion

Time (s)	Acceleration (g)
79.375	0.030381
79.38	0.031796
79.385	0.033032
79.39	0.034081
79.395	0.034912
79.4	0.035507
79.405	0.035853
79.41	0.035912
79.415	0.035647
79.42	0.035062
79.425	0.034158
79.43	0.032929
79.435	0.031378
79.44	0.029499
79.445	0.02729
79.45	0.024771
79.455	0.02196
79.46	0.01887
79.465	0.01552
79.47	0.011921
79.475	0.008107
79.48	0.00414
79.485	0.000101
79.49	-0.003878
79.495	-0.007661
79.5	-0.011156
79.505	-0.014276
79.51	-0.016988
79.515	-0.019277
79.52	-0.021115
79.525	-0.022497
79.53	-0.023428
79.535	-0.023923
79.54	-0.024048
79.545	-0.023876
79.55	-0.02346
79.555	-0.022856
79.56	-0.022082
79.565	-0.02114
79.57	-0.020046
79.575	-0.018799
79.58	-0.017401

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
96.89941406	3.42E-06
96.90551758	4.18E-06
96.91162109	3.82E-06
96.91772461	3.2E-06
96.92382813	3.29E-06
96.92993164	2.21E-06
96.93603516	1.59E-06
96.94213867	2.11E-06
96.94824219	1.51E-06
96.9543457	1.12E-06
96.96044922	9.3E-07
96.96655273	4.63E-07
96.97265625	1.51E-06
96.97875977	1.12E-06
96.98486328	1.77E-06
96.9909668	2.39E-06
96.99707031	2.22E-06
97.00317383	3.22E-06
97.00927734	3.51E-06
97.01538086	3.46E-06
97.02148438	4.3E-06
97.02758789	4.1E-06
97.03369141	4.36E-06
97.03979492	5.79E-06
97.04589844	5.65E-06
97.05200195	6.12E-06
97.05810547	6.89E-06
97.06420898	6.29E-06
97.0703125	7.07E-06
97.07641602	8.01E-06
97.08251953	7.52E-06
97.08862305	8.26E-06
97.09472656	8.64E-06
97.10083008	7.74E-06
97.10693359	8.44E-06
97.11303711	8.79E-06
97.11914063	8.09E-06
97.12524414	8.84E-06
97.13134766	8.67E-06
97.13745117	7.37E-06
97.14355469	8.04E-06
97.1496582	8.33E-06

Input Motion

Time (s)	Acceleration (g)
79.585	-0.015857
79.59	-0.014166
79.595	-0.012337
79.6	-0.010409
79.605	-0.008397
79.61	-0.006288
79.615	-0.004149
79.62	-0.002123
79.625	-0.000306
79.63	0.00124
79.635	0.002455
79.64	0.003324
79.645	0.003859
79.65	0.00409
79.655	0.004061
79.66	0.003817
79.665	0.003405
79.67	0.002867
79.675	0.002241
79.68	0.001572
79.685	0.000897
79.69	0.000255
79.695	-0.000321
79.7	-0.000832
79.705	-0.001275
79.71	-0.001643
79.715	-0.00193
79.72	-0.002096
79.725	-0.002103
79.73	-0.001944
79.735	-0.001623
79.74	-0.001158
79.745	-0.000577
79.75	0.000093
79.755	0.000824
79.76	0.001607
79.765	0.002429
79.77	0.003262
79.775	0.004076
79.78	0.004808
79.785	0.005401
79.79	0.005839

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
97.15576172	7.92E-06
97.16186523	8.6E-06
97.16796875	8.23E-06
97.17407227	7.36E-06
97.18017578	7.74E-06
97.1862793	7.44E-06
97.19238281	7.25E-06
97.19848633	7.4E-06
97.20458984	6.5E-06
97.21069336	6.47E-06
97.21679688	6.57E-06
97.22290039	5.26E-06
97.22900391	5.48E-06
97.23510742	5.85E-06
97.24121094	4.73E-06
97.24731445	4.39E-06
97.25341797	3.81E-06
97.25952148	3.07E-06
97.265625	3.74E-06
97.27172852	3.31E-06
97.27783203	2.9E-06
97.28393555	2.93E-06
97.29003906	1.45E-06
97.29614258	1.55E-06
97.30224609	2.28E-06
97.30834961	1.73E-06
97.31445313	2.16E-06
97.32055664	1.86E-06
97.32666016	1.59E-06
97.33276367	2.55E-06
97.33886719	2.3E-06
97.3449707	2.43E-06
97.35107422	2.69E-06
97.35717773	2.37E-06
97.36328125	3.94E-06
97.36938477	4.42E-06
97.37548828	3.93E-06
97.3815918	5.24E-06
97.38769531	5.29E-06
97.39379883	4.84E-06
97.39990234	6.08E-06
97.40600586	6.09E-06

Time (s)	Acceleration (g)
79.795	0.006117
79.8	0.006253
79.805	0.006274
79.81	0.006193
79.815	0.006015
79.82	0.005724
79.825	0.005293
79.83	0.00471
79.835	0.003968
79.84	0.003074
79.845	0.002053
79.85	0.000954
79.855	-0.000175
79.86	-0.001275
79.865	-0.002302
79.87	-0.003256
79.875	-0.004143
79.88	-0.004981
79.885	-0.005792
79.89	-0.006561
79.895	-0.007284
79.9	-0.007979
79.905	-0.008668
79.91	-0.009443
79.915	-0.010387
79.92	-0.011532
79.925	-0.012895
79.93	-0.014435
79.935	-0.01609
79.94	-0.017841
79.945	-0.019667
79.95	-0.021562
79.955	-0.023526
79.96	-0.025562
79.965	-0.02766
79.97	-0.029797
79.975	-0.031944
79.98	-0.034051
79.985	-0.036063
79.99	-0.037944
79.995	-0.03966
80	-0.041166

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
97.41210938	6.28E-06
97.41821289	7.28E-06
97.42431641	6.68E-06
97.43041992	6.83E-06
97.43652344	7.6E-06
97.44262695	7.24E-06
97.44873047	8.16E-06
97.45483398	8.29E-06
97.4609375	7.1E-06
97.46704102	7.98E-06
97.47314453	8.47E-06
97.47924805	7.71E-06
97.48535156	8.26E-06
97.49145508	8.18E-06
97.49755859	7.62E-06
97.50366211	8.12E-06
97.50976563	7.95E-06
97.51586914	7.92E-06
97.52197266	8.56E-06
97.52807617	7.79E-06
97.53417969	7.14E-06
97.5402832	7.34E-06
97.54638672	6.6E-06
97.55249023	6.52E-06
97.55859375	6.79E-06
97.56469727	5.57E-06
97.57080078	5.43E-06
97.5769043	5.59E-06
97.58300781	4.04E-06
97.58911133	4.24E-06
97.59521484	4.76E-06
97.60131836	3.65E-06
97.60742188	3.85E-06
97.61352539	3.77E-06
97.61962891	2.47E-06
97.62573242	3.02E-06
97.63183594	3.04E-06
97.63793945	1.97E-06
97.64404297	1.86E-06
97.65014648	1.06E-06
97.65625	5.08E-07
97.66235352	1.12E-06

Time (s)	Acceleration (g)
80.005	-0.042413
80.01	-0.043372
80.015	-0.044009
80.02	-0.044283
80.025	-0.044158
80.03	-0.043637
80.035	-0.042722
80.04	-0.041433
80.045	-0.039798
80.05	-0.037832
80.055	-0.035554
80.06	-0.032992
80.065	-0.030178
80.07	-0.027156
80.075	-0.023981
80.08	-0.020713
80.085	-0.017418
80.09	-0.014159
80.095	-0.010991
80.1	-0.007947
80.105	-0.005055
80.11	-0.002307
80.115	0.000308
80.12	0.00278
80.125	0.005094
80.13	0.007238
80.135	0.009196
80.14	0.010943
80.145	0.012466
80.15	0.013763
80.155	0.014847
80.16	0.015761
80.165	0.016559
80.17	0.017291
80.175	0.018004
80.18	0.01873
80.185	0.019477
80.19	0.02023
80.195	0.02096
80.2	0.021598
80.205	0.022076
80.21	0.022358

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
97.66845703	6.36E-07
97.67456055	1.17E-06
97.68066406	6.1E-07
97.68676758	1.78E-06
97.69287109	2.4E-06
97.69897461	2.1E-06
97.70507813	3.09E-06
97.71118164	3.58E-06
97.71728516	3.21E-06
97.72338867	4.17E-06
97.72949219	4.37E-06
97.7355957	4.22E-06
97.74169922	4.97E-06
97.74780273	5.01E-06
97.75390625	4.95E-06
97.76000977	5.96E-06
97.76611328	6.01E-06
97.7722168	6.28E-06
97.77832031	6.77E-06
97.78442383	6.08E-06
97.79052734	6.34E-06
97.79663086	7.28E-06
97.80273438	7.12E-06
97.80883789	7.6E-06
97.81494141	8E-06
97.82104492	6.97E-06
97.82714844	7.05E-06
97.83325195	7.33E-06
97.83935547	6.51E-06
97.84545898	7.12E-06
97.8515625	7.37E-06
97.85766602	6.07E-06
97.86376953	6.23E-06
97.86987305	6E-06
97.87597656	4.98E-06
97.88208008	5.67E-06
97.88818359	5.32E-06
97.89428711	4.47E-06
97.90039063	5.04E-06
97.90649414	4.21E-06
97.91259766	3.62E-06
97.91870117	4.41E-06

Time (s)	Acceleration (g)
80.215	0.022425
80.22	0.02228
80.225	0.02194
80.23	0.021425
80.235	0.020759
80.24	0.019972
80.245	0.01909
80.25	0.018151
80.255	0.017183
80.26	0.016217
80.265	0.015272
80.27	0.014342
80.275	0.013412
80.28	0.01246
80.285	0.011471
80.29	0.010441
80.295	0.009386
80.3	0.008327
80.305	0.007298
80.31	0.006327
80.315	0.005444
80.32	0.004671
80.325	0.004025
80.33	0.003527
80.335	0.003191
80.34	0.00302
80.345	0.003005
80.35	0.003141
80.355	0.003415
80.36	0.003775
80.365	0.004173
80.37	0.004582
80.375	0.004985
80.38	0.005387
80.385	0.005798
80.39	0.006228
80.395	0.006687
80.4	0.007156
80.405	0.007622
80.41	0.008087
80.415	0.008558
80.42	0.009072

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
97.92480469	4.07E-06
97.9309082	3.7E-06
97.93701172	3.62E-06
97.94311523	2.2E-06
97.94921875	1.89E-06
97.95532227	2.46E-06
97.96142578	1.54E-06
97.9675293	1.13E-06
97.97363281	1.13E-06
97.97973633	4.5E-07
97.98583984	9.65E-07
97.99194336	4.02E-07
97.99804688	1.38E-06
98.00415039	1.46E-06
98.01025391	1.19E-06
98.01635742	2.24E-06
98.02246094	2.62E-06
98.02856445	2.72E-06
98.03466797	3.27E-06
98.04077148	2.83E-06
98.046875	3.4E-06
98.05297852	4.25E-06
98.05908203	3.73E-06
98.06518555	4.51E-06
98.07128906	5.25E-06
98.07739258	4.67E-06
98.08349609	5.78E-06
98.08959961	6.46E-06
98.09570313	6.26E-06
98.10180664	7.36E-06
98.10791016	7.13E-06
98.11401367	6.23E-06
98.12011719	7.2E-06
98.1262207	7.45E-06
98.13232422	7.48E-06
98.13842773	8.04E-06
98.14453125	7.13E-06
98.15063477	6.82E-06
98.15673828	7.67E-06
98.1628418	7.31E-06
98.16894531	7.41E-06
98.17504883	7.57E-06

Time (s)	Acceleration (g)
80.425	0.009657
80.43	0.010328
80.435	0.011083
80.44	0.011854
80.445	0.012568
80.45	0.013172
80.455	0.013612
80.46	0.013885
80.465	0.014002
80.47	0.013923
80.475	0.013613
80.48	0.013042
80.485	0.012181
80.49	0.011019
80.495	0.009564
80.5	0.007825
80.505	0.005828
80.51	0.003608
80.515	0.001204
80.52	-0.001324
80.525	-0.003915
80.53	-0.006527
80.535	-0.009118
80.54	-0.011651
80.545	-0.01409
80.55	-0.016401
80.555	-0.018551
80.56	-0.020505
80.565	-0.02223
80.57	-0.023703
80.575	-0.024903
80.58	-0.025817
80.585	-0.02644
80.59	-0.026775
80.595	-0.026844
80.6	-0.026674
80.605	-0.026296
80.61	-0.025767
80.615	-0.025144
80.62	-0.024429
80.625	-0.023625
80.63	-0.022733

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
98.18115234	6.57E-06
98.18725586	6.64E-06
98.19335938	6.8E-06
98.19946289	6.07E-06
98.20556641	6.64E-06
98.21166992	6.76E-06
98.21777344	5.84E-06
98.22387695	6.07E-06
98.22998047	5.97E-06
98.23608398	5.15E-06
98.2421875	5.6E-06
98.24829102	5.19E-06
98.25439453	4.27E-06
98.26049805	4.48E-06
98.26660156	3.84E-06
98.27270508	3.14E-06
98.27880859	3.57E-06
98.28491211	2.96E-06
98.29101563	2.33E-06
98.29711914	2.29E-06
98.30322266	1.23E-06
98.30932617	1.42E-06
98.31542969	1.54E-06
98.3215332	1.08E-06
98.32763672	1.34E-06
98.33374023	7.55E-07
98.33984375	1.91E-06
98.34594727	2.67E-06
98.35205078	1.9E-06
98.3581543	2.56E-06
98.36425781	2.68E-06
98.37036133	2.57E-06
98.37646484	3.99E-06
98.38256836	4.03E-06
98.38867188	4.04E-06
98.39477539	4.77E-06
98.40087891	4.26E-06
98.40698242	4.74E-06
98.41308594	5.58E-06
98.41918945	5.28E-06
98.42529297	6.18E-06
98.43139648	6.6E-06

Time (s)	Acceleration (g)
80.635	-0.021758
80.64	-0.02074
80.645	-0.01973
80.65	-0.018779
80.655	-0.017928
80.66	-0.017189
80.665	-0.016567
80.67	-0.016025
80.675	-0.015528
80.68	-0.01509
80.685	-0.01472
80.69	-0.014449
80.695	-0.014295
80.7	-0.014219
80.705	-0.014171
80.71	-0.01408
80.715	-0.01387
80.72	-0.013532
80.725	-0.013073
80.73	-0.012486
80.735	-0.011784
80.74	-0.010968
80.745	-0.010036
80.75	-0.008991
80.755	-0.007838
80.76	-0.006579
80.765	-0.005225
80.77	-0.003817
80.775	-0.002398
80.78	-0.001004
80.785	0.000323
80.79	0.001555
80.795	0.002662
80.8	0.003592
80.805	0.004302
80.81	0.004747
80.815	0.004892
80.82	0.00475
80.825	0.004341
80.83	0.003691
80.835	0.002842
80.84	0.001814

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
98.4375	5.67E-06
98.44360352	6.6E-06
98.44970703	7.22E-06
98.45581055	6.78E-06
98.46191406	7.46E-06
98.46801758	7.32E-06
98.47412109	6.37E-06
98.48022461	6.99E-06
98.48632813	7.16E-06
98.49243164	7.04E-06
98.49853516	7.79E-06
98.50463867	7.5E-06
98.51074219	7.32E-06
98.5168457	7.97E-06
98.52294922	7.36E-06
98.52905273	7.17E-06
98.53515625	7.5E-06
98.54125977	6.86E-06
98.54736328	7.19E-06
98.5534668	7.24E-06
98.55957031	6E-06
98.56567383	6.33E-06
98.57177734	6.34E-06
98.57788086	5.37E-06
98.58398438	5.82E-06
98.59008789	5.36E-06
98.59619141	4.28E-06
98.60229492	4.87E-06
98.60839844	4.44E-06
98.61450195	3.54E-06
98.62060547	3.71E-06
98.62670898	3.07E-06
98.6328125	2.54E-06
98.63891602	2.83E-06
98.64501953	2.14E-06
98.65112305	1.92E-06
98.65722656	1.78E-06
98.66333008	4.62E-07
98.66943359	9.87E-07
98.67553711	8.34E-07
98.68164063	8.02E-07
98.68774414	1.67E-06

Time (s)	Acceleration (g)
80.845	0.000634
80.85	-0.000631
80.855	-0.001913
80.86	-0.003132
80.865	-0.004211
80.87	-0.005109
80.875	-0.005804
80.88	-0.006277
80.885	-0.006525
80.89	-0.006567
80.895	-0.006432
80.9	-0.006139
80.905	-0.005719
80.91	-0.005218
80.915	-0.004686
80.92	-0.004171
80.925	-0.003721
80.93	-0.00336
80.935	-0.003098
80.94	-0.002929
80.945	-0.002831
80.95	-0.002776
80.955	-0.002731
80.96	-0.002662
80.965	-0.002547
80.97	-0.002381
80.975	-0.002166
80.98	-0.001927
80.985	-0.001694
80.99	-0.001481
80.995	-0.001305
81	-0.001188
81.005	-0.001151
81.01	-0.00122
81.015	-0.001415
81.02	-0.001747
81.025	-0.002214
81.03	-0.002782
81.035	-0.003405
81.04	-0.004041
81.045	-0.004649
81.05	-0.005174

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
98.69384766	1.06E-06
98.69995117	2.07E-06
98.70605469	2.5E-06
98.7121582	2.19E-06
98.71826172	3.58E-06
98.72436523	3.52E-06
98.73046875	2.43E-06
98.73657227	3.93E-06
98.74267578	4.27E-06
98.7487793	4.12E-06
98.75488281	4.9E-06
98.76098633	4.3E-06
98.76708984	4.73E-06
98.77319336	5.85E-06
98.77929688	4.96E-06
98.78540039	5.7E-06
98.79150391	6.56E-06
98.79760742	5.56E-06
98.80371094	6.03E-06
98.80981445	6.63E-06
98.81591797	6.28E-06
98.82202148	7.2E-06
98.828125	7.16E-06
98.83422852	6.32E-06
98.84033203	6.55E-06
98.84643555	6.14E-06
98.85253906	6.16E-06
98.85864258	7.11E-06
98.86474609	6.52E-06
98.87084961	5.78E-06
98.87695313	6E-06
98.88305664	5.67E-06
98.88916016	5.48E-06
98.89526367	5.59E-06
98.90136719	5.08E-06
98.9074707	4.97E-06
98.91357422	4.98E-06
98.91967773	4.02E-06
98.92578125	3.81E-06
98.93188477	4.19E-06
98.93798828	3.52E-06
98.9440918	3.14E-06

Time (s)	Acceleration (g)
81.055	-0.005579
81.06	-0.005848
81.065	-0.00598
81.07	-0.005999
81.075	-0.005937
81.08	-0.005817
81.085	-0.005668
81.09	-0.005502
81.095	-0.005332
81.1	-0.005208
81.105	-0.005182
81.11	-0.005298
81.115	-0.005599
81.12	-0.006112
81.125	-0.006848
81.13	-0.00782
81.135	-0.009022
81.14	-0.01041
81.145	-0.011935
81.15	-0.013529
81.155	-0.015114
81.16	-0.016646
81.165	-0.01808
81.17	-0.019347
81.175	-0.02039
81.18	-0.021155
81.185	-0.021613
81.19	-0.021793
81.195	-0.021748
81.2	-0.02157
81.205	-0.021356
81.21	-0.021159
81.215	-0.02102
81.22	-0.020951
81.225	-0.020941
81.23	-0.021002
81.235	-0.021136
81.24	-0.02133
81.245	-0.021568
81.25	-0.021815
81.255	-0.02203
81.26	-0.022171

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
98.95019531	3.23E-06
98.95629883	2.08E-06
98.96240234	1.84E-06
98.96850586	2.16E-06
98.97460938	1.14E-06
98.98071289	1.29E-06
98.98681641	1.42E-06
98.99291992	4.06E-07
98.99902344	2.16E-07
99.00512695	5.48E-07
99.01123047	1.27E-06
99.01733398	6.26E-07
99.0234375	1.25E-06
99.02954102	1.77E-06
99.03564453	1.29E-06
99.04174805	2.14E-06
99.04785156	2.29E-06
99.05395508	1.6E-06
99.06005859	3E-06
99.06616211	3.28E-06
99.07226563	3.06E-06
99.07836914	4.31E-06
99.08447266	4.02E-06
99.09057617	3.59E-06
99.09667969	5.01E-06
99.1027832	4.87E-06
99.10888672	4.96E-06
99.11499023	6.2E-06
99.12109375	5.61E-06
99.12719727	5.36E-06
99.13330078	6.17E-06
99.1394043	5.48E-06
99.14550781	5.91E-06
99.15161133	6.87E-06
99.15771484	5.8E-06
99.16381836	5.66E-06
99.16992188	6.08E-06
99.17602539	5.44E-06
99.18212891	6.19E-06
99.18823242	6.56E-06
99.19433594	5.7E-06
99.20043945	5.88E-06

Time (s)	Acceleration (g)
81.265	-0.022195
81.27	-0.022072
81.275	-0.021788
81.28	-0.021353
81.285	-0.020786
81.29	-0.020129
81.295	-0.019425
81.3	-0.018686
81.305	-0.017919
81.31	-0.017147
81.315	-0.016389
81.32	-0.015647
81.325	-0.014918
81.33	-0.014206
81.335	-0.013502
81.34	-0.012777
81.345	-0.012
81.35	-0.011127
81.355	-0.010116
81.36	-0.00896
81.365	-0.00766
81.37	-0.006225
81.375	-0.004675
81.38	-0.00302
81.385	-0.001273
81.39	0.000559
81.395	0.002463
81.4	0.004394
81.405	0.006293
81.41	0.008083
81.415	0.009679
81.42	0.010994
81.425	0.01196
81.43	0.012534
81.435	0.012691
81.44	0.012458
81.445	0.011865
81.45	0.010917
81.455	0.009632
81.46	0.007987
81.465	0.005972
81.47	0.003669

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
99.20654297	5.39E-06
99.21264648	5.05E-06
99.21875	5.99E-06
99.22485352	5.22E-06
99.23095703	4.27E-06
99.23706055	4.76E-06
99.24316406	4.25E-06
99.24926758	4.1E-06
99.25537109	4.42E-06
99.26147461	3.46E-06
99.26757813	3.23E-06
99.27368164	3.5E-06
99.27978516	2.49E-06
99.28588867	2.06E-06
99.29199219	2.2E-06
99.2980957	1.75E-06
99.30419922	1.72E-06
99.31030273	1.3E-06
99.31640625	7.81E-07
99.32250977	3.42E-07
99.32861328	6.46E-07
99.3347168	3.8E-07
99.34082031	6.22E-07
99.34692383	9.32E-07
99.35302734	1.65E-06
99.35913086	1.45E-06
99.36523438	1.38E-06
99.37133789	2.43E-06
99.37744141	2.52E-06
99.38354492	2.67E-06
99.38964844	3.68E-06
99.39575195	3.69E-06
99.40185547	4.34E-06
99.40795898	5.2E-06
99.4140625	4.23E-06
99.42016602	4.66E-06
99.42626953	5.44E-06
99.43237305	5.05E-06
99.43847656	6.03E-06
99.44458008	6.26E-06
99.45068359	5.3E-06
99.45678711	6.21E-06

Time (s)	Acceleration (g)
81.475	0.001182
81.48	-0.001388
81.485	-0.003921
81.49	-0.006318
81.495	-0.008495
81.5	-0.010376
81.505	-0.011908
81.51	-0.013068
81.515	-0.013858
81.52	-0.014313
81.525	-0.014484
81.53	-0.014451
81.535	-0.014303
81.54	-0.014098
81.545	-0.013875
81.55	-0.013675
81.555	-0.013517
81.56	-0.013374
81.565	-0.013219
81.57	-0.013046
81.575	-0.012858
81.58	-0.012695
81.585	-0.012612
81.59	-0.012657
81.595	-0.012869
81.6	-0.013251
81.605	-0.013792
81.61	-0.014447
81.615	-0.015159
81.62	-0.015903
81.625	-0.016648
81.63	-0.017349
81.635	-0.017974
81.64	-0.018472
81.645	-0.018788
81.65	-0.01893
81.655	-0.018904
81.66	-0.018688
81.665	-0.01827
81.67	-0.017652
81.675	-0.016839
81.68	-0.015878

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
99.46289063	6.43E-06
99.46899414	6.06E-06
99.47509766	6.88E-06
99.48120117	6.3E-06
99.48730469	5.93E-06
99.4934082	6.67E-06
99.49951172	5.86E-06
99.50561523	5.97E-06
99.51171875	6.86E-06
99.51782227	6.13E-06
99.52392578	6.1E-06
99.5300293	6.24E-06
99.53613281	5.29E-06
99.54223633	5.7E-06
99.54833984	5.96E-06
99.55444336	5.15E-06
99.56054688	5.08E-06
99.56665039	4.5E-06
99.57275391	3.82E-06
99.57885742	4.54E-06
99.58496094	4.19E-06
99.59106445	3.41E-06
99.59716797	3.92E-06
99.60327148	3.55E-06
99.609375	2.77E-06
99.61547852	3.05E-06
99.62158203	2.47E-06
99.62768555	2.13E-06
99.63378906	2.61E-06
99.63989258	1.54E-06
99.64599609	1.07E-06
99.65209961	1.5E-06
99.65820313	5.5E-07
99.66430664	4.23E-07
99.67041016	7.45E-07
99.67651367	2.4E-07
99.68261719	8.17E-07
99.6887207	6.1E-07
99.69482422	1.33E-06
99.70092773	1.71E-06
99.70703125	1.7E-06
99.71313477	2.49E-06

Input Motion

Time (s)	Acceleration (g)
81.685	-0.014834
81.69	-0.013759
81.695	-0.012718
81.7	-0.011779
81.705	-0.011
81.71	-0.010432
81.715	-0.010113
81.72	-0.010052
81.725	-0.010246
81.73	-0.010703
81.735	-0.011426
81.74	-0.012401
81.745	-0.013607
81.75	-0.014996
81.755	-0.0165
81.76	-0.018062
81.765	-0.01961
81.77	-0.021068
81.775	-0.022376
81.78	-0.023474
81.785	-0.024321
81.79	-0.024954
81.795	-0.025418
81.8	-0.025742
81.805	-0.025959
81.81	-0.026057
81.815	-0.026025
81.82	-0.025869
81.825	-0.025608
81.83	-0.025294
81.835	-0.024983
81.84	-0.02472
81.845	-0.024529
81.85	-0.02439
81.855	-0.024257
81.86	-0.024075
81.865	-0.02379
81.87	-0.023372
81.875	-0.022808
81.88	-0.022135
81.885	-0.021403
81.89	-0.020642

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
99.71923828	2.37E-06
99.7253418	2.84E-06
99.73144531	3.89E-06
99.73754883	3.49E-06
99.74365234	3.16E-06
99.74975586	3.83E-06
99.75585938	4.06E-06
99.76196289	4.61E-06
99.76806641	4.76E-06
99.77416992	4.25E-06
99.78027344	4.84E-06
99.78637695	5.44E-06
99.79248047	5.27E-06
99.79858398	5.94E-06
99.8046875	6.24E-06
99.81079102	5.54E-06
99.81689453	5.98E-06
99.82299805	6.05E-06
99.82910156	5.24E-06
99.83520508	5.94E-06
99.84130859	6.14E-06
99.84741211	5.52E-06
99.85351563	5.91E-06
99.85961914	5.53E-06
99.86572266	5.15E-06
99.87182617	5.86E-06
99.87792969	5.42E-06
99.8840332	5.07E-06
99.89013672	5.35E-06
99.89624023	4.33E-06
99.90234375	4.36E-06
99.90844727	4.86E-06
99.91455078	3.97E-06
99.9206543	3.98E-06
99.92675781	4E-06
99.93286133	3.01E-06
99.93896484	3.3E-06
99.94506836	3.34E-06
99.95117188	2.75E-06
99.95727539	2.91E-06
99.96337891	2.39E-06
99.96948242	1.27E-06

Input Motion

Time (s)	Acceleration (g)
81.895	-0.01988
81.9	-0.019134
81.905	-0.018416
81.91	-0.017762
81.915	-0.017219
81.92	-0.016852
81.925	-0.016724
81.93	-0.016877
81.935	-0.01733
81.94	-0.018052
81.945	-0.018988
81.95	-0.020062
81.955	-0.021188
81.96	-0.022318
81.965	-0.023409
81.97	-0.024439
81.975	-0.025399
81.98	-0.026261
81.985	-0.027005
81.99	-0.027622
81.995	-0.028103
82	-0.02844
82.005	-0.028629
82.01	-0.028641
82.015	-0.028455
82.02	-0.028051
82.025	-0.027401
82.03	-0.0265
82.035	-0.025336
82.04	-0.02385
82.045	-0.021987
82.05	-0.019691
82.055	-0.016929
82.06	-0.01372
82.065	-0.010119
82.07	-0.006222
82.075	-0.00215
82.08	0.001985
82.085	0.006089
82.09	0.010075
82.095	0.013891
82.1	0.017544

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)
99.97558594	1.71E-06
99.98168945	1.44E-06
99.98779297	7.19E-07
99.99389648	9.77E-07

Time (s)	Acceleration (g)
82.105	0.021045
82.11	0.024409
82.115	0.027638
82.12	0.030669
82.125	0.033416
82.13	0.035785
82.135	0.037695
82.14	0.039093
82.145	0.039968
82.15	0.040386
82.155	0.040433
82.16	0.040198
82.165	0.039751
82.17	0.039088
82.175	0.038173
82.18	0.036971
82.185	0.03545
82.19	0.033618
82.195	0.031522
82.2	0.029261
82.205	0.026957
82.21	0.024745
82.215	0.022746
82.22	0.021038
82.225	0.019669
82.23	0.018631
82.235	0.017899
82.24	0.017476
82.245	0.017352
82.25	0.017531
82.255	0.018015
82.26	0.018756
82.265	0.019699
82.27	0.020785
82.275	0.021948
82.28	0.023141
82.285	0.024306
82.29	0.025391
82.295	0.026335
82.3	0.027015
82.305	0.027328
82.31	0.027207

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
82.315	0.026624
82.32	0.025645
82.325	0.024372
82.33	0.022931
82.335	0.021441
82.34	0.019957
82.345	0.018499
82.35	0.017045
82.355	0.015542
82.36	0.013947
82.365	0.012221
82.37	0.010319
82.375	0.008236
82.38	0.006014
82.385	0.003724
82.39	0.001498
82.395	-0.000529
82.4	-0.002278
82.405	-0.003691
82.41	-0.004775
82.415	-0.00557
82.42	-0.006095
82.425	-0.006385
82.43	-0.006482
82.435	-0.006421
82.44	-0.006274
82.445	-0.006119
82.45	-0.005995
82.455	-0.00593
82.46	-0.005966
82.465	-0.006109
82.47	-0.006322
82.475	-0.00655
82.48	-0.006696
82.485	-0.006684
82.49	-0.006496
82.495	-0.006156
82.5	-0.005778
82.505	-0.005479
82.51	-0.005353
82.515	-0.005449
82.52	-0.005673

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
82.525	-0.005901
82.53	-0.006001
82.535	-0.005858
82.54	-0.005485
82.545	-0.004931
82.55	-0.004261
82.555	-0.003547
82.56	-0.002786
82.565	-0.001953
82.57	-0.001008
82.575	0.000089
82.58	0.001325
82.585	0.002654
82.59	0.003998
82.595	0.00526
82.6	0.006339
82.605	0.007166
82.61	0.00773
82.615	0.008063
82.62	0.008249
82.625	0.008385
82.63	0.008545
82.635	0.008777
82.64	0.009052
82.645	0.009315
82.65	0.0095
82.655	0.009541
82.66	0.009433
82.665	0.009196
82.67	0.008851
82.675	0.008446
82.68	0.008029
82.685	0.007647
82.69	0.007374
82.695	0.007269
82.7	0.007342
82.705	0.00759
82.71	0.007983
82.715	0.008475
82.72	0.009044
82.725	0.009663
82.73	0.010293

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
82.735	0.010905
82.74	0.011456
82.745	0.011917
82.75	0.012307
82.755	0.012655
82.76	0.013013
82.765	0.013439
82.77	0.013935
82.775	0.014493
82.78	0.01513
82.785	0.015836
82.79	0.016622
82.795	0.017493
82.8	0.018404
82.805	0.019309
82.81	0.020156
82.815	0.020895
82.82	0.021504
82.825	0.021966
82.83	0.022277
82.835	0.022442
82.84	0.022448
82.845	0.022288
82.85	0.021997
82.855	0.021618
82.86	0.021194
82.865	0.020787
82.87	0.02046
82.875	0.020278
82.88	0.020317
82.885	0.020624
82.89	0.021207
82.895	0.02203
82.9	0.022981
82.905	0.023946
82.91	0.024812
82.915	0.025509
82.92	0.026074
82.925	0.026578
82.93	0.027131
82.935	0.027838
82.94	0.028705

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
82.945	0.029702
82.95	0.030765
82.955	0.031783
82.96	0.032658
82.965	0.03336
82.97	0.033935
82.975	0.034402
82.98	0.034751
82.985	0.03497
82.99	0.035019
82.995	0.034844
83	0.034401
83.005	0.033657
83.01	0.032595
83.015	0.031238
83.02	0.029629
83.025	0.027828
83.03	0.025949
83.035	0.024069
83.04	0.022209
83.045	0.020353
83.05	0.018393
83.055	0.016221
83.06	0.013832
83.065	0.011253
83.07	0.008613
83.075	0.006059
83.08	0.003692
83.085	0.001576
83.09	-0.00032
83.095	-0.002069
83.1	-0.003758
83.105	-0.005468
83.11	-0.00723
83.115	-0.009034
83.12	-0.010825
83.125	-0.012529
83.13	-0.014072
83.135	-0.015388
83.14	-0.016476
83.145	-0.017352
83.15	-0.018042

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
83.155	-0.018578
83.16	-0.018944
83.165	-0.019112
83.17	-0.019073
83.175	-0.018822
83.18	-0.018352
83.185	-0.01766
83.19	-0.016777
83.195	-0.015736
83.2	-0.014524
83.205	-0.013234
83.21	-0.012078
83.215	-0.011131
83.22	-0.010316
83.225	-0.009589
83.23	-0.008981
83.235	-0.008557
83.24	-0.008333
83.245	-0.008266
83.25	-0.008352
83.255	-0.008587
83.26	-0.008899
83.265	-0.009231
83.27	-0.009549
83.275	-0.009819
83.28	-0.010073
83.285	-0.010334
83.29	-0.010569
83.295	-0.010757
83.3	-0.010794
83.305	-0.01053
83.31	-0.009911
83.315	-0.008874
83.32	-0.007279
83.325	-0.005186
83.33	-0.002817
83.335	-0.000208
83.34	0.002569
83.345	0.005287
83.35	0.007815
83.355	0.01008
83.36	0.011964

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
83.365	0.01342
83.37	0.014493
83.375	0.01525
83.38	0.015776
83.385	0.016158
83.39	0.016433
83.395	0.016616
83.4	0.016685
83.405	0.016603
83.41	0.016349
83.415	0.015906
83.42	0.0153
83.425	0.014553
83.43	0.013668
83.435	0.012703
83.44	0.011645
83.445	0.010471
83.45	0.009324
83.455	0.008229
83.46	0.007036
83.465	0.005734
83.47	0.004331
83.475	0.002736
83.48	0.000886
83.485	-0.001211
83.49	-0.003459
83.495	-0.005739
83.5	-0.007916
83.505	-0.00989
83.51	-0.011686
83.515	-0.013366
83.52	-0.01506
83.525	-0.016863
83.53	-0.018673
83.535	-0.020401
83.54	-0.022058
83.545	-0.023628
83.55	-0.025027
83.555	-0.026105
83.56	-0.026788
83.565	-0.027083
83.57	-0.026975

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
83.575	-0.026471
83.58	-0.025614
83.585	-0.024506
83.59	-0.023221
83.595	-0.021779
83.6	-0.020288
83.605	-0.018865
83.61	-0.017505
83.615	-0.016223
83.62	-0.015062
83.625	-0.01403
83.63	-0.013148
83.635	-0.012427
83.64	-0.011843
83.645	-0.011364
83.65	-0.010974
83.655	-0.010649
83.66	-0.010374
83.665	-0.010096
83.67	-0.009782
83.675	-0.009382
83.68	-0.008815
83.685	-0.008213
83.69	-0.007721
83.695	-0.007345
83.7	-0.007054
83.705	-0.006875
83.71	-0.006797
83.715	-0.006762
83.72	-0.006752
83.725	-0.006749
83.73	-0.006738
83.735	-0.006719
83.74	-0.006679
83.745	-0.006615
83.75	-0.006526
83.755	-0.006409
83.76	-0.006296
83.765	-0.006191
83.77	-0.006064
83.775	-0.005929
83.78	-0.005761

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
83.785	-0.005501
83.79	-0.00511
83.795	-0.004545
83.8	-0.003757
83.805	-0.002724
83.81	-0.001473
83.815	-0.00005
83.82	0.001453
83.825	0.00295
83.83	0.004396
83.835	0.005772
83.84	0.007107
83.845	0.008451
83.85	0.009853
83.855	0.011344
83.86	0.012926
83.865	0.014564
83.87	0.016161
83.875	0.017608
83.88	0.018809
83.885	0.019679
83.89	0.020216
83.895	0.020445
83.9	0.020376
83.905	0.020034
83.91	0.019421
83.915	0.018531
83.92	0.017378
83.925	0.015962
83.93	0.014304
83.935	0.012474
83.94	0.01051
83.945	0.008419
83.95	0.006276
83.955	0.004176
83.96	0.002176
83.965	0.000323
83.97	-0.001381
83.975	-0.002943
83.98	-0.004344
83.985	-0.005585
83.99	-0.00666

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
83.995	-0.007524
84	-0.008134
84.005	-0.008482
84.01	-0.008603
84.015	-0.008532
84.02	-0.008319
84.025	-0.008007
84.03	-0.0076
84.035	-0.007099
84.04	-0.006497
84.045	-0.005793
84.05	-0.005036
84.055	-0.004277
84.06	-0.003579
84.065	-0.003003
84.07	-0.002543
84.075	-0.002188
84.08	-0.001931
84.085	-0.001749
84.09	-0.001659
84.095	-0.001656
84.1	-0.001665
84.105	-0.001602
84.11	-0.001346
84.115	-0.000792
84.12	0.000099
84.125	0.001319
84.13	0.002794
84.135	0.00441
84.14	0.006056
84.145	0.007628
84.15	0.009049
84.155	0.010275
84.16	0.011307
84.165	0.012166
84.17	0.012896
84.175	0.013546
84.18	0.014143
84.185	0.014704
84.19	0.015238
84.195	0.015736
84.2	0.016201

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
84.205	0.01664
84.21	0.017046
84.215	0.017426
84.22	0.017822
84.225	0.018262
84.23	0.018764
84.235	0.019321
84.24	0.019823
84.245	0.020155
84.25	0.02023
84.255	0.019982
84.26	0.019451
84.265	0.018715
84.27	0.017854
84.275	0.016953
84.28	0.016056
84.285	0.015163
84.29	0.014255
84.295	0.01328
84.3	0.012171
84.305	0.010876
84.31	0.00937
84.315	0.007667
84.32	0.005857
84.325	0.004031
84.33	0.002296
84.335	0.000776
84.34	-0.000534
84.345	-0.00171
84.35	-0.002815
84.355	-0.003913
84.36	-0.005015
84.365	-0.006125
84.37	-0.007262
84.375	-0.008459
84.38	-0.009795
84.385	-0.011349
84.39	-0.013162
84.395	-0.015225
84.4	-0.017452
84.405	-0.019739
84.41	-0.021945

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
84.415	-0.023934
84.42	-0.02566
84.425	-0.027125
84.43	-0.028391
84.435	-0.029538
84.44	-0.030631
84.445	-0.031704
84.45	-0.032715
84.455	-0.033589
84.46	-0.034237
84.465	-0.034579
84.47	-0.034572
84.475	-0.034235
84.48	-0.03364
84.485	-0.032814
84.49	-0.031815
84.495	-0.030743
84.5	-0.029553
84.505	-0.028147
84.51	-0.026474
84.515	-0.024519
84.52	-0.022362
84.525	-0.020123
84.53	-0.017969
84.535	-0.01605
84.54	-0.01443
84.545	-0.013122
84.55	-0.012064
84.555	-0.011156
84.56	-0.010338
84.565	-0.009555
84.57	-0.008792
84.575	-0.008059
84.58	-0.00735
84.585	-0.006677
84.59	-0.006058
84.595	-0.005516
84.6	-0.005096
84.605	-0.004846
84.61	-0.004802
84.615	-0.004971
84.62	-0.00532

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
84.625	-0.0058
84.63	-0.006332
84.635	-0.006803
84.64	-0.007086
84.645	-0.007083
84.65	-0.006717
84.655	-0.005965
84.66	-0.0049
84.665	-0.003634
84.67	-0.002311
84.675	-0.001065
84.68	0.000015
84.685	0.000889
84.69	0.001592
84.695	0.002174
84.7	0.00268
84.705	0.003149
84.71	0.003514
84.715	0.003656
84.72	0.003494
84.725	0.002984
84.73	0.002104
84.735	0.000885
84.74	-0.000521
84.745	-0.002007
84.75	-0.003559
84.755	-0.005076
84.76	-0.006466
84.765	-0.007707
84.77	-0.008736
84.775	-0.009465
84.78	-0.009795
84.785	-0.009637
84.79	-0.008941
84.795	-0.007704
84.8	-0.006008
84.805	-0.003974
84.81	-0.001758
84.815	0.000476
84.82	0.002612
84.825	0.004555
84.83	0.006235

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
84.835	0.007624
84.84	0.008703
84.845	0.009491
84.85	0.010053
84.855	0.010471
84.86	0.010848
84.865	0.011268
84.87	0.011781
84.875	0.012407
84.88	0.013087
84.885	0.01375
84.89	0.014365
84.895	0.014896
84.9	0.015343
84.905	0.015706
84.91	0.015933
84.915	0.015968
84.92	0.015729
84.925	0.015131
84.93	0.014149
84.935	0.012767
84.94	0.01098
84.945	0.008825
84.95	0.006332
84.955	0.003583
84.96	0.000755
84.965	-0.001961
84.97	-0.004338
84.975	-0.006194
84.98	-0.007477
84.985	-0.00821
84.99	-0.008534
84.995	-0.008619
85	-0.008581
85.005	-0.008499
85.01	-0.008333
85.015	-0.007996
85.02	-0.007399
85.025	-0.006464
85.03	-0.00519
85.035	-0.00363
85.04	-0.001889

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
85.045	-0.000095
85.05	0.001633
85.055	0.003197
85.06	0.004567
85.065	0.005738
85.07	0.006726
85.075	0.007565
85.08	0.008255
85.085	0.008803
85.09	0.009256
85.095	0.009671
85.1	0.01012
85.105	0.010664
85.11	0.011345
85.115	0.012144
85.12	0.012978
85.125	0.013733
85.13	0.014225
85.135	0.014322
85.14	0.014008
85.145	0.013359
85.15	0.012584
85.155	0.011936
85.16	0.01165
85.165	0.011905
85.17	0.012739
85.175	0.01409
85.18	0.015801
85.185	0.017687
85.19	0.019618
85.195	0.02152
85.2	0.023456
85.205	0.025552
85.21	0.027927
85.215	0.030696
85.22	0.033895
85.225	0.037484
85.23	0.041346
85.235	0.045285
85.24	0.049062
85.245	0.052409
85.25	0.055053

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
85.255	0.056761
85.26	0.057363
85.265	0.056789
85.27	0.05511
85.275	0.052498
85.28	0.049215
85.285	0.045565
85.29	0.041834
85.295	0.038284
85.3	0.03511
85.305	0.032433
85.31	0.030316
85.315	0.028739
85.32	0.027586
85.325	0.026694
85.33	0.025867
85.335	0.024909
85.34	0.023692
85.345	0.022139
85.35	0.020206
85.355	0.017926
85.36	0.015387
85.365	0.012714
85.37	0.010096
85.375	0.007703
85.38	0.005659
85.385	0.004026
85.39	0.002755
85.395	0.001745
85.4	0.000854
85.405	-0.00006
85.41	-0.001063
85.415	-0.002194
85.42	-0.003454
85.425	-0.004824
85.43	-0.006332
85.435	-0.008001
85.44	-0.009856
85.445	-0.011906
85.45	-0.014121
85.455	-0.016445
85.46	-0.018774

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
85.465	-0.021008
85.47	-0.023059
85.475	-0.024869
85.48	-0.026442
85.485	-0.027812
85.49	-0.029001
85.495	-0.030037
85.5	-0.030937
85.505	-0.031698
85.51	-0.032323
85.515	-0.032806
85.52	-0.033143
85.525	-0.033296
85.53	-0.033206
85.535	-0.032838
85.54	-0.032206
85.545	-0.031333
85.55	-0.030252
85.555	-0.029019
85.56	-0.027683
85.565	-0.02631
85.57	-0.025001
85.575	-0.023844
85.58	-0.022924
85.585	-0.02229
85.59	-0.021883
85.595	-0.021617
85.6	-0.02136
85.605	-0.020989
85.61	-0.020455
85.615	-0.019736
85.62	-0.018844
85.625	-0.017813
85.63	-0.01662
85.635	-0.015252
85.64	-0.013698
85.645	-0.011959
85.65	-0.010086
85.655	-0.008145
85.66	-0.0062
85.665	-0.004321
85.67	-0.002539

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
85.675	-0.000869
85.68	0.000659
85.685	0.002035
85.69	0.003266
85.695	0.004364
85.7	0.005355
85.705	0.006261
85.71	0.007081
85.715	0.007808
85.72	0.008415
85.725	0.008887
85.73	0.009256
85.735	0.009569
85.74	0.009912
85.745	0.01036
85.75	0.010919
85.755	0.011563
85.76	0.012219
85.765	0.012802
85.77	0.013251
85.775	0.013531
85.78	0.013679
85.785	0.013761
85.79	0.013857
85.795	0.01405
85.8	0.014395
85.805	0.014919
85.81	0.015605
85.815	0.016403
85.82	0.017253
85.825	0.018084
85.83	0.018805
85.835	0.019335
85.84	0.019611
85.845	0.019591
85.85	0.019256
85.855	0.018606
85.86	0.017665
85.865	0.016469
85.87	0.015052
85.875	0.013432
85.88	0.011615

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
85.885	0.009592
85.89	0.007316
85.895	0.004749
85.9	0.001912
85.905	-0.001142
85.91	-0.004324
85.915	-0.007519
85.92	-0.01061
85.925	-0.013461
85.93	-0.015966
85.935	-0.018062
85.94	-0.019743
85.945	-0.021024
85.95	-0.021942
85.955	-0.022547
85.96	-0.022866
85.965	-0.02293
85.97	-0.022788
85.975	-0.022478
85.98	-0.022029
85.985	-0.021455
85.99	-0.020716
85.995	-0.019767
86	-0.018568
86.005	-0.017086
86.01	-0.015363
86.015	-0.013465
86.02	-0.011447
86.025	-0.009375
86.03	-0.007308
86.035	-0.005294
86.04	-0.003369
86.045	-0.001562
86.05	0.000095
86.055	0.001583
86.06	0.002873
86.065	0.003927
86.07	0.004738
86.075	0.005293
86.08	0.005523
86.085	0.005374
86.09	0.004828

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
86.095	0.003884
86.1	0.002611
86.105	0.001105
86.11	-0.000569
86.115	-0.002347
86.12	-0.004168
86.125	-0.005995
86.13	-0.007803
86.135	-0.009573
86.14	-0.011298
86.145	-0.012957
86.15	-0.014506
86.155	-0.015873
86.16	-0.016964
86.165	-0.017681
86.17	-0.017916
86.175	-0.017601
86.18	-0.016747
86.185	-0.01541
86.19	-0.013726
86.195	-0.011855
86.2	-0.009907
86.205	-0.007971
86.21	-0.006113
86.215	-0.004337
86.22	-0.002625
86.225	-0.000933
86.23	0.000858
86.235	0.002842
86.24	0.005054
86.245	0.007491
86.25	0.010055
86.255	0.012638
86.26	0.015165
86.265	0.017591
86.27	0.019973
86.275	0.022383
86.28	0.024875
86.285	0.027469
86.29	0.030063
86.295	0.032509
86.3	0.034639

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
86.305	0.036308
86.31	0.037457
86.315	0.038101
86.32	0.038369
86.325	0.038433
86.33	0.038429
86.335	0.038475
86.34	0.038584
86.345	0.038711
86.35	0.038815
86.355	0.038834
86.36	0.038704
86.365	0.038381
86.37	0.037865
86.375	0.03718
86.38	0.036379
86.385	0.035532
86.39	0.034701
86.395	0.033936
86.4	0.033268
86.405	0.032694
86.41	0.032194
86.415	0.031719
86.42	0.03117
86.425	0.030443
86.43	0.029452
86.435	0.028136
86.44	0.026468
86.445	0.024473
86.45	0.022207
86.455	0.019759
86.46	0.017233
86.465	0.014725
86.47	0.012289
86.475	0.009949
86.48	0.007686
86.485	0.005468
86.49	0.003266
86.495	0.00107
86.5	-0.001085
86.505	-0.003138
86.51	-0.00501

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
86.515	-0.006622
86.52	-0.007926
86.525	-0.008902
86.53	-0.009588
86.535	-0.010056
86.54	-0.010379
86.545	-0.010634
86.55	-0.010894
86.555	-0.0112
86.56	-0.011541
86.565	-0.011876
86.57	-0.012126
86.575	-0.012205
86.58	-0.012057
86.585	-0.011647
86.59	-0.010982
86.595	-0.010101
86.6	-0.009042
86.605	-0.007854
86.61	-0.006585
86.615	-0.005272
86.62	-0.003919
86.625	-0.002527
86.63	-0.001108
86.635	0.000335
86.64	0.001761
86.645	0.003135
86.65	0.004478
86.655	0.005817
86.66	0.007183
86.665	0.008609
86.67	0.010089
86.675	0.011598
86.68	0.013098
86.685	0.014533
86.69	0.015848
86.695	0.016988
86.7	0.017912
86.705	0.018589
86.71	0.019003
86.715	0.019155
86.72	0.019056

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
86.725	0.018737
86.73	0.018279
86.735	0.017778
86.74	0.017335
86.745	0.017037
86.75	0.016939
86.755	0.017058
86.76	0.017345
86.765	0.017732
86.77	0.018157
86.775	0.018572
86.78	0.018979
86.785	0.019409
86.79	0.019907
86.795	0.020519
86.8	0.021256
86.805	0.022101
86.81	0.022984
86.815	0.023815
86.82	0.024495
86.825	0.024934
86.83	0.025116
86.835	0.02505
86.84	0.024774
86.845	0.024343
86.85	0.023799
86.855	0.023171
86.86	0.022479
86.865	0.02173
86.87	0.020906
86.875	0.019984
86.88	0.018956
86.885	0.017803
86.89	0.016481
86.895	0.014955
86.9	0.013168
86.905	0.011077
86.91	0.008729
86.915	0.006187
86.92	0.003538
86.925	0.000878
86.93	-0.00176

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
86.935	-0.004362
86.94	-0.006911
86.945	-0.009394
86.95	-0.01178
86.955	-0.014029
86.96	-0.016057
86.965	-0.017794
86.97	-0.019216
86.975	-0.020326
86.98	-0.021184
86.985	-0.021882
86.99	-0.022481
86.995	-0.023045
87	-0.023624
87.005	-0.02425
87.01	-0.024939
87.015	-0.025704
87.02	-0.026546
87.025	-0.027446
87.03	-0.028415
87.035	-0.029439
87.04	-0.030446
87.045	-0.031362
87.05	-0.032127
87.055	-0.032688
87.06	-0.033054
87.065	-0.033253
87.07	-0.033327
87.075	-0.033334
87.08	-0.033296
87.085	-0.033233
87.09	-0.033189
87.095	-0.033194
87.1	-0.033281
87.105	-0.033481
87.11	-0.033763
87.115	-0.034095
87.12	-0.034473
87.125	-0.034877
87.13	-0.035323
87.135	-0.035812
87.14	-0.036274

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
87.145	-0.036627
87.15	-0.036782
87.155	-0.036654
87.16	-0.036221
87.165	-0.035486
87.17	-0.034484
87.175	-0.03327
87.18	-0.031878
87.185	-0.030347
87.19	-0.028723
87.195	-0.027051
87.2	-0.025397
87.205	-0.023826
87.21	-0.022387
87.215	-0.021109
87.22	-0.019967
87.225	-0.018916
87.23	-0.01786
87.235	-0.0167
87.24	-0.015369
87.245	-0.013807
87.25	-0.012003
87.255	-0.009963
87.26	-0.007684
87.265	-0.005183
87.27	-0.002502
87.275	0.000311
87.28	0.003172
87.285	0.005996
87.29	0.008752
87.295	0.011412
87.3	0.013957
87.305	0.016381
87.31	0.018658
87.315	0.020764
87.32	0.022701
87.325	0.024464
87.33	0.026025
87.335	0.02737
87.34	0.028476
87.345	0.029344
87.35	0.030031

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
87.355	0.030627
87.36	0.031232
87.365	0.031948
87.37	0.032864
87.375	0.034024
87.38	0.035409
87.385	0.036957
87.39	0.038552
87.395	0.040079
87.4	0.041468
87.405	0.042676
87.41	0.043722
87.415	0.044645
87.42	0.045448
87.425	0.046121
87.43	0.046629
87.435	0.046922
87.44	0.04695
87.445	0.046694
87.45	0.046143
87.455	0.045315
87.46	0.044311
87.465	0.043154
87.47	0.041875
87.475	0.040638
87.48	0.038907
87.485	0.036706
87.49	0.035179
87.495	0.033916
87.5	0.03235
87.505	0.030691
87.51	0.028944
87.515	0.027141
87.52	0.025218
87.525	0.023221
87.53	0.021233
87.535	0.01887
87.54	0.016147
87.545	0.013876
87.55	0.011949
87.555	0.009019
87.56	0.00579

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
87.565	0.002471
87.57	-0.001217
87.575	-0.004091
87.58	-0.006497
87.585	-0.008891
87.59	-0.010969
87.595	-0.012715
87.6	-0.014152
87.605	-0.015285
87.61	-0.016181
87.615	-0.016903
87.62	-0.017496
87.625	-0.018001
87.63	-0.01841
87.635	-0.018712
87.64	-0.018925
87.645	-0.01907
87.65	-0.019192
87.655	-0.019338
87.66	-0.019531
87.665	-0.019775
87.67	-0.020039
87.675	-0.020286
87.68	-0.020455
87.685	-0.020495
87.69	-0.020398
87.695	-0.020165
87.7	-0.019819
87.705	-0.019385
87.71	-0.018848
87.715	-0.0182
87.72	-0.017424
87.725	-0.016516
87.73	-0.015523
87.735	-0.014494
87.74	-0.013487
87.745	-0.012535
87.75	-0.011622
87.755	-0.010714
87.76	-0.009735
87.765	-0.008687
87.77	-0.007562

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
87.775	-0.006148
87.78	-0.004546
87.785	-0.003168
87.79	-0.001954
87.795	-0.000744
87.8	0.00027
87.805	0.001128
87.81	0.002152
87.815	0.003296
87.82	0.004197
87.825	0.005017
87.83	0.006153
87.835	0.007415
87.84	0.008628
87.845	0.009763
87.85	0.010534
87.855	0.010915
87.86	0.011064
87.865	0.010924
87.87	0.010473
87.875	0.00977
87.88	0.008893
87.885	0.007922
87.89	0.006893
87.895	0.00582
87.9	0.004662
87.905	0.003371
87.91	0.001962
87.915	0.000459
87.92	-0.001077
87.925	-0.002567
87.93	-0.003958
87.935	-0.0052
87.94	-0.006242
87.945	-0.007046
87.95	-0.007577
87.955	-0.007812
87.96	-0.007732
87.965	-0.007344
87.97	-0.006676
87.975	-0.005779
87.98	-0.00476

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
87.985	-0.003736
87.99	-0.002791
87.995	-0.001994
88	-0.00139
88.005	-0.00099
88.01	-0.00078
88.015	-0.000726
88.02	-0.000778
88.025	-0.000894
88.03	-0.001054
88.035	-0.001261
88.04	-0.001554
88.045	-0.001972
88.05	-0.002554
88.055	-0.003311
88.06	-0.004186
88.065	-0.005107
88.07	-0.00599
88.075	-0.006756
88.08	-0.007407
88.085	-0.007973
88.09	-0.008484
88.095	-0.008978
88.1	-0.00949
88.105	-0.01003
88.11	-0.010572
88.115	-0.011084
88.12	-0.011518
88.125	-0.01184
88.13	-0.012078
88.135	-0.012275
88.14	-0.012468
88.145	-0.012692
88.15	-0.012937
88.155	-0.013171
88.16	-0.013325
88.165	-0.013325
88.17	-0.013107
88.175	-0.012626
88.18	-0.011915
88.185	-0.011025
88.19	-0.010014

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
88.195	-0.008954
88.2	-0.007879
88.205	-0.006818
88.21	-0.005838
88.215	-0.005001
88.22	-0.004351
88.225	-0.003941
88.23	-0.003794
88.235	-0.00392
88.24	-0.004351
88.245	-0.005095
88.25	-0.006116
88.255	-0.007368
88.26	-0.00877
88.265	-0.010239
88.27	-0.011744
88.275	-0.013254
88.28	-0.014759
88.285	-0.016251
88.29	-0.017681
88.295	-0.019003
88.3	-0.020172
88.305	-0.021147
88.31	-0.021939
88.315	-0.022567
88.32	-0.023049
88.325	-0.023398
88.33	-0.023595
88.335	-0.023614
88.34	-0.023409
88.345	-0.022936
88.35	-0.02219
88.355	-0.021184
88.36	-0.019944
88.365	-0.018522
88.37	-0.016985
88.375	-0.015397
88.38	-0.013823
88.385	-0.012317
88.39	-0.010867
88.395	-0.00946
88.4	-0.008112

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
88.405	-0.006841
88.41	-0.005679
88.415	-0.004663
88.42	-0.003807
88.425	-0.003116
88.43	-0.002583
88.435	-0.002191
88.44	-0.001936
88.445	-0.001809
88.45	-0.001814
88.455	-0.001961
88.46	-0.002229
88.465	-0.002604
88.47	-0.003083
88.475	-0.003659
88.48	-0.004339
88.485	-0.005117
88.49	-0.005953
88.495	-0.006797
88.5	-0.007571
88.505	-0.008208
88.51	-0.008684
88.515	-0.009007
88.52	-0.00922
88.525	-0.009379
88.53	-0.009553
88.535	-0.009794
88.54	-0.010082
88.545	-0.010379
88.55	-0.010634
88.555	-0.010776
88.56	-0.010792
88.565	-0.010778
88.57	-0.010786
88.575	-0.010767
88.58	-0.010748
88.585	-0.010821
88.59	-0.010956
88.595	-0.011105
88.6	-0.011261
88.605	-0.011407
88.61	-0.011529

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
88.615	-0.011626
88.62	-0.011689
88.625	-0.01172
88.63	-0.011702
88.635	-0.011621
88.64	-0.011513
88.645	-0.011405
88.65	-0.011302
88.655	-0.011204
88.66	-0.011093
88.665	-0.010945
88.67	-0.010756
88.675	-0.010533
88.68	-0.010298
88.685	-0.01009
88.69	-0.009947
88.695	-0.009897
88.7	-0.009952
88.705	-0.010091
88.71	-0.010238
88.715	-0.01031
88.72	-0.010201
88.725	-0.009819
88.73	-0.009153
88.735	-0.008198
88.74	-0.006968
88.745	-0.005495
88.75	-0.003736
88.755	-0.001676
88.76	0.000623
88.765	0.003074
88.77	0.005526
88.775	0.007813
88.78	0.009832
88.785	0.011518
88.79	0.012847
88.795	0.013847
88.8	0.014594
88.805	0.015175
88.81	0.015683
88.815	0.0162
88.82	0.016744

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
88.825	0.017332
88.83	0.017961
88.835	0.018557
88.84	0.019099
88.845	0.019622
88.85	0.020072
88.855	0.020376
88.86	0.02052
88.865	0.020503
88.87	0.020332
88.875	0.020015
88.88	0.019538
88.885	0.018886
88.89	0.018051
88.895	0.017029
88.9	0.015841
88.905	0.014516
88.91	0.013089
88.915	0.011607
88.92	0.010077
88.925	0.008506
88.93	0.006937
88.935	0.005404
88.94	0.003939
88.945	0.002586
88.95	0.001354
88.955	0.000276
88.96	-0.000582
88.965	-0.001239
88.97	-0.001675
88.975	-0.001818
88.98	-0.001742
88.985	-0.001626
88.99	-0.001645
88.995	-0.001905
89	-0.002459
89.005	-0.003388
89.01	-0.004572
89.015	-0.005711
89.02	-0.006679
89.025	-0.007465
89.03	-0.008

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
89.035	-0.008251
89.04	-0.008285
89.045	-0.008175
89.05	-0.007965
89.055	-0.007705
89.06	-0.00743
89.065	-0.007161
89.07	-0.006893
89.075	-0.006615
89.08	-0.006329
89.085	-0.006036
89.09	-0.005732
89.095	-0.005421
89.1	-0.005108
89.105	-0.004825
89.11	-0.004599
89.115	-0.004463
89.12	-0.004535
89.125	-0.004846
89.13	-0.005292
89.135	-0.005844
89.14	-0.006486
89.145	-0.00712
89.15	-0.00766
89.155	-0.008056
89.16	-0.008271
89.165	-0.008249
89.17	-0.007965
89.175	-0.00751
89.18	-0.006892
89.185	-0.00598
89.19	-0.004786
89.195	-0.003429
89.2	-0.001942
89.205	-0.000356
89.21	0.001248
89.215	0.002796
89.22	0.004236
89.225	0.005517
89.23	0.006591
89.235	0.007423
89.24	0.008037

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
89.245	0.00847
89.25	0.008741
89.255	0.008923
89.26	0.009122
89.265	0.009372
89.27	0.009674
89.275	0.010071
89.28	0.010616
89.285	0.011313
89.29	0.012149
89.295	0.013069
89.3	0.013923
89.305	0.014634
89.31	0.015219
89.315	0.015618
89.32	0.015774
89.325	0.015747
89.33	0.015655
89.335	0.015589
89.34	0.015583
89.345	0.015653
89.35	0.015765
89.355	0.015878
89.36	0.016001
89.365	0.016131
89.37	0.016281
89.375	0.016498
89.38	0.016795
89.385	0.017163
89.39	0.017617
89.395	0.018165
89.4	0.018788
89.405	0.019416
89.41	0.01999
89.415	0.020494
89.42	0.020896
89.425	0.021138
89.43	0.021219
89.435	0.021155
89.44	0.020939
89.445	0.020582
89.45	0.02009

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
89.455	0.019465
89.46	0.01872
89.465	0.017867
89.47	0.016897
89.475	0.015803
89.48	0.014577
89.485	0.01322
89.49	0.01174
89.495	0.010161
89.5	0.008509
89.505	0.006819
89.51	0.005152
89.515	0.003566
89.52	0.002105
89.525	0.000803
89.53	-0.00032
89.535	-0.001251
89.54	-0.001976
89.545	-0.002479
89.55	-0.002744
89.555	-0.002763
89.56	-0.00254
89.565	-0.002097
89.57	-0.0015
89.575	-0.000824
89.58	-0.000137
89.585	0.000502
89.59	0.001084
89.595	0.001624
89.6	0.002145
89.605	0.002681
89.61	0.003264
89.615	0.003915
89.62	0.004631
89.625	0.005394
89.63	0.006185
89.635	0.006974
89.64	0.007748
89.645	0.008487
89.65	0.009168
89.655	0.00977
89.66	0.010248

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
89.665	0.01056
89.67	0.010702
89.675	0.010663
89.68	0.010432
89.685	0.010005
89.69	0.009343
89.695	0.008419
89.7	0.007243
89.705	0.005845
89.71	0.004299
89.715	0.002703
89.72	0.001156
89.725	-0.000257
89.73	-0.001473
89.735	-0.002474
89.74	-0.003292
89.745	-0.003985
89.75	-0.004642
89.755	-0.00534
89.76	-0.0061
89.765	-0.00692
89.77	-0.007737
89.775	-0.008483
89.78	-0.009156
89.785	-0.00978
89.79	-0.010407
89.795	-0.011107
89.8	-0.011943
89.805	-0.012957
89.81	-0.014128
89.815	-0.015394
89.82	-0.016666
89.825	-0.017831
89.83	-0.018784
89.835	-0.01945
89.84	-0.019791
89.845	-0.019818
89.85	-0.019606
89.855	-0.019258
89.86	-0.018871
89.865	-0.018537
89.87	-0.018302

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
89.875	-0.018188
89.88	-0.018183
89.885	-0.018252
89.89	-0.018353
89.895	-0.018437
89.9	-0.018453
89.905	-0.018363
89.91	-0.018133
89.915	-0.017743
89.92	-0.017231
89.925	-0.016642
89.93	-0.016007
89.935	-0.01536
89.94	-0.01472
89.945	-0.014096
89.95	-0.013513
89.955	-0.013001
89.96	-0.012578
89.965	-0.012265
89.97	-0.012073
89.975	-0.012007
89.98	-0.012041
89.985	-0.012144
89.99	-0.012286
89.995	-0.012436
90	-0.012575
90.005	-0.012689
90.01	-0.01276
90.015	-0.012778
90.02	-0.012725
90.025	-0.012596
90.03	-0.012385
90.035	-0.012099
90.04	-0.011774
90.045	-0.011444
90.05	-0.011139
90.055	-0.010876
90.06	-0.010625
90.065	-0.010349
90.07	-0.009988
90.075	-0.009492
90.08	-0.008848

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
90.085	-0.008057
90.09	-0.007155
90.095	-0.006186
90.1	-0.005161
90.105	-0.004098
90.11	-0.003005
90.115	-0.001903
90.12	-0.000847
90.125	0.0001
90.13	0.000849
90.135	0.001318
90.14	0.001472
90.145	0.001298
90.15	0.000813
90.155	0.000063
90.16	-0.000918
90.165	-0.002081
90.17	-0.003357
90.175	-0.004674
90.18	-0.005958
90.185	-0.007131
90.19	-0.008133
90.195	-0.008914
90.2	-0.009421
90.205	-0.009613
90.21	-0.009493
90.215	-0.009076
90.22	-0.008362
90.225	-0.007372
90.23	-0.006144
90.235	-0.00472
90.24	-0.003171
90.245	-0.001575
90.25	0.000031
90.255	0.001612
90.26	0.003098
90.265	0.004452
90.27	0.005656
90.275	0.006675
90.28	0.007499
90.285	0.008156
90.29	0.008698

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
90.295	0.00918
90.3	0.009624
90.305	0.010041
90.31	0.01044
90.315	0.010815
90.32	0.011135
90.325	0.011383
90.33	0.01155
90.335	0.011591
90.34	0.011427
90.345	0.011015
90.35	0.010328
90.355	0.009362
90.36	0.008145
90.365	0.006742
90.37	0.005255
90.375	0.003796
90.38	0.002463
90.385	0.001339
90.39	0.000443
90.395	-0.000218
90.4	-0.000646
90.405	-0.000874
90.41	-0.000897
90.415	-0.000684
90.42	-0.000247
90.425	0.00038
90.43	0.001157
90.435	0.00204
90.44	0.002986
90.445	0.003953
90.45	0.004913
90.455	0.005836
90.46	0.006662
90.465	0.007334
90.47	0.007803
90.475	0.008032
90.48	0.00802
90.485	0.007792
90.49	0.007389
90.495	0.006856
90.5	0.006249

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
90.505	0.005608
90.51	0.004917
90.515	0.004146
90.52	0.003255
90.525	0.002204
90.53	0.000992
90.535	-0.000362
90.54	-0.001808
90.545	-0.003278
90.55	-0.004707
90.555	-0.006026
90.56	-0.007179
90.565	-0.008119
90.57	-0.008797
90.575	-0.009176
90.58	-0.009251
90.585	-0.009028
90.59	-0.008523
90.595	-0.007761
90.6	-0.006765
90.605	-0.005561
90.61	-0.004177
90.615	-0.002645
90.62	-0.000997
90.625	0.00073
90.63	0.002487
90.635	0.004219
90.64	0.005871
90.645	0.007396
90.65	0.008731
90.655	0.009832
90.66	0.010711
90.665	0.011383
90.67	0.011868
90.675	0.012191
90.68	0.012315
90.685	0.012197
90.69	0.011822
90.695	0.011174
90.7	0.010241
90.705	0.009038
90.71	0.007583

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
90.715	0.005912
90.72	0.004087
90.725	0.002179
90.73	0.000249
90.735	-0.001647
90.74	-0.003444
90.745	-0.005092
90.75	-0.006579
90.755	-0.007902
90.76	-0.009053
90.765	-0.010036
90.77	-0.010849
90.775	-0.011488
90.78	-0.011974
90.785	-0.012332
90.79	-0.012556
90.795	-0.012648
90.8	-0.012647
90.805	-0.012593
90.81	-0.012546
90.815	-0.012572
90.82	-0.012708
90.825	-0.012986
90.83	-0.013414
90.835	-0.013988
90.84	-0.014694
90.845	-0.015515
90.85	-0.016427
90.855	-0.017418
90.86	-0.018476
90.865	-0.01961
90.87	-0.020857
90.875	-0.022243
90.88	-0.023798
90.885	-0.025522
90.89	-0.027349
90.895	-0.02919
90.9	-0.03095
90.905	-0.03253
90.91	-0.033861
90.915	-0.034896
90.92	-0.03561

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
90.925	-0.036003
90.93	-0.036072
90.935	-0.035818
90.94	-0.035245
90.945	-0.034357
90.95	-0.033134
90.955	-0.031566
90.96	-0.029654
90.965	-0.027416
90.97	-0.024902
90.975	-0.02217
90.98	-0.019283
90.985	-0.016297
90.99	-0.013221
90.995	-0.010068
91	-0.006831
91.005	-0.003509
91.01	-0.000165
91.015	0.003127
91.02	0.006314
91.025	0.009337
91.03	0.01214
91.035	0.014682
91.04	0.016922
91.045	0.018831
91.05	0.020419
91.055	0.021701
91.06	0.022687
91.065	0.023384
91.07	0.023785
91.075	0.023874
91.08	0.023621
91.085	0.023003
91.09	0.022025
91.095	0.02072
91.1	0.019149
91.105	0.017396
91.11	0.015559
91.115	0.013735
91.12	0.012013
91.125	0.010458
91.13	0.00911

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
91.135	0.007997
91.14	0.007123
91.145	0.006484
91.15	0.006113
91.155	0.006032
91.16	0.006236
91.165	0.006712
91.17	0.007404
91.175	0.008248
91.18	0.009198
91.185	0.010204
91.19	0.011231
91.195	0.01225
91.2	0.013206
91.205	0.014052
91.21	0.014746
91.215	0.015261
91.22	0.015624
91.225	0.015866
91.23	0.016037
91.235	0.016176
91.24	0.016272
91.245	0.016296
91.25	0.016207
91.255	0.015957
91.26	0.015532
91.265	0.014934
91.27	0.014186
91.275	0.013333
91.28	0.012429
91.285	0.01153
91.29	0.010694
91.295	0.00995
91.3	0.00931
91.305	0.008764
91.31	0.008252
91.315	0.00771
91.32	0.007124
91.325	0.006484
91.33	0.005797
91.335	0.005074
91.34	0.004304

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
91.345	0.003467
91.35	0.00252
91.355	0.00143
91.36	0.00018
91.365	-0.001222
91.37	-0.002714
91.375	-0.004223
91.38	-0.005661
91.385	-0.006954
91.39	-0.008091
91.395	-0.009086
91.4	-0.009989
91.405	-0.01087
91.41	-0.011768
91.415	-0.012711
91.42	-0.013717
91.425	-0.014775
91.43	-0.015869
91.435	-0.016974
91.44	-0.018034
91.445	-0.018999
91.45	-0.019831
91.455	-0.020484
91.46	-0.020947
91.465	-0.0212
91.47	-0.021183
91.475	-0.020845
91.48	-0.020135
91.485	-0.019025
91.49	-0.01757
91.495	-0.01586
91.5	-0.014015
91.505	-0.012164
91.51	-0.010406
91.515	-0.008815
91.52	-0.007404
91.525	-0.006161
91.53	-0.005076
91.535	-0.004129
91.54	-0.003318
91.545	-0.002643
91.55	-0.002112

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
91.555	-0.001729
91.56	-0.001468
91.565	-0.001289
91.57	-0.001153
91.575	-0.001014
91.58	-0.000818
91.585	-0.000528
91.59	-0.000123
91.595	0.000393
91.6	0.000973
91.605	0.001557
91.61	0.002076
91.615	0.00248
91.62	0.002763
91.625	0.002946
91.63	0.003106
91.635	0.003325
91.64	0.003647
91.645	0.004103
91.65	0.004682
91.655	0.005358
91.66	0.006142
91.665	0.007043
91.67	0.008079
91.675	0.009265
91.68	0.010581
91.685	0.011997
91.69	0.013459
91.695	0.014911
91.7	0.016322
91.705	0.017663
91.71	0.018924
91.715	0.020096
91.72	0.021144
91.725	0.022031
91.73	0.022689
91.735	0.023058
91.74	0.023107
91.745	0.022816
91.75	0.022214
91.755	0.021339
91.76	0.020206

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
91.765	0.018834
91.77	0.017213
91.775	0.015332
91.78	0.013218
91.785	0.010912
91.79	0.008464
91.795	0.005932
91.8	0.003384
91.805	0.000876
91.81	-0.001564
91.815	-0.003919
91.82	-0.006189
91.825	-0.008374
91.83	-0.010453
91.835	-0.012406
91.84	-0.014214
91.845	-0.015861
91.85	-0.017356
91.855	-0.018704
91.86	-0.019898
91.865	-0.020938
91.87	-0.021772
91.875	-0.02235
91.88	-0.022651
91.885	-0.022663
91.89	-0.022384
91.895	-0.021829
91.9	-0.021014
91.905	-0.019966
91.91	-0.018719
91.915	-0.01731
91.92	-0.015798
91.925	-0.014238
91.93	-0.012679
91.935	-0.011165
91.94	-0.009729
91.945	-0.008392
91.95	-0.007183
91.955	-0.00612
91.96	-0.005197
91.965	-0.004406
91.97	-0.003735

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
91.975	-0.003168
91.98	-0.002692
91.985	-0.002301
91.99	-0.001978
91.995	-0.001712
92	-0.001516
92.005	-0.001392
92.01	-0.00134
92.015	-0.001352
92.02	-0.001376
92.025	-0.001359
92.03	-0.001269
92.035	-0.001086
92.04	-0.000826
92.045	-0.000519
92.05	-0.000189
92.055	0.000133
92.06	0.000438
92.065	0.000724
92.07	0.000964
92.075	0.001137
92.08	0.001231
92.085	0.001234
92.09	0.001156
92.095	0.001016
92.1	0.000825
92.105	0.000607
92.11	0.000387
92.115	0.000194
92.12	0.000075
92.125	0.000077
92.13	0.000223
92.135	0.000517
92.14	0.000952
92.145	0.001502
92.15	0.002095
92.155	0.002665
92.16	0.003164
92.165	0.003558
92.17	0.003869
92.175	0.004125
92.18	0.004326

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
92.185	0.004465
92.19	0.004504
92.195	0.004399
92.2	0.004129
92.205	0.003679
92.21	0.003079
92.215	0.002373
92.22	0.001572
92.225	0.000686
92.23	-0.000268
92.235	-0.001285
92.24	-0.002354
92.245	-0.003463
92.25	-0.0046
92.255	-0.005748
92.26	-0.006898
92.265	-0.008032
92.27	-0.009128
92.275	-0.010158
92.28	-0.011075
92.285	-0.011833
92.29	-0.012401
92.295	-0.01277
92.3	-0.012938
92.305	-0.012924
92.31	-0.012785
92.315	-0.012577
92.32	-0.012327
92.325	-0.012062
92.33	-0.011771
92.335	-0.011446
92.34	-0.011108
92.345	-0.010786
92.35	-0.010513
92.355	-0.010332
92.36	-0.010247
92.365	-0.010256
92.37	-0.010367
92.375	-0.010575
92.38	-0.01086
92.385	-0.011199
92.39	-0.011573

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
92.395	-0.011965
92.4	-0.012344
92.405	-0.012684
92.41	-0.012983
92.415	-0.013238
92.42	-0.013439
92.425	-0.013581
92.43	-0.013649
92.435	-0.013634
92.44	-0.013544
92.445	-0.013394
92.45	-0.013213
92.455	-0.01303
92.46	-0.012865
92.465	-0.012724
92.47	-0.012595
92.475	-0.012453
92.48	-0.012273
92.485	-0.012032
92.49	-0.011709
92.495	-0.011291
92.5	-0.010774
92.505	-0.010158
92.51	-0.009446
92.515	-0.008641
92.52	-0.007749
92.525	-0.00678
92.53	-0.005731
92.535	-0.004607
92.54	-0.003452
92.545	-0.002315
92.55	-0.001236
92.555	-0.000254
92.56	0.000616
92.565	0.001377
92.57	0.002026
92.575	0.002577
92.58	0.003059
92.585	0.003496
92.59	0.00392
92.595	0.00436
92.6	0.004817

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
92.605	0.005289
92.61	0.005799
92.615	0.006362
92.62	0.006981
92.625	0.007653
92.63	0.008363
92.635	0.009094
92.64	0.009817
92.645	0.01051
92.65	0.011174
92.655	0.011817
92.66	0.012445
92.665	0.013071
92.67	0.013681
92.675	0.014261
92.68	0.014819
92.685	0.015363
92.69	0.015909
92.695	0.01648
92.7	0.017071
92.705	0.017669
92.71	0.018257
92.715	0.018815
92.72	0.019304
92.725	0.019698
92.73	0.020005
92.735	0.020241
92.74	0.020451
92.745	0.020676
92.75	0.020936
92.755	0.021237
92.76	0.021542
92.765	0.021799
92.77	0.021985
92.775	0.022072
92.78	0.02205
92.785	0.021915
92.79	0.021666
92.795	0.021299
92.8	0.020798
92.805	0.020155
92.81	0.019364

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
92.815	0.018428
92.82	0.0174
92.825	0.016331
92.83	0.015271
92.835	0.014263
92.84	0.013289
92.845	0.012333
92.85	0.011398
92.855	0.010492
92.86	0.009661
92.865	0.008962
92.87	0.008405
92.875	0.007998
92.88	0.007728
92.885	0.007569
92.89	0.007528
92.895	0.007614
92.9	0.007802
92.905	0.008072
92.91	0.008417
92.915	0.00882
92.92	0.009272
92.925	0.009757
92.93	0.010232
92.935	0.010651
92.94	0.010972
92.945	0.011156
92.95	0.011173
92.955	0.011013
92.96	0.010678
92.965	0.010191
92.97	0.009586
92.975	0.008914
92.98	0.008198
92.985	0.007454
92.99	0.006712
92.995	0.005992
93	0.005294
93.005	0.004621
93.01	0.003972
93.015	0.003354
93.02	0.002797

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
93.025	0.002331
93.03	0.001985
93.035	0.001777
93.04	0.001694
93.045	0.001712
93.05	0.001795
93.055	0.001906
93.06	0.00205
93.065	0.002238
93.07	0.002491
93.075	0.002836
93.08	0.003286
93.085	0.003842
93.09	0.004507
93.095	0.005267
93.1	0.006087
93.105	0.00693
93.11	0.007741
93.115	0.008481
93.12	0.009129
93.125	0.009683
93.13	0.010176
93.135	0.010648
93.14	0.011109
93.145	0.011557
93.15	0.011959
93.155	0.012273
93.16	0.012471
93.165	0.012545
93.17	0.012526
93.175	0.012459
93.18	0.012406
93.185	0.012417
93.19	0.012482
93.195	0.012583
93.2	0.012667
93.205	0.012684
93.21	0.012662
93.215	0.012649
93.22	0.012695
93.225	0.012858
93.23	0.013176

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
93.235	0.013666
93.24	0.014303
93.245	0.015056
93.25	0.015879
93.255	0.016727
93.26	0.017601
93.265	0.018496
93.27	0.019377
93.275	0.020211
93.28	0.020939
93.285	0.021498
93.29	0.02186
93.295	0.022002
93.3	0.021905
93.305	0.021576
93.31	0.021042
93.315	0.020342
93.32	0.019555
93.325	0.018753
93.33	0.017976
93.335	0.017253
93.34	0.016578
93.345	0.015922
93.35	0.015311
93.355	0.014757
93.36	0.014255
93.365	0.013801
93.37	0.013356
93.375	0.012869
93.38	0.012323
93.385	0.011696
93.39	0.010962
93.395	0.010107
93.4	0.009137
93.405	0.008066
93.41	0.006931
93.415	0.005773
93.42	0.004623
93.425	0.003505
93.43	0.002435
93.435	0.001429
93.44	0.000494

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
93.445	-0.000364
93.45	-0.001106
93.455	-0.001699
93.46	-0.002143
93.465	-0.002452
93.47	-0.002667
93.475	-0.002846
93.48	-0.003055
93.485	-0.003356
93.49	-0.003807
93.495	-0.004446
93.5	-0.005277
93.505	-0.006276
93.51	-0.007414
93.515	-0.008646
93.52	-0.009906
93.525	-0.011139
93.53	-0.012314
93.535	-0.013411
93.54	-0.014446
93.545	-0.015436
93.55	-0.016372
93.555	-0.017238
93.56	-0.018014
93.565	-0.018664
93.57	-0.019172
93.575	-0.019519
93.58	-0.019671
93.585	-0.019612
93.59	-0.019339
93.595	-0.018874
93.6	-0.018262
93.605	-0.017558
93.61	-0.016845
93.615	-0.01619
93.62	-0.015619
93.625	-0.015146
93.63	-0.01475
93.635	-0.014402
93.64	-0.014117
93.645	-0.01391
93.65	-0.013805

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
93.655	-0.013828
93.66	-0.01397
93.665	-0.014213
93.67	-0.014546
93.675	-0.014942
93.68	-0.015379
93.685	-0.01584
93.69	-0.016309
93.695	-0.016776
93.7	-0.017253
93.705	-0.017756
93.71	-0.018294
93.715	-0.018864
93.72	-0.019452
93.725	-0.020023
93.73	-0.020518
93.735	-0.020878
93.74	-0.021048
93.745	-0.020987
93.75	-0.020699
93.755	-0.020205
93.76	-0.019537
93.765	-0.018744
93.77	-0.017854
93.775	-0.0169
93.78	-0.015919
93.785	-0.014946
93.79	-0.014012
93.795	-0.013154
93.8	-0.012377
93.805	-0.011687
93.81	-0.011105
93.815	-0.010647
93.82	-0.010327
93.825	-0.010154
93.83	-0.010137
93.835	-0.010274
93.84	-0.010548
93.845	-0.010933
93.85	-0.011386
93.855	-0.011859
93.86	-0.012309

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
93.865	-0.012704
93.87	-0.013007
93.875	-0.013196
93.88	-0.013281
93.885	-0.013277
93.89	-0.013204
93.895	-0.013084
93.9	-0.012934
93.905	-0.012763
93.91	-0.012578
93.915	-0.012386
93.92	-0.012194
93.925	-0.012012
93.93	-0.011861
93.935	-0.011763
93.94	-0.01173
93.945	-0.011765
93.95	-0.011838
93.955	-0.01191
93.96	-0.011948
93.965	-0.011921
93.97	-0.011836
93.975	-0.011701
93.98	-0.011513
93.985	-0.011263
93.99	-0.010915
93.995	-0.010429
94	-0.009787
94.005	-0.008977
94.01	-0.008022
94.015	-0.00696
94.02	-0.005823
94.025	-0.004651
94.03	-0.003482
94.035	-0.002352
94.04	-0.001305
94.045	-0.000372
94.05	0.000418
94.055	0.001048
94.06	0.00154
94.065	0.001923
94.07	0.002221

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
94.075	0.002461
94.08	0.002651
94.085	0.002796
94.09	0.002914
94.095	0.003011
94.1	0.003111
94.105	0.00323
94.11	0.003347
94.115	0.003433
94.12	0.003448
94.125	0.003354
94.13	0.003139
94.135	0.002801
94.14	0.002365
94.145	0.001862
94.15	0.001291
94.155	0.000659
94.16	-0.00003
94.165	-0.000773
94.17	-0.001535
94.175	-0.002284
94.18	-0.003011
94.185	-0.003708
94.19	-0.00439
94.195	-0.005077
94.2	-0.005759
94.205	-0.006425
94.21	-0.007058
94.215	-0.007631
94.22	-0.008134
94.225	-0.008563
94.23	-0.008912
94.235	-0.009179
94.24	-0.009388
94.245	-0.009556
94.25	-0.009692
94.255	-0.009799
94.26	-0.00987
94.265	-0.009899
94.27	-0.009888
94.275	-0.009848
94.28	-0.009807

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
94.285	-0.009798
94.29	-0.009855
94.295	-0.010001
94.3	-0.010237
94.305	-0.010544
94.31	-0.01087
94.315	-0.011148
94.32	-0.011337
94.325	-0.0114
94.33	-0.011305
94.335	-0.011042
94.34	-0.010624
94.345	-0.01007
94.35	-0.009432
94.355	-0.008762
94.36	-0.008077
94.365	-0.007386
94.37	-0.006687
94.375	-0.005963
94.38	-0.005212
94.385	-0.00443
94.39	-0.003596
94.395	-0.002693
94.4	-0.001724
94.405	-0.000697
94.41	0.000382
94.415	0.001503
94.42	0.002647
94.425	0.0038
94.43	0.004961
94.435	0.006124
94.44	0.007276
94.445	0.0084
94.45	0.009455
94.455	0.010396
94.46	0.0112
94.465	0.011849
94.47	0.012327
94.475	0.012639
94.48	0.012789
94.485	0.012797
94.49	0.012697

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
94.495	0.012522
94.5	0.012302
94.505	0.012055
94.51	0.011776
94.515	0.011448
94.52	0.011042
94.525	0.010533
94.53	0.009909
94.535	0.009179
94.54	0.008402
94.545	0.007648
94.55	0.006987
94.555	0.006472
94.56	0.006111
94.565	0.005888
94.57	0.005756
94.575	0.005661
94.58	0.005571
94.585	0.005464
94.59	0.00534
94.595	0.005215
94.6	0.005095
94.605	0.004991
94.61	0.004926
94.615	0.004916
94.62	0.004968
94.625	0.005074
94.63	0.005237
94.635	0.005446
94.64	0.005658
94.645	0.005838
94.65	0.005963
94.655	0.00602
94.66	0.006041
94.665	0.006065
94.67	0.006108
94.675	0.006184
94.68	0.006285
94.685	0.006394
94.69	0.006512
94.695	0.006645
94.7	0.006808

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
94.705	0.007027
94.71	0.007335
94.715	0.007763
94.72	0.00833
94.725	0.009044
94.73	0.009904
94.735	0.010899
94.74	0.012029
94.745	0.01329
94.75	0.014668
94.755	0.016151
94.76	0.017728
94.765	0.019376
94.77	0.021094
94.775	0.022864
94.78	0.024624
94.785	0.026324
94.79	0.027902
94.795	0.029309
94.8	0.030579
94.805	0.031752
94.81	0.032836
94.815	0.033842
94.82	0.03472
94.825	0.035415
94.83	0.035908
94.835	0.036187
94.84	0.036283
94.845	0.036243
94.85	0.03608
94.855	0.035806
94.86	0.035419
94.865	0.034907
94.87	0.034285
94.875	0.033569
94.88	0.032778
94.885	0.031933
94.89	0.031059
94.895	0.030182
94.9	0.029326
94.905	0.028514
94.91	0.027763

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
94.915	0.02708
94.92	0.026474
94.925	0.025934
94.93	0.025423
94.935	0.024894
94.94	0.024276
94.945	0.023508
94.95	0.022572
94.955	0.021468
94.96	0.020231
94.965	0.018901
94.97	0.017507
94.975	0.016061
94.98	0.014548
94.985	0.012942
94.99	0.01123
94.995	0.009406
95	0.007504
95.005	0.005577
95.01	0.003669
95.015	0.001831
95.02	0.000125
95.025	-0.001402
95.03	-0.002731
95.035	-0.003853
95.04	-0.004788
95.045	-0.005564
95.05	-0.006192
95.055	-0.00668
95.06	-0.007035
95.065	-0.007255
95.07	-0.007346
95.075	-0.007311
95.08	-0.007151
95.085	-0.006861
95.09	-0.006447
95.095	-0.005904
95.1	-0.005219
95.105	-0.004386
95.11	-0.003385
95.115	-0.002216
95.12	-0.000925

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
95.125	0.000423
95.13	0.001745
95.135	0.002963
95.14	0.004022
95.145	0.004892
95.15	0.005581
95.155	0.006112
95.16	0.006499
95.165	0.006754
95.17	0.006854
95.175	0.006765
95.18	0.006473
95.185	0.005968
95.19	0.005251
95.195	0.004341
95.2	0.003268
95.205	0.002071
95.21	0.00081
95.215	-0.00046
95.22	-0.001683
95.225	-0.002813
95.23	-0.003836
95.235	-0.004741
95.24	-0.005523
95.245	-0.006184
95.25	-0.006695
95.255	-0.007025
95.26	-0.007184
95.265	-0.007187
95.27	-0.007047
95.275	-0.006784
95.28	-0.006416
95.285	-0.005961
95.29	-0.005414
95.295	-0.004766
95.3	-0.004044
95.305	-0.003264
95.31	-0.002432
95.315	-0.00156
95.32	-0.000618
95.325	0.000413
95.33	0.001511

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
95.335	0.002649
95.34	0.003766
95.345	0.004802
95.35	0.005756
95.355	0.006634
95.36	0.007467
95.365	0.008287
95.37	0.009085
95.375	0.009841
95.38	0.010513
95.385	0.011064
95.39	0.011469
95.395	0.011722
95.4	0.011864
95.405	0.011937
95.41	0.011973
95.415	0.011993
95.42	0.011969
95.425	0.011865
95.43	0.01167
95.435	0.01138
95.44	0.011013
95.445	0.010605
95.45	0.010173
95.455	0.009733
95.46	0.009298
95.465	0.008863
95.47	0.008422
95.475	0.007958
95.48	0.007438
95.485	0.006829
95.49	0.006113
95.495	0.005287
95.5	0.004369
95.505	0.00339
95.51	0.002392
95.515	0.001416
95.52	0.000491
95.525	-0.000369
95.53	-0.001164
95.535	-0.001901
95.54	-0.00261

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
95.545	-0.003285
95.55	-0.003929
95.555	-0.004552
95.56	-0.005166
95.565	-0.00579
95.57	-0.006427
95.575	-0.00708
95.58	-0.007772
95.585	-0.008521
95.59	-0.009322
95.595	-0.010168
95.6	-0.011038
95.605	-0.011913
95.61	-0.012804
95.615	-0.01373
95.62	-0.014716
95.625	-0.015787
95.63	-0.016958
95.635	-0.018229
95.64	-0.019579
95.645	-0.020975
95.65	-0.022377
95.655	-0.023746
95.66	-0.025074
95.665	-0.02636
95.67	-0.027585
95.675	-0.028735
95.68	-0.029804
95.685	-0.030781
95.69	-0.031669
95.695	-0.032468
95.7	-0.033171
95.705	-0.033765
95.71	-0.034232
95.715	-0.034552
95.72	-0.034717
95.725	-0.034725
95.73	-0.034586
95.735	-0.034324
95.74	-0.033964
95.745	-0.033542
95.75	-0.033101

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
95.755	-0.032678
95.76	-0.032309
95.765	-0.032007
95.77	-0.031755
95.775	-0.031525
95.78	-0.031264
95.785	-0.030928
95.79	-0.030495
95.795	-0.029966
95.8	-0.029365
95.805	-0.028727
95.81	-0.028107
95.815	-0.027544
95.82	-0.027031
95.825	-0.026546
95.83	-0.026044
95.835	-0.025471
95.84	-0.024812
95.845	-0.024064
95.85	-0.023227
95.855	-0.022315
95.86	-0.021358
95.865	-0.020387
95.87	-0.019428
95.875	-0.018507
95.88	-0.01762
95.885	-0.016764
95.89	-0.015937
95.895	-0.015134
95.9	-0.014357
95.905	-0.013613
95.91	-0.012893
95.915	-0.012193
95.92	-0.011501
95.925	-0.010803
95.93	-0.010087
95.935	-0.009333
95.94	-0.008514
95.945	-0.007601
95.95	-0.006554
95.955	-0.005341
95.96	-0.003952

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
95.965	-0.002404
95.97	-0.000737
95.975	0.000989
95.98	0.002687
95.985	0.004281
95.99	0.005725
95.995	0.00699
96	0.008085
96.005	0.009025
96.01	0.009824
96.015	0.010459
96.02	0.010893
96.025	0.011326
96.03	0.011688
96.035	0.0116
96.04	0.011361
96.045	0.011192
96.05	0.010847
96.055	0.010367
96.06	0.009894
96.065	0.009372
96.07	0.008769
96.075	0.008139
96.08	0.007324
96.085	0.006255
96.09	0.005252
96.095	0.004318
96.1	0.003273
96.105	0.002006
96.11	0.000553
96.115	-0.000948
96.12	-0.00251
96.125	-0.004131
96.13	-0.005691
96.135	-0.00735
96.14	-0.009126
96.145	-0.010594
96.15	-0.011817
96.155	-0.01291
96.16	-0.013829
96.165	-0.014709
96.17	-0.015528

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
96.175	-0.016184
96.18	-0.016701
96.185	-0.017061
96.19	-0.01727
96.195	-0.017388
96.2	-0.017404
96.205	-0.017372
96.21	-0.017275
96.215	-0.016947
96.22	-0.016411
96.225	-0.015718
96.23	-0.014678
96.235	-0.013454
96.24	-0.012326
96.245	-0.011136
96.25	-0.009796
96.255	-0.00841
96.26	-0.006922
96.265	-0.005348
96.27	-0.003822
96.275	-0.002343
96.28	-0.000953
96.285	0.000201
96.29	0.001167
96.295	0.001987
96.3	0.002624
96.305	0.003094
96.31	0.003429
96.315	0.003628
96.32	0.003737
96.325	0.003862
96.33	0.003915
96.335	0.003868
96.34	0.00396
96.345	0.00416
96.35	0.004301
96.355	0.004393
96.36	0.004446
96.365	0.004457
96.37	0.004437
96.375	0.004385
96.38	0.004326

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
96.385	0.00427
96.39	0.004108
96.395	0.003895
96.4	0.003822
96.405	0.003831
96.41	0.003836
96.415	0.003887
96.42	0.003964
96.425	0.004023
96.43	0.00403
96.435	0.00394
96.44	0.003763
96.445	0.003515
96.45	0.003195
96.455	0.002799
96.46	0.0023
96.465	0.001662
96.47	0.000851
96.475	-0.00016
96.48	-0.001377
96.485	-0.002804
96.49	-0.004422
96.495	-0.006203
96.5	-0.008155
96.505	-0.010271
96.51	-0.01252
96.515	-0.014869
96.52	-0.017236
96.525	-0.019538
96.53	-0.021744
96.535	-0.023825
96.54	-0.025765
96.545	-0.027549
96.55	-0.029133
96.555	-0.030473
96.56	-0.031481
96.565	-0.032085
96.57	-0.032264
96.575	-0.032018
96.58	-0.0314
96.585	-0.030493
96.59	-0.029341

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
96.595	-0.027997
96.6	-0.02653
96.605	-0.02499
96.61	-0.023422
96.615	-0.021852
96.62	-0.020285
96.625	-0.018713
96.63	-0.017123
96.635	-0.015502
96.64	-0.013869
96.645	-0.012245
96.65	-0.010667
96.655	-0.009177
96.66	-0.007781
96.665	-0.006477
96.67	-0.005293
96.675	-0.004242
96.68	-0.00331
96.685	-0.002482
96.69	-0.001717
96.695	-0.000976
96.7	-0.000247
96.705	0.000479
96.71	0.001204
96.715	0.001928
96.72	0.002683
96.725	0.003501
96.73	0.0044
96.735	0.005395
96.74	0.006468
96.745	0.007589
96.75	0.008721
96.755	0.009812
96.76	0.010817
96.765	0.011684
96.77	0.01234
96.775	0.012722
96.78	0.012778
96.785	0.012478
96.79	0.011838
96.795	0.010897
96.8	0.009716

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
96.805	0.008362
96.81	0.006874
96.815	0.005277
96.82	0.003591
96.825	0.001826
96.83	-0.000017
96.835	-0.001928
96.84	-0.003886
96.845	-0.00586
96.85	-0.007803
96.855	-0.009665
96.86	-0.011419
96.865	-0.013046
96.87	-0.014542
96.875	-0.015908
96.88	-0.017145
96.885	-0.018254
96.89	-0.019219
96.895	-0.020023
96.9	-0.02065
96.905	-0.021088
96.91	-0.021336
96.915	-0.021402
96.92	-0.021295
96.925	-0.021022
96.93	-0.020595
96.935	-0.020024
96.94	-0.019291
96.945	-0.018383
96.95	-0.017329
96.955	-0.01616
96.96	-0.014929
96.965	-0.013698
96.97	-0.012495
96.975	-0.011343
96.98	-0.010294
96.985	-0.009379
96.99	-0.008594
96.995	-0.007925
97	-0.007342
97.005	-0.006806
97.01	-0.006298

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
97.015	-0.005809
97.02	-0.005338
97.025	-0.004888
97.03	-0.004463
97.035	-0.00406
97.04	-0.003643
97.045	-0.003169
97.05	-0.002597
97.055	-0.001883
97.06	-0.001
97.065	0.000069
97.07	0.001327
97.075	0.002765
97.08	0.004369
97.085	0.006118
97.09	0.007976
97.095	0.00991
97.1	0.011887
97.105	0.013879
97.11	0.015873
97.115	0.01785
97.12	0.019793
97.125	0.021688
97.13	0.023478
97.135	0.025117
97.14	0.026587
97.145	0.027877
97.15	0.02901
97.155	0.030011
97.16	0.03085
97.165	0.031497
97.17	0.031917
97.175	0.032083
97.18	0.03201
97.185	0.031735
97.19	0.031309
97.195	0.03079
97.2	0.030226
97.205	0.029657
97.21	0.029106
97.215	0.028587
97.22	0.028107

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
97.225	0.02767
97.23	0.027272
97.235	0.026908
97.24	0.026584
97.245	0.026292
97.25	0.026018
97.255	0.025737
97.26	0.025397
97.265	0.024948
97.27	0.024357
97.275	0.023608
97.28	0.02272
97.285	0.021736
97.29	0.020716
97.295	0.019724
97.3	0.018815
97.305	0.018026
97.31	0.017368
97.315	0.016834
97.32	0.016397
97.325	0.016035
97.33	0.015738
97.335	0.015502
97.34	0.015354
97.345	0.015322
97.35	0.015391
97.355	0.015544
97.36	0.015766
97.365	0.01603
97.37	0.016293
97.375	0.016523
97.38	0.016686
97.385	0.016763
97.39	0.016776
97.395	0.016753
97.4	0.016698
97.405	0.016624
97.41	0.016513
97.415	0.016357
97.42	0.016168
97.425	0.015955
97.43	0.015737

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
97.435	0.015529
97.44	0.015286
97.445	0.014965
97.45	0.014541
97.455	0.013994
97.46	0.013352
97.465	0.012656
97.47	0.011916
97.475	0.011138
97.48	0.010311
97.485	0.009405
97.49	0.008391
97.495	0.007247
97.5	0.005968
97.505	0.004565
97.51	0.00308
97.515	0.001564
97.52	0.000044
97.525	-0.001458
97.53	-0.002937
97.535	-0.004402
97.54	-0.005869
97.545	-0.00735
97.55	-0.008874
97.555	-0.010473
97.56	-0.012113
97.565	-0.013767
97.57	-0.015475
97.575	-0.017222
97.58	-0.018922
97.585	-0.020554
97.59	-0.022182
97.595	-0.023852
97.6	-0.025523
97.605	-0.027111
97.61	-0.028556
97.615	-0.029835
97.62	-0.030919
97.625	-0.031747
97.63	-0.032266
97.635	-0.032517
97.64	-0.032532

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
97.645	-0.032197
97.65	-0.031516
97.655	-0.030686
97.66	-0.029732
97.665	-0.02859
97.67	-0.027311
97.675	-0.025899
97.68	-0.024355
97.685	-0.022756
97.69	-0.021123
97.695	-0.019433
97.7	-0.017662
97.705	-0.015836
97.71	-0.013966
97.715	-0.011956
97.72	-0.009846
97.725	-0.007862
97.73	-0.006015
97.735	-0.00421
97.74	-0.002482
97.745	-0.000842
97.75	0.000746
97.755	0.002299
97.76	0.003882
97.765	0.005511
97.77	0.007085
97.775	0.008596
97.78	0.010135
97.785	0.011689
97.79	0.013265
97.795	0.014995
97.8	0.016868
97.805	0.018717
97.81	0.020508
97.815	0.022278
97.82	0.023964
97.825	0.025514
97.83	0.026917
97.835	0.02816
97.84	0.029225
97.845	0.030109
97.85	0.030806

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
97.855	0.031311
97.86	0.031615
97.865	0.031724
97.87	0.031627
97.875	0.031321
97.88	0.030874
97.885	0.030309
97.89	0.029564
97.895	0.028651
97.9	0.027663
97.905	0.026624
97.91	0.025515
97.915	0.024332
97.92	0.023055
97.925	0.021671
97.93	0.020187
97.935	0.018623
97.94	0.017041
97.945	0.015504
97.95	0.014067
97.955	0.012778
97.96	0.011642
97.965	0.010645
97.97	0.009804
97.975	0.009123
97.98	0.008568
97.985	0.008108
97.99	0.007724
97.995	0.007394
98	0.007112
98.005	0.006879
98.01	0.006682
98.015	0.006508
98.02	0.006349
98.025	0.006192
98.03	0.006027
98.035	0.00585
98.04	0.00566
98.045	0.005464
98.05	0.005278
98.055	0.005123
98.06	0.00503

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
98.065	0.005022
98.07	0.005104
98.075	0.005271
98.08	0.005492
98.085	0.005729
98.09	0.005959
98.095	0.006162
98.1	0.00632
98.105	0.006425
98.11	0.006467
98.115	0.006444
98.12	0.006366
98.125	0.006256
98.13	0.006125
98.135	0.00599
98.14	0.005887
98.145	0.005842
98.15	0.005868
98.155	0.005978
98.16	0.006146
98.165	0.006342
98.17	0.006572
98.175	0.006844
98.18	0.007131
98.185	0.00742
98.19	0.007705
98.195	0.00798
98.2	0.008275
98.205	0.008614
98.21	0.008995
98.215	0.009404
98.22	0.009787
98.225	0.010088
98.23	0.010266
98.235	0.010293
98.24	0.010191
98.245	0.009993
98.25	0.009724
98.255	0.009409
98.26	0.009031
98.265	0.008568
98.27	0.008019

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
98.275	0.007387
98.28	0.006707
98.285	0.006018
98.29	0.005333
98.295	0.004664
98.3	0.004016
98.305	0.003385
98.31	0.002801
98.315	0.002297
98.32	0.001886
98.325	0.001582
98.33	0.001393
98.335	0.001316
98.34	0.001335
98.345	0.001433
98.35	0.001589
98.355	0.001786
98.36	0.002022
98.365	0.002302
98.37	0.002631
98.375	0.003017
98.38	0.003458
98.385	0.003947
98.39	0.004469
98.395	0.005003
98.4	0.00554
98.405	0.006081
98.41	0.00662
98.415	0.007153
98.42	0.007706
98.425	0.008298
98.43	0.008896
98.435	0.009475
98.44	0.010012
98.445	0.010481
98.45	0.010905
98.455	0.011307
98.46	0.011663
98.465	0.011953
98.47	0.012144
98.475	0.012196
98.48	0.012106

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
98.485	0.011888
98.49	0.011557
98.495	0.011151
98.5	0.010725
98.505	0.01033
98.51	0.009998
98.515	0.00975
98.52	0.009558
98.525	0.009382
98.53	0.009201
98.535	0.008995
98.54	0.008751
98.545	0.008465
98.55	0.008147
98.555	0.007803
98.56	0.007435
98.565	0.007047
98.57	0.006613
98.575	0.006113
98.58	0.005575
98.585	0.005025
98.59	0.004501
98.595	0.004039
98.6	0.003632
98.605	0.003269
98.61	0.002936
98.615	0.00262
98.62	0.002332
98.625	0.002089
98.63	0.001909
98.635	0.001805
98.64	0.001757
98.645	0.001734
98.65	0.001693
98.655	0.001591
98.66	0.001408
98.665	0.001134
98.67	0.000758
98.675	0.000289
98.68	-0.000272
98.685	-0.000925
98.69	-0.001623

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
98.695	-0.002322
98.7	-0.003022
98.705	-0.003727
98.71	-0.004433
98.715	-0.005138
98.72	-0.005846
98.725	-0.006551
98.73	-0.00722
98.735	-0.007822
98.74	-0.008325
98.745	-0.008702
98.75	-0.008963
98.755	-0.009127
98.76	-0.009189
98.765	-0.009144
98.77	-0.00898
98.775	-0.008673
98.78	-0.00822
98.785	-0.007631
98.79	-0.006904
98.795	-0.006075
98.8	-0.005202
98.805	-0.004289
98.81	-0.003384
98.815	-0.002599
98.82	-0.001943
98.825	-0.001355
98.83	-0.000824
98.835	-0.000332
98.84	0.000177
98.845	0.00074
98.85	0.001358
98.855	0.002024
98.86	0.002721
98.865	0.003412
98.87	0.004079
98.875	0.004703
98.88	0.005231
98.885	0.005622
98.89	0.005882
98.895	0.006033
98.9	0.006103

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
98.905	0.006133
98.91	0.006178
98.915	0.006275
98.92	0.006428
98.925	0.006628
98.93	0.006832
98.935	0.006985
98.94	0.007064
98.945	0.007048
98.95	0.006907
98.955	0.006638
98.96	0.006234
98.965	0.005697
98.97	0.005094
98.975	0.004491
98.98	0.003901
98.985	0.003339
98.99	0.002785
98.995	0.002212
99	0.001642
99.005	0.001097
99.01	0.000583
99.015	0.000104
99.02	-0.000368
99.025	-0.000858
99.03	-0.001391
99.035	-0.00198
99.04	-0.00259
99.045	-0.00317
99.05	-0.003684
99.055	-0.004093
99.06	-0.004377
99.065	-0.004538
99.07	-0.004584
99.075	-0.004534
99.08	-0.004424
99.085	-0.004284
99.09	-0.004123
99.095	-0.003953
99.1	-0.003767
99.105	-0.003563
99.11	-0.003375

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
99.115	-0.003234
99.12	-0.003164
99.125	-0.003185
99.13	-0.003269
99.135	-0.003376
99.14	-0.003475
99.145	-0.00353
99.15	-0.003522
99.155	-0.00345
99.16	-0.003301
99.165	-0.003075
99.17	-0.002804
99.175	-0.002516
99.18	-0.002223
99.185	-0.001928
99.19	-0.001624
99.195	-0.001297
99.2	-0.000938
99.205	-0.000545
99.21	-0.000133
99.215	0.000271
99.22	0.00062
99.225	0.000871
99.23	0.001009
99.235	0.001038
99.24	0.001001
99.245	0.000958
99.25	0.00097
99.255	0.001096
99.26	0.001346
99.265	0.001706
99.27	0.002147
99.275	0.002618
99.28	0.00306
99.285	0.003421
99.29	0.003658
99.295	0.003748
99.3	0.003697
99.305	0.00352
99.31	0.00324
99.315	0.00288
99.32	0.00243

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
99.325	0.001881
99.33	0.001229
99.335	0.000474
99.34	-0.000351
99.345	-0.001208
99.35	-0.002081
99.355	-0.002953
99.36	-0.003831
99.365	-0.004726
99.37	-0.005625
99.375	-0.006518
99.38	-0.007377
99.385	-0.008171
99.39	-0.008911
99.395	-0.009612
99.4	-0.010273
99.405	-0.010896
99.41	-0.011474
99.415	-0.012002
99.42	-0.012466
99.425	-0.012862
99.43	-0.013216
99.435	-0.013555
99.44	-0.013903
99.445	-0.014274
99.45	-0.014617
99.455	-0.014875
99.46	-0.014984
99.465	-0.014888
99.47	-0.014595
99.475	-0.014131
99.48	-0.013527
99.485	-0.012823
99.49	-0.012027
99.495	-0.011143
99.5	-0.01019
99.505	-0.009192
99.51	-0.008164
99.515	-0.007129
99.52	-0.006135
99.525	-0.005229
99.53	-0.004449

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
99.535	-0.003828
99.54	-0.003378
99.545	-0.00309
99.55	-0.002946
99.555	-0.00292
99.56	-0.002958
99.565	-0.003018
99.57	-0.003104
99.575	-0.003218
99.58	-0.003395
99.585	-0.003672
99.59	-0.004
99.595	-0.004331
99.6	-0.004658
99.605	-0.004967
99.61	-0.005276
99.615	-0.005613
99.62	-0.005967
99.625	-0.006329
99.63	-0.006691
99.635	-0.007043
99.64	-0.007383
99.645	-0.007713
99.65	-0.008037
99.655	-0.00836
99.66	-0.008692
99.665	-0.009042
99.67	-0.009416
99.675	-0.00982
99.68	-0.010254
99.685	-0.010713
99.69	-0.011194
99.695	-0.011692
99.7	-0.012181
99.705	-0.012634
99.71	-0.013043
99.715	-0.013395
99.72	-0.013685
99.725	-0.01391
99.73	-0.014058
99.735	-0.01412
99.74	-0.014102

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
99.745	-0.014014
99.75	-0.013895
99.755	-0.013789
99.76	-0.013712
99.765	-0.013682
99.77	-0.013699
99.775	-0.01376
99.78	-0.013877
99.785	-0.014058
99.79	-0.014322
99.795	-0.014677
99.8	-0.01508
99.805	-0.01548
99.81	-0.015814
99.815	-0.016022
99.82	-0.01609
99.825	-0.016016
99.83	-0.015809
99.835	-0.015489
99.84	-0.015062
99.845	-0.014538
99.85	-0.013944
99.855	-0.0133
99.86	-0.012654
99.865	-0.012042
99.87	-0.011477
99.875	-0.01096
99.88	-0.010483
99.885	-0.010024
99.89	-0.00957
99.895	-0.009104
99.9	-0.008605
99.905	-0.008058
99.91	-0.007455
99.915	-0.00679
99.92	-0.006078
99.925	-0.005339
99.93	-0.004577
99.935	-0.0038
99.94	-0.003015
99.945	-0.002221
99.95	-0.001419

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
99.955	-0.000605
99.96	0.000232
99.965	0.001098
99.97	0.001993
99.975	0.002906
99.98	0.003804
99.985	0.004654
99.99	0.005426
99.995	0.006097
100	0.006676
100.005	0.00718
100.01	0.007639
100.015	0.00809
100.02	0.00854
100.025	0.008993
100.03	0.009462
100.035	0.009951
100.04	0.010444
100.045	0.010929
100.05	0.011375
100.055	0.011751
100.06	0.012059
100.065	0.012287
100.07	0.012404
100.075	0.012376
100.08	0.012134
100.085	0.011622
100.09	0.010836
100.095	0.009791
100.1	0.008575
100.105	0.00729
100.11	0.00599
100.115	0.004722
100.12	0.003501
100.125	0.00233
100.13	0.001233
100.135	0.000234
100.14	-0.000623
100.145	-0.001295
100.15	-0.001766
100.155	-0.002026
100.16	-0.002096

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
100.165	-0.002009
100.17	-0.001767
100.175	-0.001379
100.18	-0.000886
100.185	-0.000326
100.19	0.000255
100.195	0.000816
100.2	0.00133
100.205	0.001787
100.21	0.002198
100.215	0.00259
100.22	0.002991
100.225	0.00342
100.23	0.003895
100.235	0.004419
100.24	0.004932
100.245	0.005391
100.25	0.005805
100.255	0.006139
100.26	0.006359
100.265	0.006478
100.27	0.006502
100.275	0.006432
100.28	0.006279
100.285	0.006054
100.29	0.005765
100.295	0.005419
100.3	0.005032
100.305	0.004616
100.31	0.00417
100.315	0.003695
100.32	0.003203
100.325	0.002711
100.33	0.002251
100.335	0.001857
100.34	0.001567
100.345	0.001407
100.35	0.001386
100.355	0.0015
100.36	0.00172
100.365	0.002006
100.37	0.002331

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
100.375	0.002669
100.38	0.002997
100.385	0.003301
100.39	0.003584
100.395	0.003852
100.4	0.004101
100.405	0.004323
100.41	0.004498
100.415	0.004607
100.42	0.004629
100.425	0.00455
100.43	0.004386
100.435	0.004157
100.44	0.00389
100.445	0.003615
100.45	0.003331
100.455	0.003036
100.46	0.00273
100.465	0.002407
100.47	0.002072
100.475	0.001732
100.48	0.001397
100.485	0.001078
100.49	0.000787
100.495	0.000536
100.5	0.000329
100.505	0.000173
100.51	0.00008
100.515	0.000043
100.52	0.000062
100.525	0.000156
100.53	0.00031
100.535	0.000495
100.54	0.000702
100.545	0.000928
100.55	0.001168
100.555	0.001424
100.56	0.00172
100.565	0.002068
100.57	0.00246
100.575	0.002883
100.58	0.003299

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
100.585	0.003671
100.59	0.004006
100.595	0.004316
100.6	0.004614
100.605	0.004917
100.61	0.005219
100.615	0.005511
100.62	0.005786
100.625	0.006024
100.63	0.006226
100.635	0.006389
100.64	0.006491
100.645	0.006528
100.65	0.006518
100.655	0.006456
100.66	0.006323
100.665	0.00612
100.67	0.005876
100.675	0.005614
100.68	0.005338
100.685	0.005061
100.69	0.004781
100.695	0.004493
100.7	0.004234
100.705	0.004043
100.71	0.003924
100.715	0.00388
100.72	0.003926
100.725	0.00406
100.73	0.004276
100.735	0.004539
100.74	0.004794
100.745	0.005012
100.75	0.005162
100.755	0.005205
100.76	0.005156
100.765	0.005045
100.77	0.004862
100.775	0.004601
100.78	0.004273
100.785	0.003878
100.79	0.003416

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
100.795	0.00289
100.8	0.002297
100.805	0.001642
100.81	0.000938
100.815	0.000203
100.82	-0.000518
100.825	-0.001182
100.83	-0.001778
100.835	-0.002298
100.84	-0.002751
100.845	-0.003156
100.85	-0.003507
100.855	-0.003806
100.86	-0.004047
100.865	-0.004222
100.87	-0.004348
100.875	-0.004445
100.88	-0.004494
100.885	-0.00448
100.89	-0.004392
100.895	-0.004217
100.9	-0.003948
100.905	-0.003583
100.91	-0.003117
100.915	-0.002554
100.92	-0.001892
100.925	-0.001136
100.93	-0.00032
100.935	0.000523
100.94	0.001355
100.945	0.002136
100.95	0.002859
100.955	0.00352
100.96	0.004091
100.965	0.004554
100.97	0.004904
100.975	0.005137
100.98	0.005264
100.985	0.005299
100.99	0.005253
100.995	0.005138
101	0.004962

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
101.005	0.004736
101.01	0.004474
101.015	0.004191
101.02	0.003908
101.025	0.003652
101.03	0.00342
101.035	0.003208
101.04	0.003041
101.045	0.002938
101.05	0.002905
101.055	0.002948
101.06	0.003042
101.065	0.003155
101.07	0.003283
101.075	0.003421
101.08	0.003542
101.085	0.003632
101.09	0.003685
101.095	0.003697
101.1	0.003681
101.105	0.003649
101.11	0.003598
101.115	0.00353
101.12	0.003427
101.125	0.003279
101.13	0.00312
101.135	0.002986
101.14	0.002913
101.145	0.002934
101.15	0.003039
101.155	0.003203
101.16	0.003403
101.165	0.003604
101.17	0.003778
101.175	0.003908
101.18	0.003977
101.185	0.003973
101.19	0.003898
101.195	0.003747
101.2	0.003489
101.205	0.003098
101.21	0.002551

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
101.215	0.001835
101.22	0.00098
101.225	0.000035
101.23	-0.000952
101.235	-0.001932
101.24	-0.002858
101.245	-0.003697
101.25	-0.004458
101.255	-0.005155
101.26	-0.005799
101.265	-0.006399
101.27	-0.006933
101.275	-0.00737
101.28	-0.007681
101.285	-0.007839
101.29	-0.007828
101.295	-0.007648
101.3	-0.007327
101.305	-0.006902
101.31	-0.006403
101.315	-0.005859
101.32	-0.005271
101.325	-0.00463
101.33	-0.003932
101.335	-0.003169
101.34	-0.002347
101.345	-0.001482
101.35	-0.000595
101.355	0.000289
101.36	0.001143
101.365	0.001945
101.37	0.002698
101.375	0.003406
101.38	0.004065
101.385	0.004671
101.39	0.0052
101.395	0.005628
101.4	0.005946
101.405	0.006156
101.41	0.006271
101.415	0.006314
101.42	0.006316

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
101.425	0.006306
101.43	0.00629
101.435	0.006271
101.44	0.006232
101.445	0.006159
101.45	0.006079
101.455	0.006031
101.46	0.006034
101.465	0.006101
101.47	0.006245
101.475	0.006465
101.48	0.006704
101.485	0.006907
101.49	0.007056
101.495	0.007138
101.5	0.007177
101.505	0.007203
101.51	0.007221
101.515	0.007236
101.52	0.007241
101.525	0.007223
101.53	0.007196
101.535	0.007174
101.54	0.007163
101.545	0.007171
101.55	0.007185
101.555	0.007183
101.56	0.007138
101.565	0.007022
101.57	0.006812
101.575	0.006498
101.58	0.006091
101.585	0.005607
101.59	0.005075
101.595	0.004523
101.6	0.003944
101.605	0.003331
101.61	0.002678
101.615	0.001977
101.62	0.001259
101.625	0.000554
101.63	-0.000127

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
101.635	-0.000779
101.64	-0.001398
101.645	-0.001979
101.65	-0.00253
101.655	-0.003056
101.66	-0.003518
101.665	-0.003892
101.67	-0.004167
101.675	-0.004335
101.68	-0.004455
101.685	-0.004584
101.69	-0.004728
101.695	-0.004896
101.7	-0.005052
101.705	-0.005156
101.71	-0.005232
101.715	-0.0053
101.72	-0.005369
101.725	-0.005451
101.73	-0.005516
101.735	-0.00553
101.74	-0.005489
101.745	-0.005394
101.75	-0.005265
101.755	-0.005132
101.76	-0.005029
101.765	-0.004991
101.77	-0.005034
101.775	-0.005166
101.78	-0.005416
101.785	-0.005812
101.79	-0.006353
101.795	-0.007032
101.8	-0.007863
101.805	-0.008847
101.81	-0.009957
101.815	-0.011162
101.82	-0.012409
101.825	-0.013639
101.83	-0.01482
101.835	-0.015924
101.84	-0.016919

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
101.845	-0.017785
101.85	-0.018498
101.855	-0.019046
101.86	-0.019453
101.865	-0.019755
101.87	-0.019991
101.875	-0.020203
101.88	-0.020422
101.885	-0.020668
101.89	-0.020946
101.895	-0.021253
101.9	-0.021588
101.905	-0.021946
101.91	-0.022332
101.915	-0.022754
101.92	-0.023209
101.925	-0.023693
101.93	-0.024206
101.935	-0.024738
101.94	-0.02527
101.945	-0.025784
101.95	-0.026253
101.955	-0.026649
101.96	-0.026966
101.965	-0.027203
101.97	-0.027341
101.975	-0.027369
101.98	-0.027284
101.985	-0.027088
101.99	-0.026802
101.995	-0.02645
102	-0.026035
102.005	-0.025558
102.01	-0.025006
102.015	-0.024363
102.02	-0.023618
102.025	-0.022759
102.03	-0.021792
102.035	-0.020725
102.04	-0.019572
102.045	-0.018353
102.05	-0.017113

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
102.055	-0.015894
102.06	-0.014736
102.065	-0.013671
102.07	-0.012721
102.075	-0.011888
102.08	-0.011165
102.085	-0.010528
102.09	-0.009936
102.095	-0.009348
102.1	-0.008734
102.105	-0.008071
102.11	-0.007347
102.115	-0.00656
102.12	-0.00571
102.125	-0.004805
102.13	-0.003866
102.135	-0.002911
102.14	-0.001963
102.145	-0.001047
102.15	-0.000152
102.155	0.000734
102.16	0.001601
102.165	0.002443
102.17	0.003249
102.175	0.004004
102.18	0.004704
102.185	0.005353
102.19	0.00595
102.195	0.0065
102.2	0.007016
102.205	0.007514
102.21	0.00801
102.215	0.008515
102.22	0.009035
102.225	0.009565
102.23	0.010085
102.235	0.010568
102.24	0.010975
102.245	0.011269
102.25	0.011422
102.255	0.011421
102.26	0.011266

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
102.265	0.010966
102.27	0.010556
102.275	0.010064
102.28	0.009503
102.285	0.008874
102.29	0.00816
102.295	0.007339
102.3	0.006402
102.305	0.005341
102.31	0.004172
102.315	0.002924
102.32	0.0016
102.325	0.00022
102.33	-0.001173
102.335	-0.002542
102.34	-0.00382
102.345	-0.004947
102.35	-0.005926
102.355	-0.00677
102.36	-0.007494
102.365	-0.008122
102.37	-0.008661
102.375	-0.009106
102.38	-0.009454
102.385	-0.009701
102.39	-0.009837
102.395	-0.009862
102.4	-0.009791
102.405	-0.009646
102.41	-0.009448
102.415	-0.009209
102.42	-0.008939
102.425	-0.008645
102.43	-0.008292
102.435	-0.007847
102.44	-0.007308
102.445	-0.006672
102.45	-0.005945
102.455	-0.005137
102.46	-0.004243
102.465	-0.003259
102.47	-0.00218

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
102.475	-0.001009
102.48	0.00023
102.485	0.001513
102.49	0.0028
102.495	0.004048
102.5	0.005254
102.505	0.006415
102.51	0.007507
102.515	0.008519
102.52	0.009429
102.525	0.01022
102.53	0.010925
102.535	0.011577
102.54	0.012184
102.545	0.01276
102.55	0.013297
102.555	0.013783
102.56	0.014227
102.565	0.014646
102.57	0.015055
102.575	0.015471
102.58	0.015922
102.585	0.01642
102.59	0.016954
102.595	0.017508
102.6	0.018039
102.605	0.0185
102.61	0.018872
102.615	0.019136
102.62	0.019282
102.625	0.01931
102.63	0.019212
102.635	0.018984
102.64	0.018629
102.645	0.018159
102.65	0.017593
102.655	0.01696
102.66	0.016302
102.665	0.015655
102.67	0.015047
102.675	0.01449
102.68	0.01395

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
102.685	0.01339
102.69	0.01279
102.695	0.012141
102.7	0.011468
102.705	0.010804
102.71	0.010183
102.715	0.009638
102.72	0.009158
102.725	0.008726
102.73	0.008333
102.735	0.007968
102.74	0.007638
102.745	0.007354
102.75	0.007139
102.755	0.007012
102.76	0.006967
102.765	0.006999
102.77	0.007082
102.775	0.007192
102.78	0.007354
102.785	0.007591
102.79	0.007909
102.795	0.00831
102.8	0.00877
102.805	0.009258
102.81	0.00976
102.815	0.010261
102.82	0.010751
102.825	0.011228
102.83	0.01167
102.835	0.012054
102.84	0.012382
102.845	0.012657
102.85	0.012875
102.855	0.013044
102.86	0.013181
102.865	0.013297
102.87	0.013419
102.875	0.013565
102.88	0.013722
102.885	0.013872
102.89	0.013968

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
102.895	0.01397
102.9	0.013862
102.905	0.013641
102.91	0.013334
102.915	0.012984
102.92	0.012613
102.925	0.01225
102.93	0.011926
102.935	0.011667
102.94	0.011487
102.945	0.01139
102.95	0.011366
102.955	0.011397
102.96	0.011455
102.965	0.011515
102.97	0.011577
102.975	0.011645
102.98	0.011736
102.985	0.011875
102.99	0.012053
102.995	0.01226
103	0.01248
103.005	0.012692
103.01	0.012893
103.015	0.013084
103.02	0.013249
103.025	0.013376
103.03	0.013456
103.035	0.013482
103.04	0.013436
103.045	0.013306
103.05	0.013069
103.055	0.012703
103.06	0.012196
103.065	0.011539
103.07	0.010733
103.075	0.009782
103.08	0.008707
103.085	0.007536
103.09	0.006282
103.095	0.004965
103.1	0.003611

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
103.105	0.002245
103.11	0.000908
103.115	-0.000357
103.12	-0.001526
103.125	-0.002579
103.13	-0.003499
103.135	-0.004278
103.14	-0.004911
103.145	-0.005403
103.15	-0.005777
103.155	-0.006059
103.16	-0.006269
103.165	-0.006417
103.17	-0.0065
103.175	-0.00651
103.18	-0.006416
103.185	-0.006199
103.19	-0.005876
103.195	-0.005476
103.2	-0.005049
103.205	-0.004649
103.21	-0.004302
103.215	-0.004024
103.22	-0.003812
103.225	-0.003656
103.23	-0.00356
103.235	-0.003533
103.24	-0.003592
103.245	-0.003763
103.25	-0.004073
103.255	-0.004547
103.26	-0.005214
103.265	-0.006089
103.27	-0.007153
103.275	-0.008369
103.28	-0.00967
103.285	-0.010979
103.29	-0.012223
103.295	-0.013342
103.3	-0.014319
103.305	-0.015146
103.31	-0.01585

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
103.315	-0.016458
103.32	-0.016955
103.325	-0.017319
103.33	-0.017527
103.335	-0.01756
103.34	-0.017413
103.345	-0.017095
103.35	-0.01665
103.355	-0.016125
103.36	-0.015517
103.365	-0.014823
103.37	-0.014015
103.375	-0.01306
103.38	-0.011974
103.385	-0.010788
103.39	-0.009519
103.395	-0.008204
103.4	-0.006892
103.405	-0.005628
103.41	-0.004443
103.415	-0.003366
103.42	-0.002408
103.425	-0.001579
103.43	-0.000909
103.435	-0.000419
103.44	-0.00014
103.445	-0.000089
103.45	-0.000227
103.455	-0.000505
103.46	-0.000887
103.465	-0.001329
103.47	-0.001815
103.475	-0.002339
103.48	-0.002868
103.485	-0.003376
103.49	-0.003842
103.495	-0.004248
103.5	-0.004584
103.505	-0.004852
103.51	-0.005053
103.515	-0.005199
103.52	-0.005307

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
103.525	-0.005401
103.53	-0.005501
103.535	-0.005618
103.54	-0.005783
103.545	-0.006016
103.55	-0.006286
103.555	-0.006564
103.56	-0.006831
103.565	-0.00706
103.57	-0.007263
103.575	-0.007457
103.58	-0.007619
103.585	-0.007734
103.59	-0.007791
103.595	-0.007781
103.6	-0.007727
103.605	-0.00766
103.61	-0.0076
103.615	-0.00757
103.62	-0.007582
103.625	-0.00764
103.63	-0.00775
103.635	-0.007904
103.64	-0.008096
103.645	-0.008307
103.65	-0.008479
103.655	-0.008557
103.66	-0.0085
103.665	-0.008276
103.67	-0.007915
103.675	-0.007457
103.68	-0.006923
103.685	-0.006331
103.69	-0.005668
103.695	-0.00491
103.7	-0.004057
103.705	-0.003115
103.71	-0.002117
103.715	-0.001113
103.72	-0.000155
103.725	0.000705
103.73	0.001437

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
103.735	0.002029
103.74	0.002506
103.745	0.002903
103.75	0.003271
103.755	0.003655
103.76	0.004068
103.765	0.00451
103.77	0.004957
103.775	0.005375
103.78	0.005761
103.785	0.006117
103.79	0.006443
103.795	0.006745
103.8	0.007035
103.805	0.007317
103.81	0.007585
103.815	0.007823
103.82	0.008001
103.825	0.008094
103.83	0.008082
103.835	0.007954
103.84	0.007733
103.845	0.007445
103.85	0.007101
103.855	0.006711
103.86	0.006258
103.865	0.005721
103.87	0.005092
103.875	0.004376
103.88	0.003591
103.885	0.00277
103.89	0.001969
103.895	0.00124
103.9	0.000605
103.905	0.000076
103.91	-0.000359
103.915	-0.000721
103.92	-0.001007
103.925	-0.001215
103.93	-0.001361
103.935	-0.001456
103.94	-0.001532

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
103.945	-0.001618
103.95	-0.001731
103.955	-0.001884
103.96	-0.002086
103.965	-0.002342
103.97	-0.002659
103.975	-0.00304
103.98	-0.003488
103.985	-0.004002
103.99	-0.004565
103.995	-0.005154
104	-0.005751
104.005	-0.006338
104.01	-0.006884
104.015	-0.007371
104.02	-0.007791
104.025	-0.008141
104.03	-0.008429
104.035	-0.008664
104.04	-0.00882
104.045	-0.00887
104.05	-0.008787
104.055	-0.00855
104.06	-0.008161
104.065	-0.007632
104.07	-0.006979
104.075	-0.006226
104.08	-0.005385
104.085	-0.004464
104.09	-0.003474
104.095	-0.00243
104.1	-0.001321
104.105	-0.000147
104.11	0.001057
104.115	0.002258
104.12	0.003428
104.125	0.004534
104.13	0.005589
104.135	0.00661
104.14	0.007584
104.145	0.008498
104.15	0.009333

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
104.155	0.010063
104.16	0.010662
104.165	0.01111
104.17	0.011403
104.175	0.011537
104.18	0.011545
104.185	0.011457
104.19	0.011268
104.195	0.010973
104.2	0.010558
104.205	0.010004
104.21	0.009317
104.215	0.008499
104.22	0.007555
104.225	0.006495
104.23	0.005308
104.235	0.003997
104.24	0.002595
104.245	0.001146
104.25	-0.000276
104.255	-0.001596
104.26	-0.002781
104.265	-0.003816
104.27	-0.004712
104.275	-0.005496
104.28	-0.006196
104.285	-0.006834
104.29	-0.007404
104.295	-0.00789
104.3	-0.008271
104.305	-0.008529
104.31	-0.008675
104.315	-0.008735
104.32	-0.008749
104.325	-0.008761
104.33	-0.008801
104.335	-0.00889
104.34	-0.009022
104.345	-0.009181
104.35	-0.009349
104.355	-0.009513
104.36	-0.009672

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
104.365	-0.009834
104.37	-0.01002
104.375	-0.01025
104.38	-0.010534
104.385	-0.010877
104.39	-0.011244
104.395	-0.011602
104.4	-0.011926
104.405	-0.012194
104.41	-0.012404
104.415	-0.012561
104.42	-0.012663
104.425	-0.012711
104.43	-0.012698
104.435	-0.012624
104.44	-0.012494
104.445	-0.012315
104.45	-0.012122
104.455	-0.011943
104.46	-0.011786
104.465	-0.011649
104.47	-0.011517
104.475	-0.011367
104.48	-0.01119
104.485	-0.010991
104.49	-0.010773
104.495	-0.010542
104.5	-0.010327
104.505	-0.010148
104.51	-0.009988
104.515	-0.009824
104.52	-0.009634
104.525	-0.00939
104.53	-0.009096
104.535	-0.008766
104.54	-0.008417
104.545	-0.008072
104.55	-0.007756
104.555	-0.007483
104.56	-0.007254
104.565	-0.007066
104.57	-0.006899

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
104.575	-0.006727
104.58	-0.006559
104.585	-0.006398
104.59	-0.006242
104.595	-0.006093
104.6	-0.005939
104.605	-0.005766
104.61	-0.005586
104.615	-0.005407
104.62	-0.005221
104.625	-0.005021
104.63	-0.004782
104.635	-0.004482
104.64	-0.004117
104.645	-0.003691
104.65	-0.003235
104.655	-0.002783
104.66	-0.002366
104.665	-0.002012
104.67	-0.001736
104.675	-0.001541
104.68	-0.001442
104.685	-0.001448
104.69	-0.001546
104.695	-0.001722
104.7	-0.001963
104.705	-0.002252
104.71	-0.002581
104.715	-0.002946
104.72	-0.003341
104.725	-0.003759
104.73	-0.004193
104.735	-0.004628
104.74	-0.005052
104.745	-0.005452
104.75	-0.005806
104.755	-0.0061
104.76	-0.006333
104.765	-0.006513
104.77	-0.006648
104.775	-0.006754
104.78	-0.006848

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
104.785	-0.006941
104.79	-0.007067
104.795	-0.007248
104.8	-0.007479
104.805	-0.007759
104.81	-0.008062
104.815	-0.00836
104.82	-0.008669
104.825	-0.008998
104.83	-0.009344
104.835	-0.009704
104.84	-0.01002
104.845	-0.010233
104.85	-0.010327
104.855	-0.010294
104.86	-0.010141
104.865	-0.009889
104.87	-0.009552
104.875	-0.009135
104.88	-0.008652
104.885	-0.008116
104.89	-0.007515
104.895	-0.006844
104.9	-0.00613
104.905	-0.005393
104.91	-0.00466
104.915	-0.00395
104.92	-0.003236
104.925	-0.002486
104.93	-0.001665
104.935	-0.000745
104.94	0.000263
104.945	0.001329
104.95	0.002422
104.955	0.003501
104.96	0.004531
104.965	0.005484
104.97	0.006349
104.975	0.007133
104.98	0.007836
104.985	0.008473
104.99	0.009064

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
104.995	0.009618
105	0.010146
105.005	0.010643
105.01	0.011047
105.015	0.011307
105.02	0.011394
105.025	0.011295
105.03	0.01107
105.035	0.010793
105.04	0.010491
105.045	0.01019
105.05	0.00989
105.055	0.009573
105.06	0.009235
105.065	0.008877
105.07	0.008492
105.075	0.008081
105.08	0.007658
105.085	0.007239
105.09	0.006813
105.095	0.006368
105.1	0.005899
105.105	0.005399
105.11	0.004851
105.115	0.004246
105.12	0.0036
105.125	0.002925
105.13	0.002247
105.135	0.001588
105.14	0.000922
105.145	0.000223
105.15	-0.000521
105.155	-0.001321
105.16	-0.002157
105.165	-0.003001
105.17	-0.003831
105.175	-0.004629
105.18	-0.005381
105.185	-0.006071
105.19	-0.006711
105.195	-0.00731
105.2	-0.007842

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
105.205	-0.008284
105.21	-0.008637
105.215	-0.008903
105.22	-0.009114
105.225	-0.009309
105.23	-0.009509
105.235	-0.009733
105.24	-0.009977
105.245	-0.01022
105.25	-0.010458
105.255	-0.010669
105.26	-0.010815
105.265	-0.010874
105.27	-0.010806
105.275	-0.010586
105.28	-0.010283
105.285	-0.009964
105.29	-0.00965
105.295	-0.009359
105.3	-0.009061
105.305	-0.008714
105.31	-0.008306
105.315	-0.007834
105.32	-0.0073
105.325	-0.006718
105.33	-0.006104
105.335	-0.005465
105.34	-0.004788
105.345	-0.004055
105.35	-0.003245
105.355	-0.002335
105.36	-0.00133
105.365	-0.000245
105.37	0.000909
105.375	0.002111
105.38	0.003326
105.385	0.004519
105.39	0.005654
105.395	0.006701
105.4	0.00764
105.405	0.008459
105.41	0.009151

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
105.415	0.00972
105.42	0.010186
105.425	0.010571
105.43	0.010892
105.435	0.01116
105.44	0.011377
105.445	0.011527
105.45	0.011597
105.455	0.011575
105.46	0.011443
105.465	0.011195
105.47	0.010864
105.475	0.010491
105.48	0.010094
105.485	0.009694
105.49	0.009282
105.495	0.008841
105.5	0.008356
105.505	0.007812
105.51	0.0072
105.515	0.00652
105.52	0.00578
105.525	0.004996
105.53	0.004168
105.535	0.003298
105.54	0.002395
105.545	0.001466
105.55	0.000515
105.555	-0.000452
105.56	-0.001414
105.565	-0.002352
105.57	-0.003247
105.575	-0.004085
105.58	-0.004874
105.585	-0.005631
105.59	-0.006361
105.595	-0.007071
105.6	-0.007768
105.605	-0.008448
105.61	-0.009109
105.615	-0.009739
105.62	-0.010304

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
105.625	-0.010779
105.63	-0.01112
105.635	-0.011294
105.64	-0.011318
105.645	-0.01121
105.65	-0.010974
105.655	-0.010613
105.66	-0.01011
105.665	-0.009443
105.67	-0.008617
105.675	-0.007647
105.68	-0.006571
105.685	-0.005434
105.69	-0.00429
105.695	-0.003183
105.7	-0.002124
105.705	-0.001108
105.71	-0.000128
105.715	0.000826
105.72	0.001741
105.725	0.002597
105.73	0.003359
105.735	0.003997
105.74	0.00449
105.745	0.00483
105.75	0.00504
105.755	0.005155
105.76	0.005206
105.765	0.005225
105.77	0.005238
105.775	0.00526
105.78	0.005287
105.785	0.005312
105.79	0.005311
105.795	0.005262
105.8	0.005172
105.805	0.005051
105.81	0.004903
105.815	0.004742
105.82	0.004563
105.825	0.004367
105.83	0.004168

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
105.835	0.003986
105.84	0.003838
105.845	0.003734
105.85	0.003681
105.855	0.003678
105.86	0.003678
105.865	0.003634
105.87	0.003531
105.875	0.003354
105.88	0.003108
105.885	0.002806
105.89	0.00243
105.895	0.001968
105.9	0.001427
105.905	0.000818
105.91	0.000176
105.915	-0.000464
105.92	-0.001076
105.925	-0.001647
105.93	-0.002191
105.935	-0.002735
105.94	-0.003306
105.945	-0.003927
105.95	-0.004591
105.955	-0.00528
105.96	-0.005949
105.965	-0.006556
105.97	-0.007063
105.975	-0.007446
105.98	-0.007719
105.985	-0.007912
105.99	-0.008051
105.995	-0.008162
106	-0.008263
106.005	-0.008357
106.01	-0.008456
106.015	-0.008563
106.02	-0.008674
106.025	-0.008785
106.03	-0.00889
106.035	-0.008988
106.04	-0.009067

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
106.045	-0.009122
106.05	-0.009158
106.055	-0.009182
106.06	-0.009208
106.065	-0.009245
106.07	-0.00929
106.075	-0.00933
106.08	-0.009336
106.085	-0.009279
106.09	-0.009133
106.095	-0.008886
106.1	-0.008577
106.105	-0.008253
106.11	-0.007976
106.115	-0.007798
106.12	-0.007718
106.125	-0.007715
106.13	-0.007749
106.135	-0.007771
106.14	-0.007744
106.145	-0.007648
106.15	-0.007485
106.155	-0.007268
106.16	-0.007016
106.165	-0.006745
106.17	-0.006453
106.175	-0.006126
106.18	-0.005758
106.185	-0.005338
106.19	-0.004852
106.195	-0.0043
106.2	-0.003705
106.205	-0.003097
106.21	-0.002515
106.215	-0.001992
106.22	-0.001536
106.225	-0.001142
106.23	-0.000787
106.235	-0.000445
106.24	-0.000107
106.245	0.00023
106.25	0.000552

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
106.255	0.000836
106.26	0.001086
106.265	0.001302
106.27	0.001483
106.275	0.001638
106.28	0.001761
106.285	0.001856
106.29	0.001966
106.295	0.00213
106.3	0.002385
106.305	0.002757
106.31	0.003236
106.315	0.003796
106.32	0.004398
106.325	0.005004
106.33	0.005602
106.335	0.006183
106.34	0.006752
106.345	0.007314
106.35	0.007824
106.355	0.008236
106.36	0.008527
106.365	0.008681
106.37	0.008713
106.375	0.008655
106.38	0.008528
106.385	0.008354
106.39	0.008161
106.395	0.007961
106.4	0.007757
106.405	0.007541
106.41	0.007278
106.415	0.006933
106.42	0.006505
106.425	0.005999
106.43	0.005444
106.435	0.004871
106.44	0.004302
106.445	0.003755
106.45	0.003222
106.455	0.00269
106.46	0.002162

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
106.465	0.001637
106.47	0.001112
106.475	0.000586
106.48	0.000044
106.485	-0.00052
106.49	-0.0011
106.495	-0.001685
106.5	-0.002243
106.505	-0.002741
106.51	-0.003171
106.515	-0.003528
106.52	-0.003841
106.525	-0.004138
106.53	-0.00442
106.535	-0.004686
106.54	-0.004916
106.545	-0.005083
106.55	-0.005175
106.555	-0.005188
106.56	-0.005108
106.565	-0.004937
106.57	-0.004682
106.575	-0.004357
106.58	-0.003995
106.585	-0.003626
106.59	-0.003254
106.595	-0.002881
106.6	-0.002497
106.605	-0.002085
106.61	-0.00165
106.615	-0.001194
106.62	-0.000723
106.625	-0.000243
106.63	0.000254
106.635	0.000775
106.64	0.001333
106.645	0.00194
106.65	0.002589
106.655	0.003276
106.66	0.003999
106.665	0.004753
106.67	0.005564

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
106.675	0.006455
106.68	0.007436
106.685	0.008506
106.69	0.009653
106.695	0.010846
106.7	0.01205
106.705	0.013232
106.71	0.014355
106.715	0.015393
106.72	0.016348
106.725	0.01723
106.73	0.018042
106.735	0.018788
106.74	0.019475
106.745	0.020105
106.75	0.020677
106.755	0.021194
106.76	0.021652
106.765	0.022052
106.77	0.022396
106.775	0.022684
106.78	0.022906
106.785	0.023052
106.79	0.023132
106.795	0.023151
106.8	0.023131
106.805	0.023093
106.81	0.023035
106.815	0.022949
106.82	0.022845
106.825	0.022722
106.83	0.022582
106.835	0.022424
106.84	0.022211
106.845	0.021913
106.85	0.021501
106.855	0.020952
106.86	0.02029
106.865	0.019547
106.87	0.018748
106.875	0.01792
106.88	0.017081

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
106.885	0.016242
106.89	0.015416
106.895	0.014614
106.9	0.013836
106.905	0.013079
106.91	0.012334
106.915	0.011587
106.92	0.010835
106.925	0.010075
106.93	0.009304
106.935	0.008521
106.94	0.007742
106.945	0.006979
106.95	0.006236
106.955	0.005522
106.96	0.004821
106.965	0.00412
106.97	0.00344
106.975	0.002797
106.98	0.002204
106.985	0.001674
106.99	0.001191
106.995	0.000736
107	0.000316
107.005	-0.000065
107.01	-0.000404
107.015	-0.000689
107.02	-0.000936
107.025	-0.001153
107.03	-0.00131
107.035	-0.001375
107.04	-0.001311
107.045	-0.001083
107.05	-0.000687
107.055	-0.000137
107.06	0.000535
107.065	0.001282
107.07	0.002066
107.075	0.002846
107.08	0.003603
107.085	0.004331
107.09	0.005009

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
107.095	0.005632
107.1	0.006214
107.105	0.00676
107.11	0.007291
107.115	0.007819
107.12	0.008301
107.125	0.008695
107.13	0.008963
107.135	0.00907
107.14	0.009045
107.145	0.008922
107.15	0.008721
107.155	0.008461
107.16	0.008125
107.165	0.007691
107.17	0.00715
107.175	0.006501
107.18	0.005776
107.185	0.005014
107.19	0.004254
107.195	0.003543
107.2	0.002881
107.205	0.002264
107.21	0.001717
107.215	0.001259
107.22	0.000895
107.225	0.00063
107.23	0.000456
107.235	0.000354
107.24	0.000311
107.245	0.000308
107.25	0.00032
107.255	0.000322
107.26	0.000307
107.265	0.000279
107.27	0.000237
107.275	0.000188
107.28	0.000162
107.285	0.000184
107.29	0.000259
107.295	0.000385
107.3	0.000525

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
107.305	0.000636
107.31	0.000705
107.315	0.000726
107.32	0.00071
107.325	0.000677
107.33	0.00065
107.335	0.000647
107.34	0.000686
107.345	0.000776
107.35	0.000918
107.355	0.001105
107.36	0.001327
107.365	0.001573
107.37	0.001827
107.375	0.002077
107.38	0.002314
107.385	0.002532
107.39	0.002722
107.395	0.002873
107.4	0.002983
107.405	0.003046
107.41	0.003044
107.415	0.002958
107.42	0.002781
107.425	0.002506
107.43	0.002141
107.435	0.001695
107.44	0.001169
107.445	0.000569
107.45	-0.000094
107.455	-0.000817
107.46	-0.001576
107.465	-0.002348
107.47	-0.003137
107.475	-0.003943
107.48	-0.004739
107.485	-0.005497
107.49	-0.00619
107.495	-0.006785
107.5	-0.007255
107.505	-0.007581
107.51	-0.007742

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
107.515	-0.00773
107.52	-0.007561
107.525	-0.007259
107.53	-0.006863
107.535	-0.006408
107.54	-0.005912
107.545	-0.005393
107.55	-0.004846
107.555	-0.004261
107.56	-0.00368
107.565	-0.003147
107.57	-0.002673
107.575	-0.002275
107.58	-0.001959
107.585	-0.001715
107.59	-0.001556
107.595	-0.001485
107.6	-0.001478
107.605	-0.001513
107.61	-0.001568
107.615	-0.001618
107.62	-0.001665
107.625	-0.001714
107.63	-0.001749
107.635	-0.001757
107.64	-0.001727
107.645	-0.001652
107.65	-0.001544
107.655	-0.001421
107.66	-0.001289
107.665	-0.001163
107.67	-0.001044
107.675	-0.000934
107.68	-0.000859
107.685	-0.000836
107.69	-0.000868
107.695	-0.000958
107.7	-0.001051
107.705	-0.001097
107.71	-0.00108
107.715	-0.000991
107.72	-0.000855

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
107.725	-0.000711
107.73	-0.000562
107.735	-0.000413
107.74	-0.000264
107.745	-0.000113
107.75	0.000029
107.755	0.000153
107.76	0.000247
107.765	0.000303
107.77	0.000325
107.775	0.000323
107.78	0.000308
107.785	0.000294
107.79	0.00029
107.795	0.000304
107.8	0.000336
107.805	0.000389
107.81	0.000465
107.815	0.000565
107.82	0.000709
107.825	0.000913
107.83	0.001183
107.835	0.001519
107.84	0.001918
107.845	0.002368
107.85	0.002855
107.855	0.003364
107.86	0.003878
107.865	0.00439
107.87	0.004904
107.875	0.005425
107.88	0.005988
107.885	0.006616
107.89	0.007284
107.895	0.007964
107.9	0.008601
107.905	0.00914
107.91	0.009589
107.915	0.009968
107.92	0.010288
107.925	0.010563
107.93	0.010793

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
107.935	0.01097
107.94	0.01108
107.945	0.011112
107.95	0.011078
107.955	0.011002
107.96	0.010897
107.965	0.01078
107.97	0.010663
107.975	0.010545
107.98	0.010408
107.985	0.010234
107.99	0.009993
107.995	0.009668
108	0.009287
108.005	0.008887
108.01	0.008498
108.015	0.00815
108.02	0.007825
108.025	0.007495
108.03	0.007145
108.035	0.006762
108.04	0.006353
108.045	0.005937
108.05	0.005527
108.055	0.005134
108.06	0.004761
108.065	0.004406
108.07	0.004049
108.075	0.003667
108.08	0.003263
108.085	0.002838
108.09	0.002394
108.095	0.001932
108.1	0.001435
108.105	0.000882
108.11	0.000275
108.115	-0.000378
108.12	-0.001065
108.125	-0.001762
108.13	-0.002446
108.135	-0.003097
108.14	-0.00369

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
108.145	-0.004212
108.15	-0.004665
108.155	-0.005061
108.16	-0.005428
108.165	-0.005794
108.17	-0.006174
108.175	-0.006574
108.18	-0.00698
108.185	-0.007372
108.19	-0.007737
108.195	-0.008065
108.2	-0.008358
108.205	-0.008623
108.21	-0.008865
108.215	-0.009087
108.22	-0.009283
108.225	-0.009438
108.23	-0.009548
108.235	-0.009608
108.24	-0.009611
108.245	-0.009555
108.25	-0.009462
108.255	-0.009352
108.26	-0.00924
108.265	-0.009142
108.27	-0.009046
108.275	-0.008936
108.28	-0.008803
108.285	-0.00864
108.29	-0.00845
108.295	-0.008242
108.3	-0.00802
108.305	-0.007796
108.31	-0.007568
108.315	-0.007333
108.32	-0.007117
108.325	-0.006939
108.33	-0.006796
108.335	-0.006684
108.34	-0.006595
108.345	-0.006519
108.35	-0.006459

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
108.355	-0.006419
108.36	-0.006408
108.365	-0.006437
108.37	-0.006492
108.375	-0.006555
108.38	-0.006613
108.385	-0.006648
108.39	-0.006639
108.395	-0.006578
108.4	-0.006457
108.405	-0.006277
108.41	-0.006058
108.415	-0.005823
108.42	-0.005583
108.425	-0.005343
108.43	-0.005094
108.435	-0.004824
108.44	-0.004514
108.445	-0.004151
108.45	-0.003745
108.455	-0.00332
108.46	-0.002911
108.465	-0.002551
108.47	-0.002278
108.475	-0.00211
108.48	-0.002024
108.485	-0.001984
108.49	-0.00195
108.495	-0.001882
108.5	-0.001767
108.505	-0.001604
108.51	-0.001404
108.515	-0.001183
108.52	-0.000948
108.525	-0.000709
108.53	-0.000463
108.535	-0.000203
108.54	0.000041
108.545	0.000244
108.55	0.000408
108.555	0.000533
108.56	0.000651

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
108.565	0.000792
108.57	0.000954
108.575	0.001131
108.58	0.001299
108.585	0.001426
108.59	0.001515
108.595	0.001573
108.6	0.001605
108.605	0.001625
108.61	0.001626
108.615	0.001595
108.62	0.001538
108.625	0.001449
108.63	0.001302
108.635	0.001075
108.64	0.000735
108.645	0.00026
108.65	-0.000319
108.655	-0.00096
108.66	-0.001629
108.665	-0.002292
108.67	-0.002936
108.675	-0.003552
108.68	-0.004151
108.685	-0.004746
108.69	-0.005309
108.695	-0.00581
108.7	-0.006222
108.705	-0.006513
108.71	-0.006672
108.715	-0.006694
108.72	-0.006584
108.725	-0.006369
108.73	-0.006103
108.735	-0.005821
108.74	-0.00554
108.745	-0.005294
108.75	-0.005111
108.755	-0.005008
108.76	-0.004997
108.765	-0.005082
108.77	-0.005237

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
108.775	-0.005435
108.78	-0.005652
108.785	-0.005861
108.79	-0.006073
108.795	-0.006303
108.8	-0.006539
108.805	-0.006778
108.81	-0.007013
108.815	-0.007227
108.82	-0.007429
108.825	-0.007621
108.83	-0.007778
108.835	-0.007878
108.84	-0.007906
108.845	-0.007854
108.85	-0.007731
108.855	-0.007557
108.86	-0.007373
108.865	-0.007216
108.87	-0.007088
108.875	-0.006986
108.88	-0.006889
108.885	-0.006764
108.89	-0.006624
108.895	-0.006486
108.9	-0.006347
108.905	-0.006209
108.91	-0.006098
108.915	-0.006025
108.92	-0.005994
108.925	-0.006004
108.93	-0.006027
108.935	-0.006039
108.94	-0.006032
108.945	-0.006004
108.95	-0.005987
108.955	-0.006021
108.96	-0.006117
108.965	-0.006282
108.97	-0.006522
108.975	-0.006835
108.98	-0.007198

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
108.985	-0.007589
108.99	-0.007993
108.995	-0.008395
109	-0.008783
109.005	-0.009151
109.01	-0.009476
109.015	-0.00974
109.02	-0.009954
109.025	-0.010123
109.03	-0.010245
109.035	-0.010323
109.04	-0.010323
109.045	-0.010212
109.05	-0.010001
109.055	-0.009701
109.06	-0.009316
109.065	-0.008868
109.07	-0.008332
109.075	-0.00769
109.08	-0.006985
109.085	-0.006257
109.09	-0.005541
109.095	-0.004882
109.1	-0.004261
109.105	-0.003648
109.11	-0.003065
109.115	-0.002527
109.12	-0.002035
109.125	-0.0016
109.13	-0.001224
109.135	-0.000908
109.14	-0.00066
109.145	-0.000484
109.15	-0.000386
109.155	-0.000367
109.16	-0.000402
109.165	-0.000465
109.17	-0.000529
109.175	-0.00058
109.18	-0.000624
109.185	-0.000675
109.19	-0.000767

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
109.195	-0.000931
109.2	-0.001154
109.205	-0.001416
109.21	-0.001683
109.215	-0.001917
109.22	-0.002116
109.225	-0.002279
109.23	-0.002407
109.235	-0.002508
109.24	-0.002565
109.245	-0.002558
109.25	-0.002503
109.255	-0.002414
109.26	-0.002302
109.265	-0.002181
109.27	-0.002038
109.275	-0.001854
109.28	-0.001622
109.285	-0.001339
109.29	-0.001009
109.295	-0.00065
109.3	-0.000304
109.305	-0.000015
109.31	0.00018
109.315	0.00026
109.32	0.000227
109.325	0.000097
109.33	-0.000071
109.335	-0.000223
109.34	-0.000336
109.345	-0.000394
109.35	-0.000424
109.355	-0.000458
109.36	-0.000497
109.365	-0.000535
109.37	-0.000549
109.375	-0.000509
109.38	-0.000394
109.385	-0.00019
109.39	0.00009
109.395	0.000419
109.4	0.000766

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
109.405	0.001098
109.41	0.001395
109.415	0.001641
109.42	0.001833
109.425	0.001974
109.43	0.002065
109.435	0.002112
109.44	0.002119
109.445	0.002091
109.45	0.002038
109.455	0.001966
109.46	0.001878
109.465	0.001777
109.47	0.001652
109.475	0.001486
109.48	0.001265
109.485	0.000977
109.49	0.0006
109.495	0.00012
109.5	-0.000453
109.505	-0.0011
109.51	-0.001804
109.515	-0.002537
109.52	-0.003276
109.525	-0.003999
109.53	-0.00467
109.535	-0.005261
109.54	-0.005764
109.545	-0.006179
109.55	-0.006516
109.555	-0.006793
109.56	-0.007016
109.565	-0.007194
109.57	-0.007347
109.575	-0.007489
109.58	-0.007632
109.585	-0.007783
109.59	-0.007918
109.595	-0.008013
109.6	-0.008061
109.605	-0.008058
109.61	-0.008018

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
109.615	-0.007955
109.62	-0.00788
109.625	-0.007795
109.63	-0.007676
109.635	-0.007496
109.64	-0.007237
109.645	-0.006886
109.65	-0.00646
109.655	-0.005982
109.66	-0.005465
109.665	-0.004922
109.67	-0.004344
109.675	-0.003718
109.68	-0.003036
109.685	-0.002292
109.69	-0.001485
109.695	-0.000624
109.7	0.000289
109.705	0.001242
109.71	0.002219
109.715	0.003203
109.72	0.004177
109.725	0.005132
109.73	0.006073
109.735	0.007008
109.74	0.007959
109.745	0.008939
109.75	0.009933
109.755	0.010922
109.76	0.011867
109.765	0.012731
109.77	0.013518
109.775	0.014239
109.78	0.014897
109.785	0.015497
109.79	0.01602
109.795	0.016443
109.8	0.016753
109.805	0.016944
109.81	0.017027
109.815	0.017018
109.82	0.016948

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
109.825	0.016849
109.83	0.01673
109.835	0.0166
109.84	0.016471
109.845	0.01635
109.85	0.016247
109.855	0.016169
109.86	0.016115
109.865	0.016087
109.87	0.01608
109.875	0.016095
109.88	0.016132
109.885	0.01619
109.89	0.016308
109.895	0.016518
109.9	0.016801
109.905	0.017134
109.91	0.017489
109.915	0.01783
109.92	0.018158
109.925	0.018477
109.93	0.018796
109.935	0.01912
109.94	0.019431
109.945	0.019706
109.95	0.019927
109.955	0.02008
109.96	0.020162
109.965	0.020174
109.97	0.020114
109.975	0.019984
109.98	0.019769
109.985	0.019454
109.99	0.019041
109.995	0.018541
110	0.017967
110.005	0.017344
110.01	0.0167
110.015	0.016059
110.02	0.015453
110.025	0.014909
110.03	0.014437

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
110.035	0.014042
110.04	0.01373
110.045	0.013501
110.05	0.013349
110.055	0.013271
110.06	0.013248
110.065	0.013261
110.07	0.013319
110.075	0.013434
110.08	0.013594
110.085	0.013794
110.09	0.014015
110.095	0.014237
110.1	0.014459
110.105	0.014686
110.11	0.014908
110.115	0.015121
110.12	0.015354
110.125	0.015625
110.13	0.015916
110.135	0.016214
110.14	0.016455
110.145	0.016583
110.15	0.01662
110.155	0.016597
110.16	0.016556
110.165	0.016546
110.17	0.016557
110.175	0.016568
110.18	0.016561
110.185	0.016509
110.19	0.016406
110.195	0.016258
110.2	0.01607
110.205	0.015853
110.21	0.015625
110.215	0.015397
110.22	0.015192
110.225	0.015024
110.23	0.014884
110.235	0.014758
110.24	0.014618

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
110.245	0.014443
110.25	0.014243
110.255	0.014039
110.26	0.013854
110.265	0.013709
110.27	0.013619
110.275	0.013582
110.28	0.013577
110.285	0.013574
110.29	0.013539
110.295	0.013441
110.3	0.013266
110.305	0.013012
110.31	0.012692
110.315	0.012326
110.32	0.01194
110.325	0.011557
110.33	0.011201
110.335	0.01089
110.34	0.010622
110.345	0.010385
110.35	0.010179
110.355	0.009995
110.36	0.00982
110.365	0.009641
110.37	0.009444
110.375	0.009219
110.38	0.008959
110.385	0.008663
110.39	0.008337
110.395	0.007985
110.4	0.007625
110.405	0.007278
110.41	0.006935
110.415	0.006581
110.42	0.006238
110.425	0.005919
110.43	0.005621
110.435	0.005339
110.44	0.005064
110.445	0.004778
110.45	0.004468

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
110.455	0.004117
110.46	0.003705
110.465	0.003218
110.47	0.002646
110.475	0.001987
110.48	0.001241
110.485	0.000408
110.49	-0.000481
110.495	-0.001402
110.5	-0.002361
110.505	-0.003364
110.51	-0.004429
110.515	-0.005567
110.52	-0.006747
110.525	-0.007931
110.53	-0.009075
110.535	-0.010135
110.54	-0.011121
110.545	-0.012053
110.55	-0.012924
110.555	-0.013728
110.56	-0.014451
110.565	-0.015069
110.57	-0.015551
110.575	-0.015869
110.58	-0.015999
110.585	-0.015935
110.59	-0.015688
110.595	-0.015279
110.6	-0.014762
110.605	-0.014191
110.61	-0.013591
110.615	-0.012977
110.62	-0.012356
110.625	-0.011723
110.63	-0.01109
110.635	-0.010475
110.64	-0.009885
110.645	-0.009323
110.65	-0.008818
110.655	-0.008391
110.66	-0.008026

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
110.665	-0.00771
110.67	-0.007429
110.675	-0.007171
110.68	-0.00695
110.685	-0.006776
110.69	-0.006665
110.695	-0.006624
110.7	-0.006616
110.705	-0.006599
110.71	-0.006536
110.715	-0.0064
110.72	-0.006207
110.725	-0.005987
110.73	-0.005781
110.735	-0.005632
110.74	-0.005542
110.745	-0.005503
110.75	-0.005489
110.755	-0.005467
110.76	-0.005417
110.765	-0.005321
110.77	-0.00518
110.775	-0.005002
110.78	-0.004792
110.785	-0.004557
110.79	-0.004305
110.795	-0.004039
110.8	-0.003776
110.805	-0.00353
110.81	-0.003309
110.815	-0.003115
110.82	-0.002952
110.825	-0.002817
110.83	-0.002703
110.835	-0.002601
110.84	-0.002493
110.845	-0.00236
110.85	-0.0022
110.855	-0.002017
110.86	-0.001824
110.865	-0.001639
110.87	-0.001476

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
110.875	-0.001342
110.88	-0.001229
110.885	-0.001121
110.89	-0.000983
110.895	-0.000784
110.9	-0.000523
110.905	-0.000206
110.91	0.000126
110.915	0.000428
110.92	0.00069
110.925	0.000906
110.93	0.001091
110.935	0.001265
110.94	0.001446
110.945	0.001646
110.95	0.001861
110.955	0.002085
110.96	0.002306
110.965	0.002513
110.97	0.002712
110.975	0.002918
110.98	0.003128
110.985	0.003344
110.99	0.003574
110.995	0.00382
111	0.004086
111.005	0.004372
111.01	0.00465
111.015	0.004896
111.02	0.005101
111.025	0.005255
111.03	0.005383
111.035	0.005511
111.04	0.005627
111.045	0.005722
111.05	0.005791
111.055	0.005828
111.06	0.005839
111.065	0.005835
111.07	0.005828
111.075	0.005823
111.08	0.005821

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
111.085	0.005819
111.09	0.005785
111.095	0.005693
111.1	0.005554
111.105	0.005386
111.11	0.005233
111.115	0.005138
111.12	0.005109
111.125	0.005142
111.13	0.0052
111.135	0.005245
111.14	0.005241
111.145	0.005161
111.15	0.005022
111.155	0.00485
111.16	0.004662
111.165	0.004474
111.17	0.00428
111.175	0.004067
111.18	0.003839
111.185	0.003593
111.19	0.003347
111.195	0.003122
111.2	0.002913
111.205	0.002714
111.21	0.00254
111.215	0.002399
111.22	0.002301
111.225	0.002257
111.23	0.002251
111.235	0.00227
111.24	0.002322
111.245	0.002403
111.25	0.002535
111.255	0.002739
111.26	0.002976
111.265	0.003207
111.27	0.003433
111.275	0.003655
111.28	0.003884
111.285	0.004139
111.29	0.004408

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
111.295	0.004678
111.3	0.004928
111.305	0.005141
111.31	0.0053
111.315	0.005397
111.32	0.00545
111.325	0.005481
111.33	0.005494
111.335	0.005486
111.34	0.005453
111.345	0.005381
111.35	0.005249
111.355	0.005043
111.36	0.00476
111.365	0.004409
111.37	0.004017
111.375	0.003612
111.38	0.003214
111.385	0.002837
111.39	0.002462
111.395	0.002059
111.4	0.001632
111.405	0.001188
111.41	0.000715
111.415	0.000207
111.42	-0.00033
111.425	-0.000888
111.43	-0.001474
111.435	-0.002095
111.44	-0.002731
111.445	-0.003371
111.45	-0.004009
111.455	-0.004636
111.46	-0.005259
111.465	-0.005888
111.47	-0.006498
111.475	-0.007066
111.48	-0.007585
111.485	-0.008042
111.49	-0.00842
111.495	-0.008712
111.5	-0.008889

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
111.505	-0.008932
111.51	-0.008865
111.515	-0.008715
111.52	-0.008513
111.525	-0.008292
111.53	-0.00806
111.535	-0.00782
111.54	-0.007582
111.545	-0.007352
111.55	-0.007144
111.555	-0.006977
111.56	-0.006855
111.565	-0.006777
111.57	-0.00674
111.575	-0.006731
111.58	-0.006732
111.585	-0.00672
111.59	-0.006679
111.595	-0.006602
111.6	-0.006486
111.605	-0.006329
111.61	-0.006156
111.615	-0.00599
111.62	-0.005818
111.625	-0.005626
111.63	-0.005414
111.635	-0.005182
111.64	-0.004938
111.645	-0.00469
111.65	-0.004438
111.655	-0.004176
111.66	-0.003876
111.665	-0.003512
111.67	-0.003068
111.675	-0.002535
111.68	-0.001939
111.685	-0.001309
111.69	-0.000661
111.695	-0.000015
111.7	0.000636
111.705	0.001296
111.71	0.001939

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
111.715	0.002537
111.72	0.003044
111.725	0.00341
111.73	0.003614
111.735	0.003643
111.74	0.003501
111.745	0.003204
111.75	0.002776
111.755	0.002244
111.76	0.001622
111.765	0.00092
111.77	0.000147
111.775	-0.000688
111.78	-0.001574
111.785	-0.002499
111.79	-0.003435
111.795	-0.004358
111.8	-0.00524
111.805	-0.006053
111.81	-0.006789
111.815	-0.007438
111.82	-0.007971
111.825	-0.008367
111.83	-0.008615
111.835	-0.00871
111.84	-0.008694
111.845	-0.008611
111.85	-0.00849
111.855	-0.008355
111.86	-0.008208
111.865	-0.008039
111.87	-0.007849
111.875	-0.007633
111.88	-0.007409
111.885	-0.007202
111.89	-0.007014
111.895	-0.006841
111.9	-0.006703
111.905	-0.006605
111.91	-0.006516
111.915	-0.006407
111.92	-0.006253

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
111.925	-0.006035
111.93	-0.005771
111.935	-0.005499
111.94	-0.005251
111.945	-0.005043
111.95	-0.004922
111.955	-0.004934
111.96	-0.004977
111.965	-0.004946
111.97	-0.004876
111.975	-0.004806
111.98	-0.004716
111.985	-0.004609
111.99	-0.0045
111.995	-0.004392
112	-0.004263
112.005	-0.004094
112.01	-0.003877
112.015	-0.003609
112.02	-0.003312
112.025	-0.003009
112.03	-0.002718
112.035	-0.002448
112.04	-0.002186
112.045	-0.001909
112.05	-0.001598
112.055	-0.001239
112.06	-0.000823
112.065	-0.000359
112.07	0.000128
112.075	0.00061
112.08	0.001053
112.085	0.001433
112.09	0.001747
112.095	0.002003
112.1	0.002223
112.105	0.00243
112.11	0.002623
112.115	0.002799
112.12	0.002941
112.125	0.003029
112.13	0.003066

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
112.135	0.003063
112.14	0.003025
112.145	0.002958
112.15	0.002873
112.155	0.002783
112.16	0.002673
112.165	0.002533
112.17	0.002378
112.175	0.002224
112.18	0.002084
112.185	0.001974
112.19	0.001889
112.195	0.001821
112.2	0.001773
112.205	0.001744
112.21	0.00172
112.215	0.001693
112.22	0.001649
112.225	0.001575
112.23	0.001475
112.235	0.001353
112.24	0.001201
112.245	0.001024
112.25	0.000826
112.255	0.000611
112.26	0.000421
112.265	0.000296
112.27	0.000232
112.275	0.000226
112.28	0.000258
112.285	0.000301
112.29	0.000367
112.295	0.000466
112.3	0.00059
112.305	0.000733
112.31	0.00087
112.315	0.000977
112.32	0.001051
112.325	0.00109
112.33	0.001117
112.335	0.001155
112.34	0.001203

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
112.345	0.001251
112.35	0.001282
112.355	0.001277
112.36	0.00122
112.365	0.001103
112.37	0.000931
112.375	0.000713
112.38	0.00046
112.385	0.000181
112.39	-0.000134
112.395	-0.000501
112.4	-0.000919
112.405	-0.001388
112.41	-0.001911
112.415	-0.002481
112.42	-0.003087
112.425	-0.003719
112.43	-0.004345
112.435	-0.004941
112.44	-0.005513
112.445	-0.006067
112.45	-0.006616
112.455	-0.007172
112.46	-0.007717
112.465	-0.00823
112.47	-0.008692
112.475	-0.009082
112.48	-0.009394
112.485	-0.009628
112.49	-0.009781
112.495	-0.00986
112.5	-0.009866
112.505	-0.009805
112.51	-0.009704
112.515	-0.009588
112.52	-0.00947
112.525	-0.009358
112.53	-0.009236
112.535	-0.009081
112.54	-0.008891
112.545	-0.008665
112.55	-0.008423

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
112.555	-0.00819
112.56	-0.007972
112.565	-0.007779
112.57	-0.007608
112.575	-0.00745
112.58	-0.007304
112.585	-0.007167
112.59	-0.007031
112.595	-0.006894
112.6	-0.006758
112.605	-0.006627
112.61	-0.006519
112.615	-0.006454
112.62	-0.006426
112.625	-0.006421
112.63	-0.006429
112.635	-0.006437
112.64	-0.006421
112.645	-0.006362
112.65	-0.006262
112.655	-0.006125
112.66	-0.005961
112.665	-0.005781
112.67	-0.005578
112.675	-0.005346
112.68	-0.005081
112.685	-0.004778
112.69	-0.004443
112.695	-0.004085
112.7	-0.003697
112.705	-0.00327
112.71	-0.002809
112.715	-0.002318
112.72	-0.001789
112.725	-0.001218
112.73	-0.000624
112.735	-0.000031
112.74	0.000534
112.745	0.001039
112.75	0.001467
112.755	0.001811
112.76	0.002062

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
112.765	0.002216
112.77	0.002286
112.775	0.00229
112.78	0.002228
112.785	0.0021
112.79	0.00194
112.795	0.001774
112.8	0.001599
112.805	0.001412
112.81	0.001203
112.815	0.000957
112.82	0.000689
112.825	0.000416
112.83	0.000143
112.835	-0.000123
112.84	-0.000395
112.845	-0.000686
112.85	-0.000995
112.855	-0.001319
112.86	-0.001636
112.865	-0.001925
112.87	-0.002168
112.875	-0.002356
112.88	-0.002508
112.885	-0.002645
112.89	-0.002801
112.895	-0.003002
112.9	-0.003232
112.905	-0.00347
112.91	-0.003692
112.915	-0.003872
112.92	-0.00402
112.925	-0.00415
112.93	-0.004261
112.935	-0.004361
112.94	-0.004443
112.945	-0.004503
112.95	-0.004552
112.955	-0.004598
112.96	-0.004646
112.965	-0.004706
112.97	-0.004767

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
112.975	-0.004821
112.98	-0.004873
112.985	-0.004925
112.99	-0.00498
112.995	-0.005043
113	-0.005103
113.005	-0.005151
113.01	-0.005194
113.015	-0.005237
113.02	-0.005292
113.025	-0.005375
113.03	-0.005481
113.035	-0.005607
113.04	-0.005761
113.045	-0.005939
113.05	-0.006137
113.055	-0.006356
113.06	-0.006559
113.065	-0.006716
113.07	-0.006838
113.075	-0.006935
113.08	-0.007022
113.085	-0.007121
113.09	-0.007227
113.095	-0.007326
113.1	-0.007421
113.105	-0.00751
113.11	-0.007566
113.115	-0.007568
113.12	-0.00752
113.125	-0.007428
113.13	-0.00729
113.135	-0.00711
113.14	-0.006877
113.145	-0.006573
113.15	-0.006197
113.155	-0.005752
113.16	-0.005214
113.165	-0.00457
113.17	-0.003836
113.175	-0.003039
113.18	-0.002203

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
113.185	-0.001359
113.19	-0.000543
113.195	0.000215
113.2	0.000893
113.205	0.001483
113.21	0.001987
113.215	0.002414
113.22	0.002789
113.225	0.003128
113.23	0.003437
113.235	0.003716
113.24	0.003938
113.245	0.004083
113.25	0.004144
113.255	0.004127
113.26	0.004063
113.265	0.003992
113.27	0.003936
113.275	0.003909
113.28	0.003911
113.285	0.003923
113.29	0.003925
113.295	0.003893
113.3	0.003805
113.305	0.003652
113.31	0.003453
113.315	0.003234
113.32	0.003034
113.325	0.002892
113.33	0.002819
113.335	0.002812
113.34	0.002861
113.345	0.002942
113.35	0.003043
113.355	0.003151
113.36	0.003258
113.365	0.003371
113.37	0.003493
113.375	0.003606
113.38	0.003721
113.385	0.003869
113.39	0.004018

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
113.395	0.004124
113.4	0.004198
113.405	0.004243
113.41	0.004271
113.415	0.004301
113.42	0.004301
113.425	0.00424
113.43	0.004127
113.435	0.003968
113.44	0.003787
113.445	0.003615
113.45	0.003444
113.455	0.003264
113.46	0.003074
113.465	0.002859
113.47	0.00263
113.475	0.002392
113.48	0.002111
113.485	0.001764
113.49	0.001316
113.495	0.00073
113.5	0.000047
113.505	-0.000686
113.51	-0.001461
113.515	-0.002258
113.52	-0.003057
113.525	-0.00385
113.53	-0.00461
113.535	-0.005309
113.54	-0.005959
113.545	-0.006568
113.55	-0.00713
113.555	-0.00765
113.56	-0.00813
113.565	-0.008577
113.57	-0.009037
113.575	-0.009548
113.58	-0.010131
113.585	-0.010801
113.59	-0.011507
113.595	-0.012195
113.6	-0.012851

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
113.605	-0.013437
113.61	-0.013931
113.615	-0.014366
113.62	-0.014771
113.625	-0.015166
113.63	-0.015571
113.635	-0.015982
113.64	-0.016391
113.645	-0.016787
113.65	-0.017133
113.655	-0.017403
113.66	-0.017586
113.665	-0.017679
113.67	-0.017705
113.675	-0.017695
113.68	-0.017642
113.685	-0.017543
113.69	-0.017391
113.695	-0.017181
113.7	-0.016925
113.705	-0.016644
113.71	-0.016356
113.715	-0.016087
113.72	-0.015834
113.725	-0.015584
113.73	-0.015341
113.735	-0.0151
113.74	-0.014848
113.745	-0.014576
113.75	-0.014292
113.755	-0.01401
113.76	-0.013726
113.765	-0.013442
113.77	-0.013153
113.775	-0.012851
113.78	-0.012529
113.785	-0.012181
113.79	-0.011798
113.795	-0.011374
113.8	-0.010919
113.805	-0.010443
113.81	-0.009959

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
113.815	-0.009477
113.82	-0.009004
113.825	-0.008538
113.83	-0.008077
113.835	-0.007611
113.84	-0.007126
113.845	-0.006616
113.85	-0.006077
113.855	-0.005509
113.86	-0.004936
113.865	-0.004381
113.87	-0.003848
113.875	-0.003347
113.88	-0.002859
113.885	-0.002342
113.89	-0.001794
113.895	-0.00124
113.9	-0.000681
113.905	-0.000107
113.91	0.000486
113.915	0.001101
113.92	0.001717
113.925	0.002309
113.93	0.002847
113.935	0.003296
113.94	0.003662
113.945	0.003955
113.95	0.004172
113.955	0.004311
113.96	0.004386
113.965	0.004401
113.97	0.004354
113.975	0.004247
113.98	0.004075
113.985	0.003835
113.99	0.003546
113.995	0.00323
114	0.002886
114.005	0.002512
114.01	0.002114
114.015	0.001691
114.02	0.00124

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
114.025	0.000762
114.03	0.000256
114.035	-0.000275
114.04	-0.0008
114.045	-0.001287
114.05	-0.001734
114.055	-0.002142
114.06	-0.002525
114.065	-0.002899
114.07	-0.003281
114.075	-0.003676
114.08	-0.004081
114.085	-0.00448
114.09	-0.004847
114.095	-0.005157
114.1	-0.005386
114.105	-0.005521
114.11	-0.005578
114.115	-0.005585
114.12	-0.005549
114.125	-0.005476
114.13	-0.005375
114.135	-0.005246
114.14	-0.005088
114.145	-0.004902
114.15	-0.004681
114.155	-0.004424
114.16	-0.004147
114.165	-0.003868
114.17	-0.003608
114.175	-0.003386
114.18	-0.003208
114.185	-0.003078
114.19	-0.002994
114.195	-0.002949
114.2	-0.002933
114.205	-0.002934
114.21	-0.002946
114.215	-0.00296
114.22	-0.002978
114.225	-0.002995
114.23	-0.003006

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
114.235	-0.003007
114.24	-0.002982
114.245	-0.002924
114.25	-0.002832
114.255	-0.00271
114.26	-0.002582
114.265	-0.002471
114.27	-0.002374
114.275	-0.002288
114.28	-0.002212
114.285	-0.002139
114.29	-0.002085
114.295	-0.002063
114.3	-0.002051
114.305	-0.002032
114.31	-0.001999
114.315	-0.001949
114.32	-0.00191
114.325	-0.00191
114.33	-0.001964
114.335	-0.002077
114.34	-0.002221
114.345	-0.002368
114.35	-0.002492
114.355	-0.002576
114.36	-0.002648
114.365	-0.002745
114.37	-0.002883
114.375	-0.003074
114.38	-0.003304
114.385	-0.003547
114.39	-0.003781
114.395	-0.00399
114.4	-0.004157
114.405	-0.004276
114.41	-0.004363
114.415	-0.00443
114.42	-0.004477
114.425	-0.004504
114.43	-0.004478
114.435	-0.004372
114.44	-0.004189

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
114.445	-0.003936
114.45	-0.003652
114.455	-0.003379
114.46	-0.003125
114.465	-0.002893
114.47	-0.002688
114.475	-0.002497
114.48	-0.002321
114.485	-0.002159
114.49	-0.001978
114.495	-0.001749
114.5	-0.001488
114.505	-0.00121
114.51	-0.000934
114.515	-0.000684
114.52	-0.000457
114.525	-0.000246
114.53	-0.000047
114.535	0.000149
114.54	0.000354
114.545	0.000576
114.55	0.000816
114.555	0.00107
114.56	0.001323
114.565	0.001565
114.57	0.001771
114.575	0.001927
114.58	0.002056
114.585	0.002187
114.59	0.002345
114.595	0.002554
114.6	0.002809
114.605	0.003094
114.61	0.003386
114.615	0.003659
114.62	0.003892
114.625	0.004076
114.63	0.004215
114.635	0.004324
114.64	0.004426
114.645	0.004541
114.65	0.004679

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
114.655	0.004845
114.66	0.005018
114.665	0.005172
114.67	0.005318
114.675	0.005467
114.68	0.005626
114.685	0.005806
114.69	0.005993
114.695	0.006167
114.7	0.006317
114.705	0.006433
114.71	0.006512
114.715	0.006557
114.72	0.006576
114.725	0.006574
114.73	0.006548
114.735	0.006492
114.74	0.006387
114.745	0.006219
114.75	0.005999
114.755	0.005739
114.76	0.005469
114.765	0.005221
114.77	0.005001
114.775	0.004812
114.78	0.004668
114.785	0.004569
114.79	0.004523
114.795	0.00453
114.8	0.00455
114.805	0.004567
114.81	0.004615
114.815	0.004682
114.82	0.004734
114.825	0.004771
114.83	0.004808
114.835	0.004841
114.84	0.004852
114.845	0.00484
114.85	0.004809
114.855	0.004736
114.86	0.004617

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
114.865	0.004471
114.87	0.004311
114.875	0.004149
114.88	0.003981
114.885	0.003801
114.89	0.003629
114.895	0.003478
114.9	0.003351
114.905	0.003248
114.91	0.003148
114.915	0.003025
114.92	0.002869
114.925	0.00267
114.93	0.002427
114.935	0.002147
114.94	0.001831
114.945	0.001479
114.95	0.0011
114.955	0.000703
114.96	0.000275
114.965	-0.000198
114.97	-0.000706
114.975	-0.00124
114.98	-0.001801
114.985	-0.002386
114.99	-0.002986
114.995	-0.003592
115	-0.004183
115.005	-0.004738
115.01	-0.005253
115.015	-0.00573
115.02	-0.006173
115.025	-0.006585
115.03	-0.006979
115.035	-0.007364
115.04	-0.007725
115.045	-0.008048
115.05	-0.008317
115.055	-0.008518
115.06	-0.008666
115.065	-0.008781
115.07	-0.008859

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
115.075	-0.008904
115.08	-0.008903
115.085	-0.008842
115.09	-0.008739
115.095	-0.008612
115.1	-0.00847
115.105	-0.00833
115.11	-0.008172
115.115	-0.007978
115.12	-0.007765
115.125	-0.007549
115.13	-0.007342
115.135	-0.00716
115.14	-0.007011
115.145	-0.006897
115.15	-0.006827
115.155	-0.006803
115.16	-0.006814
115.165	-0.006853
115.17	-0.006908
115.175	-0.006966
115.18	-0.007041
115.185	-0.007142
115.19	-0.007265
115.195	-0.007407
115.2	-0.007535
115.205	-0.007612
115.21	-0.007654
115.215	-0.007667
115.22	-0.007652
115.225	-0.007663
115.23	-0.0077
115.235	-0.007707
115.24	-0.007704
115.245	-0.007735
115.25	-0.007798
115.255	-0.007882
115.26	-0.00798
115.265	-0.008075
115.27	-0.008146
115.275	-0.008174
115.28	-0.008172

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
115.285	-0.008152
115.29	-0.008122
115.295	-0.008088
115.3	-0.008034
115.305	-0.007944
115.31	-0.007816
115.315	-0.007646
115.32	-0.007453
115.325	-0.007262
115.33	-0.007059
115.335	-0.00683
115.34	-0.006596
115.345	-0.006351
115.35	-0.006068
115.355	-0.005758
115.36	-0.005454
115.365	-0.005156
115.37	-0.004842
115.375	-0.004503
115.38	-0.00414
115.385	-0.003758
115.39	-0.003378
115.395	-0.003019
115.4	-0.00268
115.405	-0.002357
115.41	-0.002029
115.415	-0.001674
115.42	-0.001297
115.425	-0.000908
115.43	-0.000517
115.435	-0.000136
115.44	0.000228
115.445	0.000571
115.45	0.00091
115.455	0.001263
115.46	0.001631
115.465	0.002006
115.47	0.002382
115.475	0.002747
115.48	0.003081
115.485	0.003351
115.49	0.003544

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
115.495	0.003663
115.5	0.003725
115.505	0.003757
115.51	0.003798
115.515	0.003884
115.52	0.004004
115.525	0.004139
115.53	0.004266
115.535	0.004359
115.54	0.004398
115.545	0.004391
115.55	0.004349
115.555	0.004251
115.56	0.00414
115.565	0.004105
115.57	0.004154
115.575	0.004251
115.58	0.004389
115.585	0.004555
115.59	0.004723
115.595	0.004886
115.6	0.005045
115.605	0.005168
115.61	0.005269
115.615	0.005404
115.62	0.005561
115.625	0.005701
115.63	0.005814
115.635	0.005893
115.64	0.005924
115.645	0.005912
115.65	0.00587
115.655	0.00581
115.66	0.005775
115.665	0.005804
115.67	0.005908
115.675	0.006092
115.68	0.006358
115.685	0.006696
115.69	0.007081
115.695	0.007492
115.7	0.007904

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
115.705	0.00829
115.71	0.008654
115.715	0.009001
115.72	0.00932
115.725	0.009606
115.73	0.00985
115.735	0.010041
115.74	0.010184
115.745	0.010286
115.75	0.010337
115.755	0.010327
115.76	0.010262
115.765	0.010148
115.77	0.009999
115.775	0.009837
115.78	0.009692
115.785	0.009591
115.79	0.009543
115.795	0.009545
115.8	0.009574
115.805	0.009601
115.81	0.009595
115.815	0.009529
115.82	0.009407
115.825	0.00924
115.83	0.009044
115.835	0.008844
115.84	0.008642
115.845	0.008437
115.85	0.008238
115.855	0.008054
115.86	0.007873
115.865	0.007688
115.87	0.007505
115.875	0.007331
115.88	0.00718
115.885	0.007067
115.89	0.006995
115.895	0.006963
115.9	0.006966
115.905	0.006989
115.91	0.00703

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
115.915	0.007085
115.92	0.007141
115.925	0.007185
115.93	0.007215
115.935	0.007233
115.94	0.007238
115.945	0.007228
115.95	0.00722
115.955	0.007227
115.96	0.007224
115.965	0.007193
115.97	0.007116
115.975	0.006979
115.98	0.006821
115.985	0.006687
115.99	0.006604
115.995	0.006594
116	0.006654
116.005	0.006771
116.01	0.006925
116.015	0.007097
116.02	0.007289
116.025	0.007508
116.03	0.007769
116.035	0.008089
116.04	0.008471
116.045	0.008909
116.05	0.009387
116.055	0.009882
116.06	0.010369
116.065	0.010825
116.07	0.011236
116.075	0.011598
116.08	0.011922
116.085	0.012225
116.09	0.012529
116.095	0.012845
116.1	0.013155
116.105	0.013432
116.11	0.013638
116.115	0.013738
116.12	0.01373

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
116.125	0.013624
116.13	0.013446
116.135	0.013235
116.14	0.013024
116.145	0.012839
116.15	0.012701
116.155	0.01261
116.16	0.012529
116.165	0.012416
116.17	0.012226
116.175	0.011925
116.18	0.011518
116.185	0.011027
116.19	0.010486
116.195	0.009928
116.2	0.009385
116.205	0.008883
116.21	0.008404
116.215	0.007931
116.22	0.007463
116.225	0.006999
116.23	0.006553
116.235	0.006144
116.24	0.005752
116.245	0.00536
116.25	0.004957
116.255	0.004534
116.26	0.00411
116.265	0.003708
116.27	0.00335
116.275	0.003056
116.28	0.002834
116.285	0.002681
116.29	0.002588
116.295	0.002539
116.3	0.002517
116.305	0.002508
116.31	0.002513
116.315	0.002538
116.32	0.002596
116.325	0.002702
116.33	0.002869

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
116.335	0.003103
116.34	0.003406
116.345	0.00378
116.35	0.004198
116.355	0.004636
116.36	0.005085
116.365	0.005539
116.37	0.005996
116.375	0.006456
116.38	0.00691
116.385	0.007345
116.39	0.007746
116.395	0.008102
116.4	0.008407
116.405	0.00866
116.41	0.008872
116.415	0.009051
116.42	0.009195
116.425	0.009301
116.43	0.009345
116.435	0.009306
116.44	0.00918
116.445	0.008972
116.45	0.008699
116.455	0.008384
116.46	0.008036
116.465	0.007663
116.47	0.007264
116.475	0.00683
116.48	0.006369
116.485	0.005888
116.49	0.005384
116.495	0.004857
116.5	0.004318
116.505	0.00377
116.51	0.003219
116.515	0.002667
116.52	0.002102
116.525	0.001516
116.53	0.00092
116.535	0.000329
116.54	-0.000227

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
116.545	-0.000718
116.55	-0.001137
116.555	-0.001482
116.56	-0.001754
116.565	-0.001963
116.57	-0.002123
116.575	-0.002241
116.58	-0.002337
116.585	-0.002421
116.59	-0.002478
116.595	-0.002494
116.6	-0.002453
116.605	-0.002348
116.61	-0.002209
116.615	-0.002071
116.62	-0.001955
116.625	-0.001883
116.63	-0.001826
116.635	-0.001747
116.64	-0.001628
116.645	-0.001448
116.65	-0.001205
116.655	-0.000914
116.66	-0.000584
116.665	-0.000226
116.67	0.000124
116.675	0.000437
116.68	0.000713
116.685	0.000952
116.69	0.00117
116.695	0.001384
116.7	0.001577
116.705	0.001737
116.71	0.001863
116.715	0.001957
116.72	0.002048
116.725	0.002165
116.73	0.002302
116.735	0.002454
116.74	0.002597
116.745	0.002706
116.75	0.00279

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
116.755	0.002857
116.76	0.002929
116.765	0.003028
116.77	0.00314
116.775	0.003246
116.78	0.003339
116.785	0.00341
116.79	0.003454
116.795	0.003474
116.8	0.003477
116.805	0.003469
116.81	0.003461
116.815	0.003461
116.82	0.003468
116.825	0.003479
116.83	0.003492
116.835	0.0035
116.84	0.003511
116.845	0.003528
116.85	0.003541
116.855	0.003538
116.86	0.003509
116.865	0.003442
116.87	0.003338
116.875	0.003204
116.88	0.003044
116.885	0.002867
116.89	0.002681
116.895	0.002495
116.9	0.002315
116.905	0.002141
116.91	0.001985
116.915	0.001854
116.92	0.001749
116.925	0.001671
116.93	0.001612
116.935	0.001564
116.94	0.00153
116.945	0.001508
116.95	0.001488
116.955	0.001466
116.96	0.001427

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
116.965	0.001366
116.97	0.001293
116.975	0.00122
116.98	0.001177
116.985	0.00119
116.99	0.001251
116.995	0.001348
117	0.001454
117.005	0.001542
117.01	0.001614
117.015	0.001679
117.02	0.001742
117.025	0.001815
117.03	0.001889
117.035	0.001954
117.04	0.002011
117.045	0.002064
117.05	0.002123
117.055	0.002197
117.06	0.002293
117.065	0.002414
117.07	0.002538
117.075	0.002645
117.08	0.002715
117.085	0.002733
117.09	0.002707
117.095	0.00265
117.1	0.002584
117.105	0.002532
117.11	0.002502
117.115	0.002492
117.12	0.00249
117.125	0.002477
117.13	0.002435
117.135	0.002349
117.14	0.002211
117.145	0.002023
117.15	0.0018
117.155	0.001558
117.16	0.001306
117.165	0.001054
117.17	0.000797

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
117.175	0.000526
117.18	0.000251
117.185	-0.000018
117.19	-0.000279
117.195	-0.000524
117.2	-0.000744
117.205	-0.000932
117.21	-0.001067
117.215	-0.001136
117.22	-0.00114
117.225	-0.001087
117.23	-0.001008
117.235	-0.000935
117.24	-0.000881
117.245	-0.000854
117.25	-0.000847
117.255	-0.000849
117.26	-0.000853
117.265	-0.000856
117.27	-0.000859
117.275	-0.000872
117.28	-0.000903
117.285	-0.000961
117.29	-0.001048
117.295	-0.00116
117.3	-0.001291
117.305	-0.001435
117.31	-0.001579
117.315	-0.001717
117.32	-0.001853
117.325	-0.001992
117.33	-0.002136
117.335	-0.002287
117.34	-0.00244
117.345	-0.002587
117.35	-0.002739
117.355	-0.002905
117.36	-0.003082
117.365	-0.003269
117.37	-0.00346
117.375	-0.00365
117.38	-0.003826

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
117.385	-0.003976
117.39	-0.004103
117.395	-0.004208
117.4	-0.004303
117.405	-0.004396
117.41	-0.004483
117.415	-0.004563
117.42	-0.004633
117.425	-0.004689
117.43	-0.004741
117.435	-0.004801
117.44	-0.00486
117.445	-0.004912
117.45	-0.004948
117.455	-0.004961
117.46	-0.004952
117.465	-0.004924
117.47	-0.004899
117.475	-0.004893
117.48	-0.004909
117.485	-0.004947
117.49	-0.004987
117.495	-0.005007
117.5	-0.005004
117.505	-0.00498
117.51	-0.004926
117.515	-0.004842
117.52	-0.004728
117.525	-0.004582
117.53	-0.004417
117.535	-0.004247
117.54	-0.004072
117.545	-0.003891
117.55	-0.003712
117.555	-0.003539
117.56	-0.00337
117.565	-0.003199
117.57	-0.003021
117.575	-0.002825
117.58	-0.002605
117.585	-0.002359
117.59	-0.002092

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
117.595	-0.00181
117.6	-0.001538
117.605	-0.001295
117.61	-0.001082
117.615	-0.000893
117.62	-0.000718
117.625	-0.00054
117.63	-0.000362
117.635	-0.00019
117.64	-0.000025
117.645	0.000128
117.65	0.000263
117.655	0.000373
117.66	0.000462
117.665	0.000533
117.67	0.000593
117.675	0.000651
117.68	0.000709
117.685	0.000764
117.69	0.000829
117.695	0.000911
117.7	0.000998
117.705	0.001079
117.71	0.001146
117.715	0.001191
117.72	0.001212
117.725	0.001214
117.73	0.001186
117.735	0.001121
117.74	0.001033
117.745	0.000935
117.75	0.000822
117.755	0.000695
117.76	0.000558
117.765	0.000412
117.77	0.000278
117.775	0.000174
117.78	0.000097
117.785	0.000042
117.79	0
117.795	-0.00004
117.8	-0.000087

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
117.805	-0.000143
117.81	-0.0002
117.815	-0.000246
117.82	-0.000273
117.825	-0.00027
117.83	-0.000246
117.835	-0.000208
117.84	-0.00016
117.845	-0.000104
117.85	-0.000036
117.855	0.00005
117.86	0.000158
117.865	0.000293
117.87	0.000441
117.875	0.000589
117.88	0.000738
117.885	0.000886
117.89	0.00103
117.895	0.001173
117.9	0.001303
117.905	0.001408
117.91	0.001492
117.915	0.00156
117.92	0.001613
117.925	0.001654
117.93	0.001671
117.935	0.001658
117.94	0.001607
117.945	0.001515
117.95	0.001397
117.955	0.001271
117.96	0.001144
117.965	0.001018
117.97	0.000891
117.975	0.00076
117.98	0.000604
117.985	0.000407
117.99	0.000175
117.995	-0.000081
118	-0.00034
118.005	-0.000576
118.01	-0.00079

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
118.015	-0.000986
118.02	-0.001172
118.025	-0.001362
118.03	-0.001559
118.035	-0.001762
118.04	-0.001971
118.045	-0.00218
118.05	-0.002379
118.055	-0.00256
118.06	-0.002719
118.065	-0.002855
118.07	-0.002979
118.075	-0.0031
118.08	-0.00323
118.085	-0.003383
118.09	-0.003557
118.095	-0.003717
118.1	-0.003843
118.105	-0.003969
118.11	-0.004113
118.115	-0.004249
118.12	-0.004382
118.125	-0.004555
118.13	-0.004748
118.135	-0.004926
118.14	-0.005097
118.145	-0.005268
118.15	-0.005437
118.155	-0.005612
118.16	-0.005797
118.165	-0.005989
118.17	-0.006181
118.175	-0.006373
118.18	-0.006385
118.185	-0.006525
118.19	-0.006617
118.195	-0.006663
118.2	-0.006682
118.205	-0.006675
118.21	-0.00665
118.215	-0.006616
118.22	-0.006568

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
118.225	-0.006501
118.23	-0.006413
118.235	-0.006306
118.24	-0.006175
118.245	-0.006022
118.25	-0.005851
118.255	-0.005669
118.26	-0.005491
118.265	-0.005333
118.27	-0.005193
118.275	-0.005068
118.28	-0.004947
118.285	-0.004816
118.29	-0.004675
118.295	-0.004525
118.3	-0.004376
118.305	-0.004241
118.31	-0.004116
118.315	-0.003998
118.32	-0.003894
118.325	-0.003809
118.33	-0.003756
118.335	-0.003748
118.34	-0.003777
118.345	-0.00383
118.35	-0.0039
118.355	-0.003976
118.36	-0.004044
118.365	-0.004097
118.37	-0.004136
118.375	-0.004166
118.38	-0.004193
118.385	-0.004235
118.39	-0.004295
118.395	-0.004315
118.4	-0.004275
118.405	-0.004239
118.41	-0.00421
118.415	-0.004128
118.42	-0.004006
118.425	-0.003885
118.43	-0.003765

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
118.435	-0.003634
118.44	-0.003504
118.445	-0.003385
118.45	-0.003271
118.455	-0.003156
118.46	-0.003036
118.465	-0.002909
118.47	-0.00277
118.475	-0.002622
118.48	-0.00247
118.485	-0.002321
118.49	-0.002179
118.495	-0.002047
118.5	-0.00192
118.505	-0.001792
118.51	-0.001658
118.515	-0.001515
118.52	-0.001365
118.525	-0.001209
118.53	-0.001061
118.535	-0.00093
118.54	-0.000817
118.545	-0.000719
118.55	-0.000625
118.555	-0.000528
118.56	-0.000425
118.565	-0.000318
118.57	-0.000217
118.575	-0.00013
118.58	-0.000059
118.585	0.000001
118.59	0.00006
118.595	0.000131
118.6	0.000211
118.605	0.000297
118.61	0.000377
118.615	0.000437
118.62	0.000478
118.625	0.000505
118.63	0.000521
118.635	0.000537
118.64	0.000557

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
118.645	0.000581
118.65	0.000614
118.655	0.000657
118.66	0.000702
118.665	0.000739
118.67	0.000773
118.675	0.000811
118.68	0.000866
118.685	0.000951
118.69	0.001066
118.695	0.00121
118.7	0.001374
118.705	0.001549
118.71	0.001727
118.715	0.001901
118.72	0.002072
118.725	0.002245
118.73	0.002422
118.735	0.002608
118.74	0.002807
118.745	0.003019
118.75	0.003246
118.755	0.003481
118.76	0.003713
118.765	0.003926
118.77	0.004104
118.775	0.004238
118.78	0.004327
118.785	0.004375
118.79	0.004405
118.795	0.00444
118.8	0.004483
118.805	0.004534
118.81	0.004586
118.815	0.004629
118.82	0.004656
118.825	0.004658
118.83	0.004654
118.835	0.004651
118.84	0.004629
118.845	0.004596
118.85	0.004573

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
118.855	0.004557
118.86	0.004545
118.865	0.004539
118.87	0.004535
118.875	0.004531
118.88	0.004531
118.885	0.00454
118.89	0.00455
118.895	0.004558
118.9	0.004568
118.905	0.004583
118.91	0.004604
118.915	0.004633
118.92	0.00466
118.925	0.00467
118.93	0.00466
118.935	0.004624
118.94	0.004568
118.945	0.004496
118.95	0.004415
118.955	0.004331
118.96	0.004239
118.965	0.004133
118.97	0.00402
118.975	0.003908
118.98	0.003797
118.985	0.003688
118.99	0.003579
118.995	0.003466
119	0.003352
119.005	0.00324
119.01	0.003134
119.015	0.003037
119.02	0.00295
119.025	0.002874
119.03	0.002801
119.035	0.002723
119.04	0.002633
119.045	0.002531
119.05	0.002417
119.055	0.002298
119.06	0.002188

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
119.065	0.002106
119.07	0.002051
119.075	0.002018
119.08	0.002004
119.085	0.002001
119.09	0.001997
119.095	0.001984
119.1	0.001949
119.105	0.001882
119.11	0.001793
119.115	0.00169
119.12	0.001582
119.125	0.001476
119.13	0.001367
119.135	0.001249
119.14	0.001117
119.145	0.000968
119.15	0.000808
119.155	0.000645
119.16	0.000488
119.165	0.000345
119.17	0.000217
119.175	0.000108
119.18	0.000017
119.185	-0.000056
119.19	-0.000111
119.195	-0.000147
119.2	-0.000168
119.205	-0.000174
119.21	-0.000168
119.215	-0.000155
119.22	-0.000135
119.225	-0.000108
119.23	-0.000079
119.235	-0.000053
119.24	-0.00003
119.245	-0.000011
119.25	0.000005
119.255	0.000015
119.26	0.000031
119.265	0.000059
119.27	0.000104

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
119.275	0.000167
119.28	0.000243
119.285	0.000322
119.29	0.000401
119.295	0.000475
119.3	0.000539
119.305	0.000589
119.31	0.000629
119.315	0.00066
119.32	0.000689
119.325	0.000719
119.33	0.000751
119.335	0.000782
119.34	0.000816
119.345	0.000857
119.35	0.000904
119.355	0.000958
119.36	0.001012
119.365	0.001062
119.37	0.001111
119.375	0.00116
119.38	0.001214
119.385	0.001278
119.39	0.00135
119.395	0.001428
119.4	0.001507
119.405	0.001581
119.41	0.001646
119.415	0.0017
119.42	0.001745
119.425	0.001783
119.43	0.001817
119.435	0.00185
119.44	0.001885
119.445	0.001924
119.45	0.001958
119.455	0.001978
119.46	0.001974
119.465	0.00194
119.47	0.001876
119.475	0.00179
119.48	0.001687

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
119.485	0.001575
119.49	0.001455
119.495	0.001326
119.5	0.001188
119.505	0.001038
119.51	0.000882
119.515	0.000725
119.52	0.000571
119.525	0.000422
119.53	0.000279
119.535	0.000141
119.54	0.000003
119.545	-0.000136
119.55	-0.00028
119.555	-0.000434
119.56	-0.000584
119.565	-0.000718
119.57	-0.000833
119.575	-0.000926
119.58	-0.001001
119.585	-0.001068
119.59	-0.001126
119.595	-0.001178
119.6	-0.001222
119.605	-0.001254
119.61	-0.001279
119.615	-0.0013
119.62	-0.001317
119.625	-0.001328
119.63	-0.001332
119.635	-0.001326
119.64	-0.001301
119.645	-0.001254
119.65	-0.001187
119.655	-0.001105
119.66	-0.001021
119.665	-0.000947
119.67	-0.000881
119.675	-0.000817
119.68	-0.000752
119.685	-0.000678
119.69	-0.000594

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
119.695	-0.000503
119.7	-0.000406
119.705	-0.000308
119.71	-0.000211
119.715	-0.000118
119.72	-0.000032
119.725	0.000043
119.73	0.000106
119.735	0.000159
119.74	0.000202
119.745	0.000238
119.75	0.000268
119.755	0.000294
119.76	0.000319
119.765	0.000349
119.77	0.000385
119.775	0.000426
119.78	0.000476
119.785	0.00053
119.79	0.000587
119.795	0.000639
119.8	0.000681
119.805	0.000706
119.81	0.000715
119.815	0.000707
119.82	0.000692
119.825	0.000677
119.83	0.000667
119.835	0.000668
119.84	0.000672
119.845	0.000673
119.85	0.000667
119.855	0.000651
119.86	0.000626
119.865	0.000593
119.87	0.00055
119.875	0.000493
119.88	0.000424
119.885	0.000342
119.89	0.000251
119.895	0.000158
119.9	0.000057

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
119.905	-0.00005
119.91	-0.000163
119.915	-0.000278
119.92	-0.000389
119.925	-0.000488
119.93	-0.000571
119.935	-0.000636
119.94	-0.000687
119.945	-0.000729
119.95	-0.000765
119.955	-0.000797
119.96	-0.000827
119.965	-0.000855
119.97	-0.000877
119.975	-0.000885
119.98	-0.000882
119.985	-0.000868
119.99	-0.000845
119.995	-0.000819
120	-0.000786
120.005	-0.000746
120.01	-0.000701
120.015	-0.000653
120.02	-0.000603
120.025	-0.000557
120.03	-0.000512
120.035	-0.000472
120.04	-0.000437
120.045	-0.000412
120.05	-0.000394
120.055	-0.000385
120.06	-0.000382
120.065	-0.000379
120.07	-0.000379
120.075	-0.000379
120.08	-0.000382
120.085	-0.000392
120.09	-0.000405
120.095	-0.000421
120.1	-0.000436
120.105	-0.000449
120.11	-0.000457

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
120.115	-0.000461
120.12	-0.000462
120.125	-0.000464
120.13	-0.000468
120.135	-0.000473
120.14	-0.000476
120.145	-0.000477
120.15	-0.000477
120.155	-0.00048
120.16	-0.000487
120.165	-0.000501
120.17	-0.000519
120.175	-0.000538
120.18	-0.000556
120.185	-0.000571
120.19	-0.000579
120.195	-0.000579
120.2	-0.000574
120.205	-0.000567
120.21	-0.000564
120.215	-0.00057
120.22	-0.000582
120.225	-0.000595
120.23	-0.000608
120.235	-0.000618
120.24	-0.000627
120.245	-0.000637
120.25	-0.000648
120.255	-0.00066
120.26	-0.000672
120.265	-0.000681
120.27	-0.000688
120.275	-0.000695
120.28	-0.000696
120.285	-0.000688
120.29	-0.000671
120.295	-0.000646
120.3	-0.000618
120.305	-0.000593
120.31	-0.000573
120.315	-0.000559
120.32	-0.000551

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
120.325	-0.000548
120.33	-0.000549
120.335	-0.000555
120.34	-0.000566
120.345	-0.000584
120.35	-0.000608
120.355	-0.000639
120.36	-0.000674
120.365	-0.000709
120.37	-0.000741
120.375	-0.000767
120.38	-0.000786
120.385	-0.000798
120.39	-0.000803
120.395	-0.000801
120.4	-0.000796
120.405	-0.000791
120.41	-0.000785
120.415	-0.000779
120.42	-0.00077
120.425	-0.00076
120.43	-0.000749
120.435	-0.00074
120.44	-0.000734
120.445	-0.000737
120.45	-0.000748
120.455	-0.000767
120.46	-0.00079
120.465	-0.000812
120.47	-0.00083
120.475	-0.000842
120.48	-0.000847
120.485	-0.000847
120.49	-0.000841
120.495	-0.000831
120.5	-0.000817
120.505	-0.000798
120.51	-0.000776
120.515	-0.000754
120.52	-0.000732
120.525	-0.00071
120.53	-0.000687

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
120.535	-0.000662
120.54	-0.000637
120.545	-0.000611
120.55	-0.000584
120.555	-0.000555
120.56	-0.000525
120.565	-0.000492
120.57	-0.000459
120.575	-0.00043
120.58	-0.000405
120.585	-0.000387
120.59	-0.000376
120.595	-0.000371
120.6	-0.000368
120.605	-0.000366
120.61	-0.00036
120.615	-0.000349
120.62	-0.000334
120.625	-0.000318
120.63	-0.000303
120.635	-0.000295
120.64	-0.00029
120.645	-0.000287
120.65	-0.000282
120.655	-0.000272
120.66	-0.000259
120.665	-0.000247
120.67	-0.000239
120.675	-0.000239
120.68	-0.000246
120.685	-0.000261
120.69	-0.000282
120.695	-0.000307
120.7	-0.000334
120.705	-0.000361
120.71	-0.00039
120.715	-0.000425
120.72	-0.000465
120.725	-0.000512
120.73	-0.000561
120.735	-0.000609
120.74	-0.000657

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
120.745	-0.000702
120.75	-0.000746
120.755	-0.00079
120.76	-0.000836
120.765	-0.000883
120.77	-0.000932
120.775	-0.000983
120.78	-0.001032
120.785	-0.001077
120.79	-0.001115
120.795	-0.001146
120.8	-0.001171
120.805	-0.001193
120.81	-0.001211
120.815	-0.001227
120.82	-0.00124
120.825	-0.001249
120.83	-0.001255
120.835	-0.001257
120.84	-0.001258
120.845	-0.001255
120.85	-0.001252
120.855	-0.00125
120.86	-0.001247
120.865	-0.001242
120.87	-0.001238
120.875	-0.001234
120.88	-0.001232
120.885	-0.001231
120.89	-0.00123
120.895	-0.001225
120.9	-0.001217
120.905	-0.001206
120.91	-0.001193
120.915	-0.001181
120.92	-0.00117
120.925	-0.001162
120.93	-0.001155
120.935	-0.001146
120.94	-0.001137
120.945	-0.001126
120.95	-0.001117

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
120.955	-0.00111
120.96	-0.001108
120.965	-0.00111
120.97	-0.001116
120.975	-0.001127
120.98	-0.001139
120.985	-0.001151
120.99	-0.001161
120.995	-0.001167
121	-0.00117
121.005	-0.00117
121.01	-0.00117
121.015	-0.00117
121.02	-0.001171
121.025	-0.001171
121.03	-0.001169
121.035	-0.001161
121.04	-0.001149
121.045	-0.001131
121.05	-0.00111
121.055	-0.001087
121.06	-0.001063
121.065	-0.001038
121.07	-0.001013
121.075	-0.000989
121.08	-0.000967
121.085	-0.000948
121.09	-0.000933
121.095	-0.000921
121.1	-0.00091
121.105	-0.000898
121.11	-0.000885
121.115	-0.000873
121.12	-0.000861
121.125	-0.00085
121.13	-0.00084
121.135	-0.000832
121.14	-0.000827
121.145	-0.000826
121.15	-0.000827
121.155	-0.000831
121.16	-0.000838

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
121.165	-0.000846
121.17	-0.000857
121.175	-0.000871
121.18	-0.000887
121.185	-0.000903
121.19	-0.00092
121.195	-0.000937
121.2	-0.000954
121.205	-0.000972
121.21	-0.000988
121.215	-0.001004
121.22	-0.001018
121.225	-0.00103
121.23	-0.001041
121.235	-0.00105
121.24	-0.001059
121.245	-0.001067
121.25	-0.001074
121.255	-0.001078
121.26	-0.001078
121.265	-0.001075
121.27	-0.001067
121.275	-0.001055
121.28	-0.001039
121.285	-0.001021
121.29	-0.001002
121.295	-0.000984
121.3	-0.000966
121.305	-0.000949
121.31	-0.000931
121.315	-0.000914
121.32	-0.000896
121.325	-0.000879
121.33	-0.000862
121.335	-0.000847
121.34	-0.000832
121.345	-0.000819
121.35	-0.000806
121.355	-0.000793
121.36	-0.000778
121.365	-0.000761
121.37	-0.000743

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
121.375	-0.000727
121.38	-0.000712
121.385	-0.0007
121.39	-0.000688
121.395	-0.000677
121.4	-0.000663
121.405	-0.000644
121.41	-0.00062
121.415	-0.000593
121.42	-0.000564
121.425	-0.000536
121.43	-0.000509
121.435	-0.000481
121.44	-0.000454
121.445	-0.000426
121.45	-0.000398
121.455	-0.00037
121.46	-0.000343
121.465	-0.000316
121.47	-0.00029
121.475	-0.000265
121.48	-0.00024
121.485	-0.000216
121.49	-0.000192
121.495	-0.00017
121.5	-0.000148
121.505	-0.000127
121.51	-0.000107
121.515	-0.000089
121.52	-0.000074
121.525	-0.000061
121.53	-0.00005
121.535	-0.000041
121.54	-0.000033
121.545	-0.000026
121.55	-0.00002
121.555	-0.000015
121.56	-0.000011
121.565	-0.000006
121.57	-0.000003
121.575	-0.000001
121.58	0

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
121.585	-0.000002
121.59	-0.000007
121.595	-0.000013
121.6	-0.00002
121.605	-0.000026
121.61	-0.000032
121.615	-0.000037
121.62	-0.000042
121.625	-0.000048
121.63	-0.000053
121.635	-0.000059
121.64	-0.000065
121.645	-0.000071
121.65	-0.000077
121.655	-0.000083
121.66	-0.000087
121.665	-0.000091
121.67	-0.000094
121.675	-0.000096
121.68	-0.000098
121.685	-0.0001
121.69	-0.000102
121.695	-0.000103
121.7	-0.000104
121.705	-0.000105
121.71	-0.000106
121.715	-0.000105
121.72	-0.000104
121.725	-0.000101
121.73	-0.000096
121.735	-0.000091
121.74	-0.000086
121.745	-0.00008
121.75	-0.000075
121.755	-0.00007
121.76	-0.000064
121.765	-0.000058
121.77	-0.000051
121.775	-0.000043
121.78	-0.000034
121.785	-0.000026
121.79	-0.000019

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
121.795	-0.000012
121.8	-0.000006
121.805	-0.000001
121.81	0.000004
121.815	0.000008
121.82	0.000012
121.825	0.000017
121.83	0.000021
121.835	0.000025
121.84	0.000029
121.845	0.000033
121.85	0.000037
121.855	0.000041
121.86	0.000045
121.865	0.000048
121.87	0.00005
121.875	0.000052
121.88	0.000053
121.885	0.000054
121.89	0.000054
121.895	0.000053
121.9	0.000052
121.905	0.000049
121.91	0.000047
121.915	0.000044
121.92	0.000041
121.925	0.000037
121.93	0.000033
121.935	0.000029
121.94	0.000024
121.945	0.000019
121.95	0.000014
121.955	0.00001
121.96	0.000005
121.965	0.000001
121.97	-0.000004
121.975	-0.000008
121.98	-0.000012
121.985	-0.000016
121.99	-0.00002
121.995	-0.000023
122	-0.000025

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
122.005	-0.000027
122.01	-0.000028
122.015	-0.000029
122.02	-0.000029
122.025	-0.00003
122.03	-0.00003
122.035	-0.000031
122.04	-0.000032
122.045	-0.000033
122.05	-0.000033
122.055	-0.000033
122.06	-0.000032
122.065	-0.000031
122.07	-0.000029
122.075	-0.000028
122.08	-0.000026
122.085	-0.000024
122.09	-0.000023
122.095	-0.000021
122.1	-0.00002
122.105	-0.000018
122.11	-0.000016
122.115	-0.000014
122.12	-0.000013
122.125	-0.000011
122.13	-0.000009
122.135	-0.000008
122.14	-0.000006
122.145	-0.000004
122.15	-0.000002
122.155	0.000001
122.16	0.000004
122.165	0.000006
122.17	0.000009
122.175	0.000011
122.18	0.000013
122.185	0.000015
122.19	0.000017
122.195	0.000019
122.2	0.00002
122.205	0.000022
122.21	0.000023

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
122.215	0.000024
122.22	0.000025
122.225	0.000026
122.23	0.000027
122.235	0.000028
122.24	0.000029
122.245	0.00003
122.25	0.00003
122.255	0.00003
122.26	0.00003
122.265	0.00003
122.27	0.00003
122.275	0.000029
122.28	0.000029
122.285	0.000029
122.29	0.000029
122.295	0.000029
122.3	0.000029
122.305	0.000028
122.31	0.000028
122.315	0.000027
122.32	0.000027
122.325	0.000027
122.33	0.000027
122.335	0.000027
122.34	0.000027
122.345	0.000027
122.35	0.000028
122.355	0.000028
122.36	0.000029
122.365	0.00003
122.37	0.000031
122.375	0.000031
122.38	0.000032
122.385	0.000033
122.39	0.000034
122.395	0.000035
122.4	0.000036
122.405	0.000037
122.41	0.000038
122.415	0.000039
122.42	0.00004

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
122.425	0.000041
122.43	0.000042
122.435	0.000043
122.44	0.000043
122.445	0.000044
122.45	0.000045
122.455	0.000046
122.46	0.000047
122.465	0.000048
122.47	0.000048
122.475	0.000049
122.48	0.00005
122.485	0.000051
122.49	0.000051
122.495	0.000052
122.5	0.000053
122.505	0.000053
122.51	0.000054
122.515	0.000055
122.52	0.000055
122.525	0.000056
122.53	0.000057
122.535	0.000057
122.54	0.000058
122.545	0.000059
122.55	0.00006
122.555	0.00006
122.56	0.000061
122.565	0.000062
122.57	0.000062
122.575	0.000063
122.58	0.000064
122.585	0.000064
122.59	0.000065
122.595	0.000065
122.6	0.000066
122.605	0.000067
122.61	0.000067
122.615	0.000068
122.62	0.000068
122.625	0.000069
122.63	0.000069

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
122.635	0.00007
122.64	0.00007
122.645	0.000071
122.65	0.000071
122.655	0.000072
122.66	0.000072
122.665	0.000073
122.67	0.000073
122.675	0.000074
122.68	0.000074
122.685	0.000074
122.69	0.000075
122.695	0.000075
122.7	0.000076
122.705	0.000076
122.71	0.000077
122.715	0.000077
122.72	0.000077
122.725	0.000078
122.73	0.000078
122.735	0.000078
122.74	0.000079
122.745	0.000079
122.75	0.000079
122.755	0.00008
122.76	0.00008
122.765	0.00008
122.77	0.000081
122.775	0.000081
122.78	0.000081
122.785	0.000082
122.79	0.000082
122.795	0.000082
122.8	0.000083
122.805	0.000083
122.81	0.000083
122.815	0.000084
122.82	0.000084
122.825	0.000084
122.83	0.000084
122.835	0.000085
122.84	0.000085

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
122.845	0.000085
122.85	0.000085
122.855	0.000086
122.86	0.000086
122.865	0.000086
122.87	0.000086
122.875	0.000086
122.88	0.000087
122.885	0.000087
122.89	0.000087
122.895	0.000087
122.9	0.000087
122.905	0.000088
122.91	0.000088
122.915	0.000088
122.92	0.000088
122.925	0.000088
122.93	0.000088
122.935	0.000088
122.94	0.000089
122.945	0.000089
122.95	0.000089
122.955	0.000089
122.96	0.000089
122.965	0.000089
122.97	0.000089
122.975	0.000089
122.98	0.000089
122.985	0.000089
122.99	0.000089
122.995	0.000089
123	0.000089
123.005	0.000089
123.01	0.000089
123.015	0.00009
123.02	0.00009
123.025	0.00009
123.03	0.00009
123.035	0.00009
123.04	0.00009
123.045	0.00009
123.05	0.00009

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
123.055	0.00009
123.06	0.000089
123.065	0.000089
123.07	0.000089
123.075	0.000089
123.08	0.000089
123.085	0.000089
123.09	0.000089
123.095	0.000089
123.1	0.000089
123.105	0.000089
123.11	0.000089
123.115	0.000089
123.12	0.000089
123.125	0.000089
123.13	0.000089
123.135	0.000088
123.14	0.000088
123.145	0.000088
123.15	0.000088
123.155	0.000088
123.16	0.000088
123.165	0.000088
123.17	0.000088
123.175	0.000088
123.18	0.000087
123.185	0.000087
123.19	0.000087
123.195	0.000087
123.2	0.000087
123.205	0.000087
123.21	0.000087
123.215	0.000086
123.22	0.000086
123.225	0.000086
123.23	0.000086
123.235	0.000086
123.24	0.000086
123.245	0.000085
123.25	0.000085
123.255	0.000085
123.26	0.000085

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
123.265	0.000085
123.27	0.000084
123.275	0.000084
123.28	0.000084
123.285	0.000084
123.29	0.000084
123.295	0.000083
123.3	0.000083
123.305	0.000083
123.31	0.000083
123.315	0.000082
123.32	0.000082
123.325	0.000082
123.33	0.000082
123.335	0.000082
123.34	0.000081
123.345	0.000081
123.35	0.000081
123.355	0.000081
123.36	0.00008
123.365	0.00008
123.37	0.00008
123.375	0.00008
123.38	0.000079
123.385	0.000079
123.39	0.000079
123.395	0.000079
123.4	0.000078
123.405	0.000078
123.41	0.000078
123.415	0.000077
123.42	0.000077
123.425	0.000077
123.43	0.000077
123.435	0.000076
123.44	0.000076
123.445	0.000076
123.45	0.000075
123.455	0.000075
123.46	0.000075
123.465	0.000075
123.47	0.000074

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
123.475	0.000074
123.48	0.000074
123.485	0.000073
123.49	0.000073
123.495	0.000073
123.5	0.000072
123.505	0.000072
123.51	0.000072
123.515	0.000072
123.52	0.000071
123.525	0.000071
123.53	0.000071
123.535	0.00007
123.54	0.00007
123.545	0.00007
123.55	0.000069
123.555	0.000069
123.56	0.000069
123.565	0.000068
123.57	0.000068
123.575	0.000068
123.58	0.000067
123.585	0.000067
123.59	0.000067
123.595	0.000066
123.6	0.000066
123.605	0.000066
123.61	0.000065
123.615	0.000065
123.62	0.000065
123.625	0.000064
123.63	0.000064
123.635	0.000064
123.64	0.000063
123.645	0.000063
123.65	0.000063
123.655	0.000062
123.66	0.000062
123.665	0.000062
123.67	0.000061
123.675	0.000061
123.68	0.00006

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
123.685	0.00006
123.69	0.00006
123.695	0.000059
123.7	0.000059
123.705	0.000059
123.71	0.000058
123.715	0.000058
123.72	0.000058
123.725	0.000057
123.73	0.000057
123.735	0.000057
123.74	0.000056
123.745	0.000056
123.75	0.000055
123.755	0.000055
123.76	0.000055
123.765	0.000054
123.77	0.000054
123.775	0.000054
123.78	0.000053
123.785	0.000053
123.79	0.000052
123.795	0.000052
123.8	0.000052
123.805	0.000051
123.81	0.000051
123.815	0.00005
123.82	0.00005
123.825	0.00005
123.83	0.000049
123.835	0.000049
123.84	0.000049
123.845	0.000048
123.85	0.000048
123.855	0.000047
123.86	0.000047
123.865	0.000047
123.87	0.000046
123.875	0.000046
123.88	0.000045
123.885	0.000045
123.89	0.000045

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
123.895	0.000044
123.9	0.000044
123.905	0.000043
123.91	0.000043
123.915	0.000043
123.92	0.000042
123.925	0.000042
123.93	0.000041
123.935	0.000041
123.94	0.000041
123.945	0.00004
123.95	0.00004
123.955	0.000039
123.96	0.000039
123.965	0.000039
123.97	0.000038
123.975	0.000038
123.98	0.000037
123.985	0.000037
123.99	0.000037
123.995	0.000036
124	0.000036
124.005	0.000035
124.01	0.000035
124.015	0.000035
124.02	0.000034
124.025	0.000034
124.03	0.000033
124.035	0.000033
124.04	0.000033
124.045	0.000032
124.05	0.000032
124.055	0.000031
124.06	0.000031
124.065	0.000031
124.07	0.00003
124.075	0.00003
124.08	0.000029
124.085	0.000029
124.09	0.000028
124.095	0.000028
124.1	0.000028

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Time (s)	Acceleration (g)
124.105	0.000027
124.11	0.000027
124.115	0.000026
124.12	0.000026
124.125	0.000026
124.13	0.000025
124.135	0.000025
124.14	0.000024
124.145	0.000024
124.15	0.000023
124.155	0.000023
124.16	0.000023
124.165	0.000022
124.17	0.000022
124.175	0.000021
124.18	0.000021
124.185	0.000021
124.19	0.00002
124.195	0.00002
124.2	0.000019
124.205	0.000019
124.21	0.000018
124.215	0.000018
124.22	0.000018
124.225	0.000017
124.23	0.000017
124.235	0.000016
124.24	0.000016
124.245	0.000015
124.25	0.000015
124.255	0.000015
124.26	0.000014
124.265	0.000014
124.27	0.000013
124.275	0.000013
124.28	0.000013
124.285	0.000012
124.29	0.000012
124.295	0.000011
124.3	0.000011
124.305	0.00001
124.31	0.00001

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Input Motion

Time (s)	Acceleration (g)
124.315	0.00001
124.32	0.000009
124.325	0.000009
124.33	0.000008
124.335	0.000008
124.34	0.000007
124.345	0.000007
124.35	0.000007
124.355	0.000006
124.36	0.000006
124.365	0.000005
124.37	0.000005
124.375	0.000004
124.38	0.000004
124.385	0.000004
124.39	0.000003

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
0	0	0	0	0	0	0
0.005	0.000016	0	0	0	6.47017E-11	3.79747E-08
0.01	1.60003E-05	1.22259E-14	2.47044E-12	5.55849E-10	1.29406E-10	2.98142E-07
0.015	1.60014E-05	3.7994E-13	7.67731E-11	1.72739E-08	1.94119E-10	8.16344E-07
0.02	1.60031E-05	2.1095E-12	4.26259E-10	9.59083E-08	2.58846E-10	1.57575E-06
0.025	1.60057E-05	5.41943E-12	1.09509E-09	2.46394E-07	3.23593E-10	2.56675E-06
0.03	1.60093E-05	1.01561E-11	2.0522E-09	4.61745E-07	3.8837E-10	3.77241E-06
0.035	1.60138E-05	1.67868E-11	3.39206E-09	7.63213E-07	4.53183E-10	5.17716E-06
0.04	1.60193E-05	2.41416E-11	4.8782E-09	1.0976E-06	5.18041E-10	6.76254E-06
0.045	1.60254E-05	3.24523E-11	6.55753E-09	1.47544E-06	5.82948E-10	8.51135E-06
0.05	1.60315E-05	4.21254E-11	8.51213E-09	1.91523E-06	6.47905E-10	1.04058E-05
0.055	1.60382E-05	5.00674E-11	1.01169E-08	2.27631E-06	7.12916E-10	1.24305E-05
0.06	1.60452E-05	5.729E-11	1.15764E-08	2.60469E-06	7.77984E-10	1.45735E-05
0.065	1.60524E-05	6.42624E-11	1.29853E-08	2.92169E-06	8.4311E-10	1.68282E-05
0.07	1.60602E-05	6.86627E-11	1.38744E-08	3.12175E-06	9.083E-10	1.91875E-05
0.075	1.6068E-05	7.35725E-11	1.48665E-08	3.34497E-06	9.73553E-10	2.16458E-05
0.08	1.60761E-05	7.84693E-11	1.5856E-08	3.56761E-06	1.03887E-09	2.41974E-05
0.085	1.60846E-05	8.21867E-11	1.66072E-08	3.73662E-06	1.10426E-09	2.68373E-05
0.09	1.60933E-05	8.61916E-11	1.74164E-08	3.9187E-06	1.16972E-09	2.95605E-05
0.095	1.61031E-05	8.54084E-11	1.72582E-08	3.88309E-06	1.23526E-09	3.23628E-05
0.1	1.61141E-05	8.09692E-11	1.63612E-08	3.68126E-06	1.30088E-09	3.52397E-05
0.105	1.61258E-05	7.52596E-11	1.52074E-08	3.42167E-06	1.36661E-09	3.81872E-05
0.11	1.61397E-05	6.13669E-11	1.24002E-08	2.79004E-06	1.43244E-09	4.12017E-05
0.115	1.61557E-05	3.94509E-11	7.97171E-09	1.79363E-06	1.49841E-09	4.42799E-05
0.12	1.61744E-05	7.2735E-12	1.46973E-09	3.30689E-07	1.56453E-09	4.74183E-05
0.125	1.61977E-05	-4.33358E-11	-8.75672E-09	-1.97026E-06	1.63084E-09	5.06135E-05
0.13	1.62285E-05	-1.25394E-10	-2.5338E-08	-5.70105E-06	1.6974E-09	5.38629E-05
0.135	1.62776E-05	-2.91709E-10	-5.89447E-08	-1.32625E-05	1.76437E-09	5.71639E-05
0.14	1.63702E-05	-6.62525E-10	-1.33874E-07	-3.01216E-05	1.8321E-09	6.05136E-05
0.145	1.65655E-05	-1.5286E-09	-3.0888E-07	-6.94979E-05	1.90146E-09	6.39109E-05
0.15	1.6998E-05	-3.55163E-09	-7.17664E-07	-0.000161474	1.97448E-09	6.73546E-05
0.155	1.79123E-05	-7.93848E-09	-1.6041E-06	-0.000360922	2.05557E-09	7.08478E-05
0.16	1.96791E-05	-1.65249E-08	-3.33912E-06	-0.000751303	2.15345E-09	7.43967E-05
0.165	2.2731E-05	-3.14636E-08	-6.35769E-06	-0.001430481	2.28404E-09	7.80185E-05
0.17	2.73593E-05	-5.422E-08	-1.09559E-05	-0.002465086	2.47323E-09	8.17409E-05
0.175	3.34414E-05	-8.42205E-08	-1.70179E-05	-0.003829029	2.75587E-09	8.56076E-05
0.18	4.02886E-05	-1.18085E-07	-2.38605E-05	-0.005368607	3.16612E-09	8.9691E-05
0.185	4.68409E-05	-1.50572E-07	-3.04248E-05	-0.006845584	3.72065E-09	9.40719E-05
0.19	5.2188E-05	-1.7716E-07	-3.57971E-05	-0.008054353	4.40901E-09	9.88368E-05
0.195	5.59701E-05	-1.96038E-07	-3.96115E-05	-0.008912582	5.20076E-09	0.000104056
0.2	5.82554E-05	-2.07518E-07	-4.19312E-05	-0.00943451	6.05848E-09	0.000109784
0.205	5.91303E-05	-2.12013E-07	-4.28395E-05	-0.009638883	6.94217E-09	0.00011605
0.21	5.86802E-05	-2.09927E-07	-4.24178E-05	-0.009544013	7.81245E-09	0.000122861
0.215	5.74556E-05	-2.03958E-07	-4.12118E-05	-0.009272662	8.64678E-09	0.000130216
0.22	5.64872E-05	-1.99209E-07	-4.02522E-05	-0.009056753	9.45323E-09	0.000138169
0.225	5.63535E-05	-1.98575E-07	-4.01241E-05	-0.009027913	1.02559E-08	0.000146631
0.23	5.65268E-05	-1.99475E-07	-4.03059E-05	-0.00906882	1.10634E-08	0.000155419
0.235	5.62355E-05	-1.98079E-07	-4.00238E-05	-0.009005354	1.18627E-08	0.000164498
0.24	5.56949E-05	-1.95425E-07	-3.94876E-05	-0.008884708	1.26467E-08	0.000173852
0.245	5.56808E-05	-1.9536E-07	-3.94743E-05	-0.008881718	1.34303E-08	0.000183466
0.25	5.61709E-05	-1.97799E-07	-3.99673E-05	-0.008992632	1.42277E-08	0.000193322
0.255	5.65287E-05	-1.99596E-07	-4.03303E-05	-0.009074326	1.50354E-08	0.000203409
0.26	5.67776E-05	-2.00847E-07	-4.05831E-05	-0.00913119	1.58501E-08	0.000213714
0.265	5.73678E-05	-2.03787E-07	-4.11772E-05	-0.009264875	1.66819E-08	0.000224227
0.27	5.79787E-05	-2.06851E-07	-4.17963E-05	-0.00940417	1.75315E-08	0.000234942
0.275	5.79496E-05	-2.06755E-07	-4.1777E-05	-0.009399823	1.83803E-08	0.000245849
0.28	5.7525E-05	-2.04681E-07	-4.13579E-05	-0.009305531	1.92166E-08	0.000256936
0.285	5.73795E-05	-2.03972E-07	-4.12146E-05	-0.009273277	2.00487E-08	0.000268185
0.29	5.74919E-05	-2.04542E-07	-4.13297E-05	-0.009299182	2.08841E-08	0.000279583
0.295	5.75731E-05	-2.04959E-07	-4.1414E-05	-0.009318144	2.17219E-08	0.000291119
0.3	5.77303E-05	-2.05748E-07	-4.15735E-05	-0.009354047	2.25642E-08	0.000302784
0.305	5.79631E-05	-2.06914E-07	-4.18091E-05	-0.009407058	2.34133E-08	0.000314571
0.31	5.8093E-05	-2.07571E-07	-4.19418E-05	-0.009436905	2.42663E-08	0.00032647
0.315	5.83789E-05	-2.08992E-07	-4.22289E-05	-0.0095015	2.51277E-08	0.000338478
0.32	5.90405E-05	-2.12279E-07	-4.28932E-05	-0.009650964	2.60087E-08	0.000350586
0.325	5.95676E-05	-2.14921E-07	-4.3427E-05	-0.009771066	2.69055E-08	0.000362796
0.33	5.95127E-05	-2.14684E-07	-4.33791E-05	-0.009760309	2.78006E-08	0.000375102
0.335	5.92176E-05	-2.13241E-07	-4.30876E-05	-0.009694707	2.86869E-08	0.000387499
0.34	5.9131E-05	-2.12818E-07	-4.30019E-05	-0.009675433	2.95706E-08	0.000399977
0.345	5.92907E-05	-2.1361E-07	-4.3162E-05	-0.00971145	3.04591E-08	0.000412526
0.35	5.96836E-05	-2.15558E-07	-4.35556E-05	-0.009800007	3.13594E-08	0.000425145
0.355	6.02852E-05	-2.18547E-07	-4.41596E-05	-0.009935913	3.22779E-08	0.000437832
0.36	6.08033E-05	-2.21135E-07	-4.46826E-05	-0.010053586	3.32123E-08	0.000450587
0.365	6.09856E-05	-2.22066E-07	-4.48706E-05	-0.010095875	3.41523E-08	0.000463411
0.37	6.09969E-05	-2.22141E-07	-4.48858E-05	-0.010099305	3.50927E-08	0.000476301
0.375	6.11144E-05	-2.22735E-07	-4.50058E-05	-0.010126307	3.60367E-08	0.000489251
0.38	6.13088E-05	-2.23711E-07	-4.5203E-05	-0.010170678	3.69867E-08	0.000502258
0.385	6.15393E-05	-2.24862E-07	-4.54356E-05	-0.010223008	3.79438E-08	0.000515317
0.39	6.20867E-05	-2.2758E-07	-4.59848E-05	-0.01034657	3.89181E-08	0.000528426
0.395	6.28691E-05	-2.3148E-07	-4.67728E-05	-0.010523882	3.9917E-08	0.000541584
0.4	6.31107E-05	-2.32722E-07	-4.70237E-05	-0.010580332	4.09237E-08	0.000554791
0.405	6.27122E-05	-2.30779E-07	-4.66311E-05	-0.010491999	4.19177E-08	0.000568045
0.41	6.27009E-05	-2.30727E-07	-4.66207E-05	-0.010489654	4.29113E-08	0.000581335
0.415	6.33813E-05	-2.34112E-07	-4.73047E-05	-0.010643554	4.39266E-08	0.00059466
0.42	6.38439E-05	-2.36448E-07	-4.77766E-05	-0.010749731	4.49568E-08	0.000608017
0.425	6.36631E-05	-2.35602E-07	-4.76056E-05	-0.01071126	4.59812E-08	0.000621404
0.43	6.32039E-05	-2.33366E-07	-4.71538E-05	-0.010609595	4.69908E-08	0.000634816
0.435	6.26965E-05	-2.30883E-07	-4.6652E-05	-0.01049671	4.79843E-08	0.000648245
0.44	6.23029E-05	-2.28955E-07	-4.62626E-05	-0.010409085	4.89653E-08	0.00066168
0.445	6.21207E-05	-2.2808E-07	-4.60857E-05	-0.010369282	4.99407E-08	0.000675117
0.45	6.17433E-05	-2.26253E-07	-4.57165E-05	-0.010286223	5.09042E-08	0.000688549
0.455	6.07801E-05	-2.21526E-07	-4.47614E-05	-0.010071307	5.18378E-08	0.000701969
0.46	5.95634E-05	-2.15524E-07	-4.35485E-05	-0.009798423	5.27345E-08	0.000715363
0.465	5.86799E-05	-2.11159E-07	-4.26666E-05	-0.009599987	5.36048E-08	0.000728726
0.47	5.80066E-05	-2.07849E-07	-4.19976E-05	-0.009449467	5.44552E-08	0.000742045
0.475	5.67021E-05	-2.01433E-07	-4.07007E-05	-0.009157649	5.52678E-08	0.000755308
0.48	5.44674E-05	-1.9039E-07	-3.84698E-05	-0.008655695	5.60176E-08	0.00076851
0.485	5.21148E-05	-1.78725E-07	-3.61128E-05	-0.008125384	5.6704E-08	0.000781632
0.49	5.01821E-05	-1.6912E-07	-3.41719E-05	-0.007688687	5.73405E-08	0.000794653
0.495	4.82262E-05	-1.59392E-07	-3.22063E-05	-0.007246408	5.79283E-08	0.000807564
0.5	4.62087E-05	-1.49327E-07	-3.01725E-05	-0.00678882	5.8468E-08	0.000820352
0.505	4.49944E-05	-1.43201E-07	-2.89347E-05	-0.006510297	5.89797E-08	0.000832999
0.51	4.50931E-05	-1.43567E-07	-2.90086E-05	-0.006526932	5.94936E-08	0.000845502
0.515	4.61404E-05	-1.48652E-07	-3.00361E-05	-0.006758118	6.00316E-08	0.000857864

Period (sec)	PSA (g)
0.01	0.16665459
0.0106412	0.167565002
0.0113235	0.168029224
0.0120495	0.167914557
0.0128221	0.169281318
0.0136442	0.175271836
0.014519	0.181144951
0.01545	0.222813893
0.0164406	0.250051864
0.0174947	0.250420473
0.0186165	0.281076306
0.0198101	0.287451355
0.0210803	0.31205577
0.0224319	0.31170742
0.0238702	0.307329015
0.0254007	0.278286305
0.0270293	0.292241009
0.0287624	0.297771895
0.0306066	0.331243554
0.032569	0.336873513
0.0346572	0.32810262
0.036879399	0.295532125
0.039244	0.283778068
0.0417603	0.283418633
0.0444378	0.330917229
0.047287099	0.371945355
0.050319	0.368642211
0.053545399	0.366440148
0.056978599	0.391812753
0.060631901	0.405411341
0.064519501	0.401057135
0.068656299	0.447499248
0.0730584	0.460652387
0.077742803	0.407840836
0.082727499	0.405095468
0.088031803	0.37296934
0.093676201	0.416675151
0.099682501	0.521464859
0.106073999	0.593141594
0.112874996	0.587174884
0.120111997	0.572064737
0.127814001	0.549947708
0.136008993	0.52565824
0.14472999	0.555426972
0.154009001	0.530211331
0.163883998	0.491258506
0.174392	0.447025126
0.185572998	0.47881171
0.197472003	0.435809851
0.210134007	0.526821407
0.223606996	0.567997677
0.237943974	0.488844926
0.253200005	0.452849031
0.269435022	0.433273898
0.286710975	0.349295674
0.305094033	0.343890853
0.324656035	0.286231539
0.345471951	0.278708847
0.367623001	0.280042788
0.391194065	0.281418577
0.416276927	0.263217687
0.442966904	0.283585875
0.471369044	0.267027236
0.50159306	0.351120445
0.533754074	0.382847784
0.567976895	0.390099331
0.604393944	0.418150381
0.643145961	0.446037483
0.684384	0.46301026
0.728264756	0.386603589
0.774958908	0.382667376
0.824647731	0.425688648
0.877523208	0.392938901
0.933787901	0.319842878
0.993660446	0.289326788
1.057369708	0.22083177
1.125169479	0.22625158
1.197309406	0.218956113
1.274080114	0.180535786
1.35577043	0.161903904
1.442699579	0.143680522
1.535199829	0.120730041
1.633639913	0.134919881
1.738380664	0.117705488
1.849841006	0.09801201
1.968449688	0.094085996
2.094661963	0.090949127
2.228968567	0.090442054
2.371882753	0.075484187
2.523958678	0.072655044
2.685796701	0.060255843
2.858000257	0.054259765
3.041251536	0.052413623
3.236245955	0.045890194
3.443751485	0.042690516
3.664560766	0.040201422
3.89951724	0.037071061
4.149549774	0.032797126
4.415615382	0.030901712
4.698740268	0.027004717
5	0.028660831
5.320592288	0.024979393
5.661744723	0.020551392
6.024749672	0.019570442

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
0.006103516	8.20944E-06	0.994707691
0.012207031	3.71853E-05	0.979143171
0.018310547	0.000167746	0.954939662
0.024414063	9.63657E-05	1.132868878
0.030517578	0.000128993	1.083599651
0.036621094	0.000276782	0.963830372
0.042724609	0.00032865	1.055413827
0.048828125	0.000198235	1.242675852
0.054931641	0.000307786	0.850495849
0.061035156	0.000825006	0.990852567
0.067138672	0.005348971	1.007333817
0.073242188	0.016510931	1.005411515
0.079345703	0.023749301	1.008709779
0.085449219	0.047398159	1.006992675
0.091552734	0.08665702	1.006301435
0.09765625	0.100170509	1.006306621
0.103759766	0.056511838	1.009863812
0.109863281	0.031766744	1.016870994
0.115966797	0.035558631	1.016741366
0.122070313	0.033329919	1.010079103
0.128173828	0.033628165	1.004982179
0.134277344	0.020045695	1.006616459
0.140380859	0.014275156	1.001499391
0.146484375	0.012275378	1.026905928
0.152587891	0.035871792	1.013071423
0.158691406	0.019949144	1.008727973
0.164794922	0.023168752	1.029385857
0.170898438	0.053552013	1.025061914
0.177001953	0.028333414	1.032700288
0.183105469	0.023759904	1.01187905
0.189208984	0.032293097	1.027280634
0.1953125	0.017686119	1.073778091
0.201416016	0.026480469	1.060447806
0.207519531	0.061444284	1.041205897
0.213623047	0.049215498	1.047210877
0.219726563	0.01470624	1.013949398
0.225830078	0.043467785	1.013341941
0.231933594	0.027794579	0.996910282
0.238037109	0.036198519	1.052676931
0.244140625	0.062800839	1.05363341
0.250244141	0.058333536	1.057744741
0.256347656	0.028154987	1.075274217
0.262451172	0.038103878	1.063262871
0.268554688	0.07015046	1.054228213
0.274658203	0.065231346	1.056916161
0.280761719	0.02943567	1.084733327
0.286865234	0.027737626	1.1085632
0.29296875	0.063381828	1.067480218
0.299072266	0.052964083	1.062247299
0.305175781	0.012524516	1.001212179
0.311279297	0.005343916	1.057743158
0.317382813	0.046363143	1.059295373
0.323486328	0.061073872	1.070838777
0.329589844	0.087229909	1.075603394
0.335693359	0.114040501	1.078059536
0.341796875	0.069237776	1.08979416
0.347900391	0.046885968	1.09807174
0.354003906	0.068731219	1.085959662
0.360107422	0.064457622	1.074468826
0.366210938	0.047277811	1.067596672
0.372314453	0.024726558	1.044284725
0.378417969	0.013421401	1.087126095
0.384521484	0.042886113	1.149832281
0.390625	0.054766452	1.125742636
0.396728516	0.028517767	1.068055951
0.402832031	0.072064855	1.10438096
0.408935547	0.100807557	1.124611427
0.415039063	0.076200654	1.157717301
0.421142578	0.044872562	1.199610997
0.427246094	0.070360576	1.146357756
0.433349609	0.07119843	1.146738504
0.439453125	0.023777278	1.210220458
0.445556641	0.055611853	1.13487547
0.451660156	0.044253494	1.19337812
0.457763672	0.016481099	1.53583728
0.463867188	0.03429957	1.280461398
0.469970703	0.069289822	1.206939559
0.476074219	0.064054093	1.211729017
0.482177734	0.042957491	1.194050977
0.48828125	0.044159616	1.139966713
0.494384766	0.019324758	1.074987999
0.500488281	0.04224321	1.176445566
0.506591797	0.089891999	1.203620853
0.512695313	0.096633741	1.222293965
0.518798828	0.08137865	1.19757429
0.524902344	0.051724324	1.157190583
0.531005859	0.022524686	1.116698666
0.537109375	0.042206519	1.24826485
0.543212891	0.039524034	1.264733889
0.549316406	0.020132303	1.18402259
0.555419922	0.026925367	1.243330338
0.561523438	0.032682555	1.265240492
0.567626953	0.03312541	1.226122963
0.573730469	0.047798577	1.212849293
0.579833984	0.068817933	1.211572629
0.5859375	0.090215867	1.246163444
0.592041016	0.116616736	1.301682929
0.598144531	0.117615431	1.329914222
0.604248047	0.085083895	1.356507705
0.610351563	0.083452696	1.325516169
0.616455078	0.092965105	1.328252559
0.622558594	0.084792133	1.37437024
0.628662109	0.076492326	1.393483686
0.634765625	0.076955137	1.374840083

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
0.52	4.74706E-05	-1.55168E-07	-3.13529E-05	-0.007054391	6.06012E-08	0.000870086
0.525	4.86838E-05	-1.61124E-07	-3.25564E-05	-0.007325181	6.12002E-08	0.000882176
0.53	4.98423E-05	-1.6682E-07	-3.37072E-05	-0.007584116	6.18281E-08	0.000894147
0.535	5.09135E-05	-1.72099E-07	-3.47739E-05	-0.007824118	6.24832E-08	0.000906004
0.54	5.15367E-05	-1.75166E-07	-3.53938E-05	-0.007963602	6.31545E-08	0.000917747
0.545	5.19713E-05	-1.77287E-07	-3.58223E-05	-0.008060011	6.38372E-08	0.000929379
0.55	5.28796E-05	-1.8175E-07	-3.67242E-05	-0.008262941	6.45439E-08	0.000940912
0.555	5.38071E-05	-1.86335E-07	-3.76506E-05	-0.008471376	6.52757E-08	0.000952345
0.56	5.39166E-05	-1.86876E-07	-3.77598E-05	-0.008495948	6.60104E-08	0.000963679
0.565	5.38148E-05	-1.86341E-07	-3.76519E-05	-0.008471668	6.67423E-08	0.000974912
0.57	5.43796E-05	-1.89099E-07	-3.8209E-05	-0.008597031	6.74897E-08	0.000986048
0.575	5.4994E-05	-1.92122E-07	-3.88199E-05	-0.008734479	6.82541E-08	0.000997093
0.58	5.50793E-05	-1.92522E-07	-3.89006E-05	-0.008752646	6.90208E-08	0.001008044
0.585	5.54774E-05	-1.94446E-07	-3.92895E-05	-0.008840136	6.97987E-08	0.0010189
0.59	5.65556E-05	-1.99749E-07	-4.0361E-05	-0.00908123	7.06071E-08	0.00102966
0.595	5.7379E-05	-2.03815E-07	-4.11827E-05	-0.009266099	7.14392E-08	0.00104033
0.6	5.77659E-05	-2.05714E-07	-4.15663E-05	-0.009352419	7.22826E-08	0.001050919
0.605	5.84092E-05	-2.08873E-07	-4.22047E-05	-0.009496067	7.31448E-08	0.001061427
0.61	5.91012E-05	-2.12286E-07	-4.28943E-05	-0.00965122	7.40277E-08	0.001071852
0.615	5.94605E-05	-2.14049E-07	-4.32506E-05	-0.009731383	7.49212E-08	0.001082196
0.62	6.00855E-05	-2.17116E-07	-4.38703E-05	-0.009870807	7.58337E-08	0.001092456
0.625	6.10561E-05	-2.2191E-07	-4.4839E-05	-0.01008877	7.67759E-08	0.001102637
0.63	6.14298E-05	-2.23767E-07	-4.52142E-05	-0.010173191	7.77296E-08	0.001112749
0.635	6.12631E-05	-2.22924E-07	-4.5044E-05	-0.01013489	7.86782E-08	0.00112279
0.64	6.17237E-05	-2.25163E-07	-4.54963E-05	-0.010236663	7.96411E-08	0.001132756
0.645	6.28537E-05	-2.30733E-07	-4.66219E-05	-0.010489923	8.06396E-08	0.001142649
0.65	6.36295E-05	-2.34573E-07	-4.73978E-05	-0.010664496	8.16629E-08	0.001152473
0.655	6.40537E-05	-2.36665E-07	-4.78203E-05	-0.010759577	8.26998E-08	0.00116222
0.66	6.47663E-05	-2.4018E-07	-4.85307E-05	-0.010919398	8.376E-08	0.0011719
0.665	6.53846E-05	-2.43245E-07	-4.915E-05	-0.011058741	8.48405E-08	0.001181544
0.67	6.54424E-05	-2.43532E-07	-4.92079E-05	-0.01107177	8.59229E-08	0.001191116
0.675	6.55351E-05	-2.43969E-07	-4.92962E-05	-0.01109165	8.70084E-08	0.001200612
0.68	6.61819E-05	-2.47144E-07	-4.99377E-05	-0.011235976	8.81154E-08	0.001210037
0.685	6.71756E-05	-2.52048E-07	-5.09286E-05	-0.011458944	8.92559E-08	0.001219417
0.69	6.81224E-05	-2.56738E-07	-5.18762E-05	-0.011672145	9.04288E-08	0.001228746
0.695	6.86687E-05	-2.59455E-07	-5.24252E-05	-0.011795668	9.16206E-08	0.001237999
0.7	6.89093E-05	-2.6065E-07	-5.26666E-05	-0.01184999	9.28207E-08	0.001247176
0.705	6.9262E-05	-2.62391E-07	-5.30185E-05	-0.011929152	9.40332E-08	0.001256301
0.71	6.96466E-05	-2.64292E-07	-5.34026E-05	-0.012015593	9.52591E-08	0.001265374
0.715	7.00335E-05	-2.66198E-07	-5.37876E-05	-0.012102203	9.64988E-08	0.00127442
0.72	7.08335E-05	-2.70146E-07	-5.45853E-05	-0.0122817	9.77669E-08	0.001283477
0.725	7.17443E-05	-2.74661E-07	-5.54977E-05	-0.012486978	9.90678E-08	0.001292485
0.73	7.22262E-05	-2.77058E-07	-5.59819E-05	-0.012595924	1.00386E-07	0.001301491
0.735	7.27881E-05	-2.79835E-07	-5.6543E-05	-0.012722182	1.01725E-07	0.001310423
0.74	7.37801E-05	-2.84748E-07	-5.75356E-05	-0.012945519	1.03101E-07	0.001319347
0.745	7.46605E-05	-2.89122E-07	-5.84195E-05	-0.013144397	1.0451E-07	0.001328251
0.75	7.54098E-05	-2.92844E-07	-5.91716E-05	-0.013313603	1.05947E-07	0.001337088
0.755	7.64227E-05	-2.97872E-07	-6.01875E-05	-0.013542191	1.07423E-07	0.001345894
0.76	7.74694E-05	-3.03081E-07	-6.12399E-05	-0.013778972	1.0894E-07	0.001354727
0.765	7.83678E-05	-3.07561E-07	-6.21451E-05	-0.013982638	1.10492E-07	0.001363497
0.77	7.93087E-05	-3.12255E-07	-6.30935E-05	-0.014196043	1.12082E-07	0.001372214
0.775	8.01644E-05	-3.16536E-07	-6.39584E-05	-0.014390651	1.13706E-07	0.001380941
0.78	8.08507E-05	-3.19978E-07	-6.4654E-05	-0.01454714	1.15358E-07	0.001389709
0.785	8.17147E-05	-3.24297E-07	-6.55267E-05	-0.014743508	1.17046E-07	0.001398432
0.79	8.28576E-05	-3.3001E-07	-6.66809E-05	-0.0150032	1.18781E-07	0.001407125
0.795	8.39577E-05	-3.35531E-07	-6.77965E-05	-0.015254207	1.20563E-07	0.001415756
0.8	8.4742E-05	-3.39505E-07	-6.85995E-05	-0.015434879	1.22378E-07	0.001424515
0.805	8.51235E-05	-3.41495E-07	-6.90016E-05	-0.01552535	1.24209E-07	0.001433207
0.81	8.51602E-05	-3.41779E-07	-6.90589E-05	-0.015538242	1.26042E-07	0.001441911
0.815	8.50096E-05	-3.41135E-07	-6.89287E-05	-0.015508966	1.27868E-07	0.001450552
0.82	8.47395E-05	-3.39906E-07	-6.86805E-05	-0.015453106	1.29683E-07	0.001459158
0.825	8.40181E-05	-3.36456E-07	-6.79833E-05	-0.015296245	1.31467E-07	0.001467877
0.83	8.2417E-05	-3.28645E-07	-6.64049E-05	-0.014941096	1.33184E-07	0.001476526
0.835	8.05367E-05	-3.19414E-07	-6.45396E-05	-0.0145214	1.34824E-07	0.001485088
0.84	7.95096E-05	-3.14384E-07	-6.35234E-05	-0.014292755	1.36421E-07	0.001493586
0.845	7.89469E-05	-3.11679E-07	-6.29766E-05	-0.014169741	1.37997E-07	0.001501983
0.85	7.78398E-05	-3.06288E-07	-6.18874E-05	-0.013924654	1.39528E-07	0.001510463
0.855	7.67875E-05	-3.01149E-07	-6.0849E-05	-0.013691023	1.41018E-07	0.001518858
0.86	7.62802E-05	-2.98721E-07	-6.03583E-05	-0.013580629	1.42489E-07	0.001527118
0.865	7.52351E-05	-2.93657E-07	-5.9335E-05	-0.013350378	1.43919E-07	0.00153524
0.87	7.35946E-05	-2.85624E-07	-5.77119E-05	-0.012985182	1.45288E-07	0.001543226
0.875	7.26015E-05	-2.80779E-07	-5.67328E-05	-0.012764887	1.4662E-07	0.001551073
0.88	7.19846E-05	-2.77824E-07	-5.61358E-05	-0.012630551	1.4793E-07	0.001558949
0.885	7.07165E-05	-2.71663E-07	-5.48908E-05	-0.012350441	1.49194E-07	0.001566793
0.89	6.91692E-05	-2.64105E-07	-5.33637E-05	-0.012006835	1.50403E-07	0.001574482
0.895	6.78897E-05	-2.57873E-07	-5.21044E-05	-0.011723497	1.51568E-07	0.001582018
0.9	6.65047E-05	-2.51133E-07	-5.07425E-05	-0.011417063	1.52686E-07	0.001589406
0.905	6.47319E-05	-2.42477E-07	-4.89935E-05	-0.011023538	1.53745E-07	0.001596639
0.91	6.27432E-05	-2.32745E-07	-4.70269E-05	-0.010581051	1.5474E-07	0.001603709
0.915	6.08607E-05	-2.23531E-07	-4.51652E-05	-0.010162166	1.55676E-07	0.00161063
0.92	5.9217E-05	-2.15508E-07	-4.35439E-05	-0.009797381	1.56562E-07	0.001617596
0.925	5.7251E-05	-2.05906E-07	-4.16038E-05	-0.00936086	1.57391E-07	0.001624377
0.93	5.46153E-05	-1.92982E-07	-3.89923E-05	-0.008773263	1.58145E-07	0.001630972
0.935	5.21766E-05	-1.81009E-07	-3.6573E-05	-0.008228926	1.58833E-07	0.001637379
0.94	5.03342E-05	-1.72E-07	-3.47528E-05	-0.007819373	1.59473E-07	0.001643591
0.945	4.80105E-05	-1.60638E-07	-3.24569E-05	-0.007302809	1.60056E-07	0.001649617
0.95	4.488E-05	-1.4527E-07	-2.93516E-05	-0.006604104	1.60565E-07	0.001655448
0.955	4.19205E-05	-1.30723E-07	-2.64123E-05	-0.005942766	1.61009E-07	0.001661073
0.96	3.92713E-05	-1.17716E-07	-2.3784E-05	-0.005351408	1.61399E-07	0.001666484
0.965	3.65437E-05	-1.04322E-07	-2.10777E-05	-0.004742491	1.61736E-07	0.001671707
0.97	3.40519E-05	-9.20969E-08	-1.86075E-05	-0.004186683	1.62029E-07	0.001676742
0.975	3.14687E-05	-7.94407E-08	-1.60502E-05	-0.003611291	1.62279E-07	0.001681698
0.98	2.80296E-05	-6.255E-08	-1.26373E-05	-0.002843383	1.62478E-07	0.001686432
0.985	2.43984E-05	-4.46815E-08	-9.02678E-06	-0.002031026	1.62629E-07	0.00169095
0.99	2.11422E-05	-2.86676E-08	-5.79105E-06	-0.001302986	1.62741E-07	0.001695254
0.995	1.75625E-05	-1.10605E-08	-2.23341E-06	-0.000502517	1.62819E-07	0.001699358
1	1.38683E-05	7.1301E-09	1.44212E-06	0.000324477	1.62868E-07	0.001703256
1.005	1.07669E-05	2.23873E-08	4.52493E-06	0.00101811	1.62897E-07	0.001706961
1.01	7.69484E-06	3.74771E-08	7.57392E-06	0.001704132	1.62912E-07	0.001710469
1.015	4.35469E-06	5.38891E-08	1.08901E-05	0.002450263	1.62917E-07	0.001713777
1.02	9.92872E-07	7.04005E-08	1.42263E-05	0.003200914	1.62917E-07	0.001716904
1.025	-2.96638E-06	8.98589E-08	1.81579E-05	0.004085536	1.6292E-07	0.001719848
1.03	-7.49341E-06	1.12151E-07	2.26622E-05	0.00509899	1.62934E-07	0.001722602
1.035	-1.16656E-05	1.32709E-07	2.68159E-05	0.006033588	1.62968E-07	0.001725158

Period (sec)	PSA (g)
6.411037242	0.019168126
6.822120042	0.016871345
7.259528131	0.01582166
7.724990344	0.013618158
8.220304151	0.013763294
8.747375787	0.013674057
9.308213568	0.02015419
9.905010945	0.028042758
10	0.028850112

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
0.640869141	0.045858698	1.369609273
0.646972656	0.016962951	1.025771164
0.653076172	0.030617082	1.250561522
0.659179688	0.070409898	1.25506913
0.665283203	0.062350479	1.25389229
0.671386719	0.040294472	1.423183528
0.677490234	0.00684494	1.266655198
0.68359375	0.074661031	1.366224674
0.689697266	0.106777301	1.433646499
0.695800781	0.086626587	1.482981761
0.701904297	0.100076647	1.404441405
0.708007813	0.103758704	1.41416024
0.714111328	0.049591093	1.490092675
0.720214844	0.064092327	1.32540494
0.726318359	0.124851786	1.380224864
0.732421875	0.14527401	1.441782231
0.738525391	0.110129142	1.53686504
0.744628906	0.045302743	1.532515251
0.750732422	0.069406022	1.268558368
0.756835938	0.092472216	1.41521292
0.762939453	0.07787143	1.532629633
0.769042969	0.082371317	1.526129389
0.775146484	0.090679281	1.566867557
0.78125	0.074378501	1.578574953
0.787353516	0.062205744	1.474780823
0.793457031	0.078236718	1.422969357
0.799560547	0.099572172	1.506529561
0.805664063	0.138934942	1.638678762
0.811767578	0.170493068	1.673454656
0.817871094	0.161106925	1.74078372
0.823974609	0.136496241	1.880970487
0.830078125	0.141544044	1.867072357
0.836181641	0.148938398	1.817210358
0.842285156	0.086903646	2.000736835
0.848388672	0.071973072	1.418200853
0.854492188	0.142583316	1.520437526
0.860595703	0.138850347	1.637404427
0.866699219	0.100829324	1.605475834
0.872802734	0.111256716	1.568343282
0.87890625	0.068200601	1.759095025
0.885009766	0.072614409	1.929118757
0.891113281	0.094110824	1.886307925
0.897216797	0.068728668	1.935200833
0.903320313	0.093152544	1.968529604
0.909423828	0.130549626	1.89155929
0.915527344	0.06304254	2.011885052
0.921630859	0.093738212	1.68253417
0.927734375	0.165590812	1.780096304
0.933837891	0.097235586	2.099007162
0.939941406	0.027252145	1.16974669
0.946044922	0.078597394	1.451086259
0.952148438	0.069781214	1.557174952
0.958251953	0.040552547	1.600631038
0.964355469	0.056853845	2.044058687
0.970458984	0.127219849	1.939720901
0.9765625	0.186037275	1.924804443
0.982666016	0.173214072	1.965660697
0.988769531	0.115930396	1.936701939
0.994873047	0.08399128	1.805191461
1.000976563	0.116419454	1.886651246
1.007080078	0.11459011	2.121712623
1.013183594	0.064953628	2.345085442
1.019287109	0.030314917	1.583204224
1.025390625	0.042345527	2.189672573
1.031494141	0.12391539	2.545770035
1.037597656	0.140732563	2.662984427
1.043701172	0.107239779	2.543528564
1.049804688	0.043835922	2.551847161
1.055908203	0.038613789	1.770770625
1.062011719	0.047040499	2.716525078
1.068115234	0.068078943	2.165576906
1.07421875	0.048261212	1.622312309
1.080322266	0.07403563	3.249387573
1.086425781	0.182937661	2.751566871
1.092529297	0.260051916	2.427221344
1.098632813	0.282769534	2.376532212
1.104736328	0.228563889	2.716768755
1.110839844	0.222057837	3.141752816
1.116943359	0.246919776	2.869230071
1.123046875	0.194364346	2.636896269
1.129150391	0.128679482	2.526612984
1.135253906	0.217169469	2.362224092
1.141357422	0.21579625	2.236358762
1.147460938	0.085414331	2.052010198
1.153564453	0.041367193	2.405698233
1.159667969	0.033534285	1.317531941
1.165771484	0.050563971	2.489687259
1.171875	0.123290941	3.342701192
1.177978516	0.16887862	2.995806497
1.184082031	0.158801651	2.697803709
1.190185547	0.094078178	2.446364067
1.196289063	0.030952527	1.617516866
1.202392578	0.096040251	3.516028155
1.208496094	0.203042495	2.687206517
1.214599609	0.200867919	2.393510586
1.220703125	0.101842119	2.134585321
1.226806641	0.148806065	3.182263367
1.232910156	0.240527203	2.852889501
1.239013672	0.277961256	2.545167787
1.245117188	0.215571748	2.086193096
1.251220703	0.02423026	0.872250693
1.257324219	0.25186711	4.439858381
1.263427734	0.347307644	3.149321793
1.26953125	0.422280716	2.754606174

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
1.04	-1.5728E-05	1.52714E-07	3.08581E-05	0.006943073	1.63031E-07	0.001727518
1.045	-2.03071E-05	1.7528E-07	3.54176E-05	0.00796896	1.63135E-07	0.001729705
1.05	-2.49573E-05	1.98218E-07	4.00523E-05	0.009011756	1.63292E-07	0.001731713
1.055	-2.93041E-05	2.19658E-07	4.43842E-05	0.009986437	1.63509E-07	0.001733537
1.06	-3.36678E-05	2.41173E-07	4.87315E-05	0.010964579	1.63796E-07	0.001735169
1.065	-3.82795E-05	2.63917E-07	5.33269E-05	0.011998551	1.64166E-07	0.001736639
1.07	-4.29319E-05	2.86873E-07	5.79651E-05	0.013042158	1.64632E-07	0.001737952
1.075	-4.73538E-05	3.08697E-07	6.23746E-05	0.014034294	1.65199E-07	0.001739103
1.08	-5.16112E-05	3.29708E-07	6.66199E-05	0.014989478	1.65872E-07	0.001740087
1.085	-5.58683E-05	3.50715E-07	7.08644E-05	0.015944492	1.66661E-07	0.001740931
1.09	-6.0402E-05	3.73088E-07	7.53847E-05	0.016961568	1.67583E-07	0.00174165
1.095	-6.55783E-05	3.98655E-07	8.05506E-05	0.01812388	1.6867E-07	0.001742242
1.1	-7.07409E-05	4.24195E-07	8.57107E-05	0.01928491	1.69935E-07	0.001742701
1.105	-7.49076E-05	4.44818E-07	8.98776E-05	0.020222452	1.71353E-07	0.001743064
1.11	-7.85995E-05	4.6307E-07	9.35653E-05	0.021052191	1.72914E-07	0.001743344
1.115	-8.23517E-05	4.81616E-07	9.73123E-05	0.021895278	1.74628E-07	0.00174354
1.12	-8.56527E-05	4.97931E-07	0.000100609	0.022636949	1.76483E-07	0.001743777
1.125	-8.88562E-05	5.13747E-07	0.000103804	0.023355915	1.78478E-07	0.001744145
1.13	-9.255E-05	5.31995E-07	0.000107491	0.024185488	1.80643E-07	0.001744815
1.135	-9.60683E-05	5.49391E-07	0.000111006	0.024976275	1.82975E-07	0.001745703
1.14	-9.94241E-05	5.65953E-07	0.000114352	0.025729196	1.85474E-07	0.001746906
1.145	-0.00010404	5.88714E-07	0.000118951	0.026763876	1.8821E-07	0.001748372
1.15	-0.000110571	6.20964E-07	0.000125466	0.028229912	1.913E-07	0.001750884
1.155	-0.000118004	6.57735E-07	0.000132895	0.029901431	1.94819E-07	0.00175407
1.16	-0.000124865	6.9173E-07	0.000139764	0.031446789	1.98759E-07	0.001757386
1.165	-0.000130643	7.2039E-07	0.000145554	0.032749589	2.03073E-07	0.00176111
1.17	-0.000135365	7.43844E-07	0.000150292	0.033815774	2.07704E-07	0.001765214
1.175	-0.000138473	7.59328E-07	0.000153421	0.034519634	2.1255E-07	0.001769326
1.18	-0.000140022	7.67072E-07	0.000154985	0.03487163	2.17506E-07	0.001774183
1.185	-0.000141196	7.72923E-07	0.000156167	0.035137615	2.22544E-07	0.001779177
1.19	-0.000142441	7.79102E-07	0.000157416	0.035418508	2.27672E-07	0.001784131
1.195	-0.000143942	7.86509E-07	0.000158912	0.035755179	2.32909E-07	0.001790016
1.2	-0.00014691	8.01136E-07	0.000161867	0.036420072	2.38364E-07	0.001795766
1.205	-0.000151881	8.25685E-07	0.000166827	0.037535992	2.44194E-07	0.00180197
1.21	-0.000158079	8.56353E-07	0.000173022	0.038930059	2.5051E-07	0.001808612
1.215	-0.000164644	8.88908E-07	0.000179599	0.040409871	2.57361E-07	0.001815135
1.22	-0.000170373	9.17409E-07	0.000185357	0.041705435	2.64697E-07	0.001821757
1.225	-0.000174062	9.35858E-07	0.000189085	0.042544027	2.72355E-07	0.001829377
1.23	-0.000175785	9.4457E-07	0.000190845	0.042940024	2.80165E-07	0.001836928
1.235	-0.000176133	9.46453E-07	0.000191225	0.043025656	2.88005E-07	0.001844384
1.24	-0.000175605	9.43944E-07	0.000190718	0.042911542	2.95799E-07	0.001853024
1.245	-0.00017557	9.43801E-07	0.000190689	0.042905069	3.0359E-07	0.001861531
1.25	-0.000177594	9.53815E-07	0.000192712	0.043360278	3.11561E-07	0.001870566
1.255	-0.00018175	9.74412E-07	0.000196873	0.044296535	3.1991E-07	0.001880051
1.26	-0.000186719	9.99123E-07	0.000201866	0.045419774	3.28722E-07	0.001890726
1.265	-0.00019044	1.01776E-06	0.000205631	0.046266921	3.37888E-07	0.001903641
1.27	-0.000190752	1.01958E-06	0.000205998	0.046349612	3.47084E-07	0.001918698
1.275	-0.000187073	1.0016E-06	0.000202365	0.0455322	3.55929E-07	0.001935035
1.28	-0.000180741	9.70354E-07	0.000196052	0.044111593	3.64185E-07	0.001951668
1.285	-0.000173595	9.34901E-07	0.000188888	0.042499733	3.71802E-07	0.001969337
1.29	-0.000168651	9.10118E-07	0.00018388	0.041372996	3.78991E-07	0.001987474
1.295	-0.000170679	9.19679E-07	0.000185812	0.041807693	3.86353E-07	0.002005226
1.3	-0.000182132	9.75942E-07	0.000197181	0.044365675	3.94737E-07	0.002023946
1.305	-0.000199883	1.06366E-06	0.000214903	0.048353194	4.04835E-07	0.00204349
1.31	-0.00021843	1.15566E-06	0.000233488	0.052534881	4.16894E-07	0.002062878
1.315	-0.000233711	1.23178E-06	0.000248867	0.05599498	4.30699E-07	0.002082222
1.32	-0.000242603	1.27649E-06	0.000257899	0.058027277	4.45574E-07	0.00210317
1.325	-0.000242522	1.27686E-06	0.000257974	0.058044132	4.6044E-07	0.002125518
1.33	-0.000233624	1.23347E-06	0.000249205	0.056071193	4.74234E-07	0.002148167
1.335	-0.000219381	1.16334E-06	0.000235034	0.052882752	4.86398E-07	0.002171031
1.34	-0.000204344	1.08896E-06	0.000220006	0.049501387	4.96952E-07	0.002193852
1.345	-0.00019274	1.03131E-06	0.000208358	0.046880466	5.06341E-07	0.002219054
1.35	-0.000187703	1.00603E-06	0.00020325	0.04573116	5.15245E-07	0.002244446
1.355	-0.000189481	1.01454E-06	0.000204968	0.046117742	5.2432E-07	0.002269288
1.36	-0.000195395	1.04369E-06	0.000210858	0.04744303	5.33969E-07	0.002293616
1.365	-0.000201652	1.07476E-06	0.000217136	0.048855629	5.44246E-07	0.00231754
1.37	-0.000204374	1.08849E-06	0.000219912	0.049480094	5.54803E-07	0.002343081
1.375	-0.000201606	1.07507E-06	0.000217198	0.048869601	5.65076E-07	0.002370004
1.38	-0.00019531	1.04405E-06	0.000210931	0.047459553	5.74717E-07	0.002396623
1.385	-0.000188877	1.01221E-06	0.000204498	0.04601206	5.83733E-07	0.002422885
1.39	-0.000183779	9.86908E-07	0.000199385	0.044861577	5.9227E-07	0.002448761
1.395	-0.00018017	9.68926E-07	0.000195752	0.044044095	6.00474E-07	0.002474245
1.4	-0.000178172	9.58905E-07	0.000193727	0.043588514	6.08497E-07	0.00250267
1.405	-0.000177812	9.56991E-07	0.00019334	0.04350148	6.16488E-07	0.00253127
1.41	-0.000179274	9.641E-07	0.000194776	0.043824671	6.24611E-07	0.002559407
1.415	-0.000182783	9.81382E-07	0.000198268	0.044610401	6.33055E-07	0.002587082
1.42	-0.00018719	1.00321E-06	0.000202679	0.045602804	6.41911E-07	0.002614334
1.425	-0.000189638	1.01545E-06	0.000205153	0.046159343	6.51E-07	0.002641162
1.43	-0.000188511	1.01E-06	0.000204052	0.045911605	6.59982E-07	0.002670991
1.435	-0.000185736	9.96305E-07	0.000201284	0.045288887	6.68701E-07	0.002701269
1.44	-0.00018359	9.85669E-07	0.000199135	0.044805324	6.77219E-07	0.002731074
1.445	-0.000181404	9.74835E-07	0.000196946	0.04431274	6.85536E-07	0.002760417
1.45	-0.000178404	9.59914E-07	0.00019393	0.043634357	6.93581E-07	0.00278929
1.455	-0.000176372	9.49676E-07	0.000191862	0.043168918	7.01443E-07	0.002817664
1.46	-0.00017699	9.52504E-07	0.000192433	0.043297509	7.0936E-07	0.00284762
1.465	-0.000180241	9.6835E-07	0.000195635	0.044017927	7.17571E-07	0.002879598
1.47	-0.000186579	9.994791E-07	0.000201925	0.04543322	7.26369E-07	0.002911061
1.475	-0.000196917	1.05049E-06	0.000212233	0.047752494	7.36169E-07	0.002942067
1.48	-0.000209622	1.11345E-06	0.000224954	0.050614566	7.47275E-07	0.002972646
1.485	-0.000220433	1.16729E-06	0.000235833	0.053062479	7.59556E-07	0.003002833
1.49	-0.000225706	1.1939E-06	0.000241211	0.054272445	7.72431E-07	0.00303266
1.495	-0.000223915	1.18561E-06	0.000239536	0.053895579	7.85103E-07	0.003066534
1.5	-0.000214972	1.14185E-06	0.000230694	0.051906042	7.96783E-07	0.003100688
1.505	-0.000200616	1.07109E-06	0.000216394	0.048688649	8.06955E-07	0.003134525
1.51	-0.000185451	9.95996E-07	0.000201221	0.045274796	8.15648E-07	0.003167991
1.515	-0.00017526	9.45259E-07	0.000190969	0.042968116	8.23411E-07	0.003200973
1.52	-0.000172699	9.32211E-07	0.000188333	0.042374904	8.30949E-07	0.003233379
1.525	-0.000175926	9.47914E-07	0.000191506	0.043088842	8.38771E-07	0.003266133
1.53	-0.0001816	9.75905E-07	0.000197162	0.044361441	8.47106E-07	0.003302738
1.535	-0.000185927	9.97424E-07	0.00020151	0.045339784	8.55843E-07	0.003338766
1.54	-0.000184549	9.90828E-07	0.000200177	0.045039899	8.64451E-07	0.003374241
1.545	-0.000176632	9.51772E-07	0.000192286	0.043264257	8.72336E-07	0.003409146
1.55	-0.000166451	9.01279E-07	0.000182083	0.040968672	8.79339E-07	0.003443528
1.555	-0.000158586	8.62042E-07	0.000174155	0.039184864	8.85695E-07	0.003477309

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
1.275634766	0.310958891	2.739425873
1.281738281	0.173297704	2.197823608
1.287841797	0.10369324	1.851001
1.293945313	0.050924099	1.738791844
1.300048828	0.037041563	1.433513684
1.306152344	0.111739022	2.509768738
1.312255859	0.124753844	3.335946867
1.318359375	0.058995179	2.194036112
1.324462891	0.130745677	2.364158856
1.330566406	0.121090878	2.649795373
1.336669922	0.130280353	3.456295489
1.342773438	0.113195325	3.354009566
1.348876953	0.077154069	1.852934502
1.354980469	0.278195706	2.72897531
1.361083984	0.351521049	2.963096992
1.3671875	0.270448664	3.130741543
1.373291016	0.162145247	3.351958135
1.379394531	0.073321594	3.691597717
1.385498047	0.059687264	4.901849886
1.391601563	0.125270784	3.867244537
1.397705078	0.187913669	3.122520709
1.403808594	0.270229723	3.175380572
1.409912109	0.292221644	3.324358904
1.416015625	0.315953217	2.929117401
1.422119141	0.392267812	2.825161676
1.428222656	0.299209613	2.716405596
1.434326172	0.07683337	1.816075047
1.440429688	0.061771392	2.982748084
1.446533203	0.177430417	3.550069317
1.452636719	0.306852676	3.491446273
1.458740234	0.219565754	3.149545678
1.46484375	0.073540106	1.735792203
1.470947266	0.070438765	1.696775057
1.477050781	0.085157932	2.089460885
1.483154297	0.075354837	2.69502254
1.489257813	0.006834021	2.532892201
1.495361328	0.103324557	3.224076202
1.501464844	0.078158962	2.475419289
1.507568359	0.180108391	3.19885043
1.513671875	0.230734889	3.214152319
1.519775391	0.077385039	2.371653243
1.525878906	0.170980599	3.880891568
1.531982422	0.313846411	3.253349087
1.538085938	0.272732239	3.105783146
1.544189453	0.058370111	3.060745552
1.550292969	0.111139762	2.801987755
1.556396484	0.083310098	2.595491748
1.5625	0.029889167	1.698064622
1.568603516	0.081885805	2.13006021
1.574707031	0.11815177	2.270324714
1.580810547	0.127492892	2.193337679
1.586914063	0.116999319	1.690899506
1.593017578	0.255526173	2.115094611
1.599121094	0.311229836	2.257345436
1.605224609	0.202458969	2.1097925
1.611328125	0.131492263	1.832864258
1.617431641	0.231785423	2.366763526
1.623535156	0.277661906	2.565332688
1.629638672	0.174047879	2.173047533
1.635742188	0.14392913	2.231744922
1.641845703	0.18240599	2.525684452
1.647949219	0.208059103	2.253449331
1.654052734	0.270440718	2.377378379
1.66015625	0.242886911	2.58329938
1.666259766	0.048237107	1.84261379
1.672363281	0.200568251	2.240592142
1.678466797	0.243916366	2.225364082
1.684570313	0.174093667	1.958511659
1.690673828	0.171564496	2.067038462
1.696777344	0.065946889	1.729074617
1.702880859	0.114143618	3.180767026
1.708984375	0.186861509	2.504714019
1.715087891	0.132652179	1.986878398
1.721191406	0.073707606	1.666021346
1.727294922	0.050611428	3.136819983
1.733398438	0.097000524	2.512233788
1.739501953	0.135011508	2.232668887
1.745605469	0.090842141	1.911616879
1.751708984	0.038947969	1.684467829
1.7578125	0.078045346	3.753956517
1.763916016	0.046340398	9.879711483
1.770019531	0.051532889	2.403107924
1.776123047	0.065178923	2.160932015
1.782226563	0.03723144	1.93498344
1.788330078	0.028879521	2.27633056
1.794433594	0.048651295	1.474618664
1.800537109	0.145430801	1.783935336
1.806640625	0.134755632	1.700481871
1.812744141	0.030228778	1.861011292
1.818847656	0.125419059	2.490926114
1.824951172	0.121282186	2.045864712
1.831054688	0.07529804	1.821455277
1.837158203	0.111261542	1.673059274
1.843261719	0.155101777	1.78076037
1.849365234	0.161910532	1.99452028
1.85546875	0.130427722	1.880311265
1.861572266	0.063415831	1.490206929
1.867675781	0.010533167	1.017156045
1.873779297	0.071831008	1.836841889
1.879882813	0.090684208	1.800533232
1.885986328	0.061956644	2.401753725
1.892089844	0.073510237	1.990973874
1.898193359	0.03949964	1.25810057
1.904296875	0.142882247	1.655395834

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
1.56	-0.00015557	8.46696E-07	0.000171054	0.038487201	8.91812E-07	0.003512291
1.565	-0.000158355	8.60072E-07	0.000173757	0.039095343	8.9815E-07	0.003550447
1.57	-0.000165186	8.93608E-07	0.000180534	0.040620051	9.05046E-07	0.003588018
1.575	-0.00017318	9.33061E-07	0.000188506	0.042413753	9.12626E-07	0.003625023
1.58	-0.000180368	9.68675E-07	0.000195702	0.044032917	9.20848E-07	0.00366148
1.585	-0.000183958	9.86597E-07	0.000199323	0.044847711	9.29401E-07	0.003697437
1.59	-0.000182418	9.79091E-07	0.000197806	0.044506441	9.37812E-07	0.003732921
1.595	-0.000179578	9.64973E-07	0.000194954	0.043864579	9.45962E-07	0.003769904
1.6	-0.000179715	9.65508E-07	0.000195062	0.04388891	9.54125E-07	0.003810306
1.605	-0.00018179	9.75692E-07	0.00019712	0.044351912	9.62478E-07	0.003850215
1.61	-0.000183678	9.85008E-07	0.000199002	0.044775469	9.71004E-07	0.003889671
1.615	-0.000185839	9.95699E-07	0.000201162	0.045261507	9.79733E-07	0.003928669
1.62	-0.000187877	1.00585E-06	0.000203213	0.045723018	9.88654E-07	0.003967207
1.625	-0.00018807	1.0069E-06	0.000203425	0.045770661	9.97594E-07	0.004005281
1.63	-0.00018701	1.00169E-06	0.000202373	0.045533997	1.00643E-06	0.004044653
1.635	-0.000186991	1.00158E-06	0.00020235	0.045528745	1.01527E-06	0.00408802
1.64	-0.000188592	1.00951E-06	0.000203952	0.045889251	1.02426E-06	0.004130977
1.645	-0.00019031	1.01809E-06	0.000205686	0.046279404	1.03341E-06	0.004173502
1.65	-0.000190428	1.01881E-06	0.000205832	0.04631222	1.04258E-06	0.004215607
1.655	-0.000188155	1.00769E-06	0.000203585	0.045806617	1.05153E-06	0.004257259
1.66	-0.00018329	9.83675E-07	0.000198732	0.044714812	1.06002E-06	0.004298466
1.665	-0.000176634	9.50621E-07	0.000192053	0.043212026	1.0679E-06	0.004339933
1.67	-0.000172113	9.2786E-07	0.000187454	0.042177244	1.07539E-06	0.00438334
1.675	-0.000175641	9.44757E-07	0.000190869	0.042945437	1.08319E-06	0.004426295
1.68	-0.000189193	1.01137E-06	0.000204329	0.045974055	1.09223E-06	0.004468751
1.685	-0.000207986	1.10429E-06	0.000223105	0.050198525	1.10317E-06	0.004510772
1.69	-0.000224674	1.18719E-06	0.000239854	0.053967195	1.11592E-06	0.004552428
1.695	-0.000234424	1.23601E-06	0.000249719	0.056186793	1.12981E-06	0.004593741
1.7	-0.000235547	1.24223E-06	0.000250975	0.056469373	1.14384E-06	0.004634778
1.705	-0.00022816	1.20622E-06	0.0002437	0.05483259	1.15699E-06	0.004675639
1.71	-0.000215429	1.14347E-06	0.00023102	0.051979562	1.16872E-06	0.004716209
1.715	-0.000203945	1.08653E-06	0.000219514	0.04939074	1.17923E-06	0.004756411
1.72	-0.000198454	1.05905E-06	0.000213963	0.04814165	1.18919E-06	0.004796238
1.725	-0.000198296	1.05797E-06	0.000213745	0.04809254	1.19913E-06	0.004835739
1.73	-0.000201611	1.07414E-06	0.000217012	0.048827738	1.2094E-06	0.004874865
1.735	-0.000208208	1.10668E-06	0.000223587	0.050307119	1.22036E-06	0.004913589
1.74	-0.00021611	1.14593E-06	0.000231517	0.052091305	1.23216E-06	0.004951846
1.745	-0.000220901	1.17002E-06	0.000236384	0.053186423	1.24449E-06	0.004989684
1.75	-0.000220424	1.16814E-06	0.000236005	0.053101125	1.25677E-06	0.005027307
1.755	-0.000215466	1.1441E-06	0.000231147	0.052008015	1.26851E-06	0.005064557
1.76	-0.000205637	1.09592E-06	0.000221412	0.049817744	1.27919E-06	0.005101471
1.765	-0.000190396	1.02078E-06	0.000206229	0.046401543	1.28836E-06	0.005137964
1.77	-0.000173715	9.38181E-07	0.000189539	0.042646351	1.29598E-06	0.005174014
1.775	-0.000161624	8.78018E-07	0.000177383	0.039911167	1.30259E-06	0.00520957
1.78	-0.000155722	8.48409E-07	0.0001714	0.038565064	1.30871E-06	0.00524446
1.785	-0.00015249	8.32085E-07	0.000168102	0.037822952	1.31459E-06	0.00527875
1.79	-0.00014763	8.07745E-07	0.000163184	0.036716411	1.3201E-06	0.005312362
1.795	-0.000140901	7.73962E-07	0.000156358	0.035180547	1.32512E-06	0.005345339
1.8	-0.000136561	7.51822E-07	0.000151885	0.034174029	1.32983E-06	0.0053777
1.805	-0.00013815	7.58916E-07	0.000153318	0.034496544	1.33466E-06	0.00540945
1.81	-0.000147066	8.02253E-07	0.000162075	0.03646686	1.34012E-06	0.005440606
1.815	-0.000165691	8.93757E-07	0.000180564	0.040626995	1.34706E-06	0.005471206
1.82	-0.000193101	1.02915E-06	0.000207921	0.046782262	1.35648E-06	0.005501292
1.825	-0.000220617	1.16564E-06	0.000235501	0.052987625	1.36879E-06	0.00553093
1.83	-0.00023937	1.25919E-06	0.000254402	0.05724056	1.38327E-06	0.005560184
1.835	-0.000246449	1.29513E-06	0.000261664	0.058874336	1.39862E-06	0.005589097
1.84	-0.000241419	1.27106E-06	0.000256801	0.057780198	1.41335E-06	0.005617682
1.845	-0.000226766	1.199E-06	0.00024224	0.054503955	1.42635E-06	0.005645954
1.85	-0.000211899	1.12531E-06	0.00022735	0.05115366	1.43769E-06	0.005673967
1.855	-0.000207738	1.10419E-06	0.000223083	0.050193684	1.4486E-06	0.005701829
1.86	-0.000217963	1.15428E-06	0.000233204	0.052470908	1.46061E-06	0.005729389
1.865	-0.000238812	1.25732E-06	0.000254025	0.057155546	1.47502E-06	0.005756549
1.87	-0.000262136	1.37321E-06	0.000277437	0.062423217	1.49239E-06	0.005783394
1.875	-0.000276707	1.44638E-06	0.000292219	0.06574925	1.51174E-06	0.005810056
1.88	-0.000273074	1.42978E-06	0.000288864	0.064994422	1.53059E-06	0.005836651
1.885	-0.000249409	1.31389E-06	0.000265446	0.059725398	1.54631E-06	0.005863331
1.89	-0.000211883	1.12882E-06	0.000228051	0.051311536	1.55766E-06	0.005889678
1.895	-0.000171772	9.30198E-07	0.000187919	0.042281678	1.56511E-06	0.005915517
1.9	-0.000139595	7.70215E-07	0.000155594	0.035008649	1.57004E-06	0.005940549
1.905	-0.000118815	6.66276E-07	0.000134593	0.030283473	1.57361E-06	0.005964818
1.91	-0.000109442	6.18545E-07	0.000124949	0.028113607	1.57663E-06	0.005988459
1.915	-0.000114757	6.43382E-07	0.000129968	0.029242846	1.57996E-06	0.006011406
1.92	-0.000135882	7.46671E-07	0.000150839	0.033938782	1.58463E-06	0.006033778
1.925	-0.000165612	8.93041E-07	0.000180415	0.040593287	1.59156E-06	0.006055573
1.93	-0.000196275	1.04449E-06	0.000211015	0.047478464	1.6013E-06	0.006076871
1.935	-0.000226889	1.19608E-06	0.000241645	0.054370015	1.61431E-06	0.006097764
1.94	-0.000255704	1.3393E-06	0.000270583	0.060881098	1.63083E-06	0.006118314
1.945	-0.000273662	1.42935E-06	0.000288778	0.06497502	1.64976E-06	0.006138574
1.95	-0.000273727	1.43104E-06	0.000289118	0.065051455	1.6687E-06	0.006158577
1.955	-0.000259598	1.36225E-06	0.000275218	0.061924083	1.68573E-06	0.006178319
1.96	-0.000237527	1.25383E-06	0.000253311	0.056995007	1.69999E-06	0.00619777
1.965	-0.00020933	1.1147E-06	0.000225198	0.05066958	1.71107E-06	0.006216928
1.97	-0.000179718	9.68001E-07	0.000195557	0.044000308	1.71923E-06	0.006235848
1.975	-0.000158028	8.59998E-07	0.000173735	0.0390903	1.72554E-06	0.006254436
1.98	-0.000147643	8.07798E-07	0.000163188	0.036717189	1.73105E-06	0.006272589
1.985	-0.000143803	7.88037E-07	0.000159195	0.035818853	1.73628E-06	0.006290154
1.99	-0.000143816	7.87308E-07	0.000159048	0.035785705	1.7415E-06	0.006307296
1.995	-0.000151392	8.23959E-07	0.000166454	0.03745205	1.7473E-06	0.006323901
2	-0.000168566	9.08291E-07	0.000183494	0.041286126	1.75448E-06	0.006340043
2.005	-0.000190514	1.01661E-06	0.000205382	0.04621091	1.76365E-06	0.006355771
2.01	-0.000212063	1.12331E-06	0.000226941	0.051061763	1.77502E-06	0.006371118
2.015	-0.000230828	1.21655E-06	0.000245779	0.055300334	1.78848E-06	0.006386118
2.02	-0.000241547	1.27026E-06	0.000256633	0.057742459	1.80323E-06	0.0064008
2.025	-0.000238791	1.25733E-06	0.00025402	0.0571546	1.81764E-06	0.00641518
2.03	-0.000225433	1.19162E-06	0.000240742	0.054167006	1.83049E-06	0.006429251
2.035	-0.000208978	1.11016E-06	0.000224282	0.050463402	1.84152E-06	0.006443027
2.04	-0.00019391	1.03521E-06	0.000209138	0.047056105	1.85103E-06	0.006456513
2.045	-0.000183803	9.84478E-07	0.000198887	0.044749561	1.85957E-06	0.006469689
2.05	-0.000184522	9.87068E-07	0.00019941	0.044867336	1.86817E-06	0.006482538
2.055	-0.00020077	1.06653E-06	0.000215466	0.048479832	1.87836E-06	0.00649506
2.06	-0.000231292	1.21702E-06	0.000245874	0.055321738	1.89188E-06	0.006507275
2.065	-0.000268451	1.401E-06	0.000283049	0.063685945	1.91009E-06	0.006519225
2.07	-0.000303144	1.57342E-06	0.000317881	0.071523221	1.93332E-06	0.006530957
2.075	-0.000329243	1.70384E-06	0.000344224	0.077450489	1.96072E-06	0.006542518

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
1.910400391	0.214952055	1.578984414
1.916503906	0.170923888	1.436312173
1.922607422	0.076835884	1.320625513
1.928710938	0.056881767	1.691355663
1.934814453	0.065155062	1.615342168
1.940917969	0.085933981	1.807705351
1.947021484	0.079456019	2.019925723
1.953125	0.034852422	1.632887693
1.959228516	0.027122648	1.076814321
1.965332031	0.039377932	1.996302237
1.971435547	0.011553318	2.56897935
1.977539063	0.041519065	1.324040592
1.983642578	0.081851648	1.274912167
1.989746094	0.141672142	1.335295234
1.995849609	0.156995185	1.378672793
2.001953125	0.097738072	1.287557449
2.008056641	0.079151773	1.38932978
2.014160156	0.089644531	1.582822935
2.020263672	0.078631489	1.711454896
2.026367188	0.059871308	1.65425897
2.032470703	0.07018577	1.482447312
2.038574219	0.059808584	1.48758493
2.044677734	0.014396635	1.601485831
2.05078125	0.021879485	1.214284348
2.056884766	0.041303245	1.174885815
2.062988281	0.079742185	1.260580738
2.069091797	0.130200531	1.302601813
2.075195313	0.139703579	1.340402963
2.081298828	0.074691018	1.349814129
2.087402344	0.018206378	0.514364603
2.093505859	0.046408054	0.768408959
2.099609375	0.060353875	1.060831798
2.105712891	0.06694556	1.42733249
2.111816406	0.029436109	1.956595603
2.117919922	0.045762447	1.120102345
2.124023438	0.073569528	1.17029176
2.130126953	0.066063315	1.220823483
2.136230469	0.0862823	1.265143137
2.142333984	0.103558963	1.272554714
2.1484375	0.077156437	1.231526003
2.154541016	0.037249381	0.980385819
2.160644531	0.04236519	1.145205992
2.166748047	0.045563125	1.534339361
2.172851563	0.028978577	1.897668789
2.178955078	0.030220756	1.105145353
2.185058594	0.018884017	0.628835697
2.191162109	0.04327702	1.053202065
2.197265625	0.056575103	1.147055681
2.203369141	0.044261845	1.120660415
2.209472656	0.055518765	1.245204984
2.215576172	0.053579744	1.117982486
2.221679688	0.063985586	1.132985708
2.227783203	0.027152348	0.947845493
2.233886719	0.071884453	1.222388566
2.239990234	0.106063076	1.143176144
2.24609375	0.085342002	1.044626316
2.252197266	0.06926301	1.03125039
2.258300781	0.070774324	1.096934401
2.264404297	0.083637788	1.223494105
2.270507813	0.08198039	1.282682325
2.276611328	0.07260531	1.262762262
2.282714844	0.083228137	1.279415077
2.288818359	0.057932693	1.129625568
2.294921875	0.069000677	0.973479201
2.301025391	0.09930639	1.078737934
2.307128906	0.092182404	1.151750259
2.313232422	0.087294113	1.229476147
2.319335938	0.098052888	1.111410214
2.325439453	0.110720235	1.020597504
2.331542969	0.100067839	0.97514896
2.337646484	0.079484454	0.939601645
2.34375	0.070738269	0.951556621
2.349853516	0.074867573	1.059463134
2.355957031	0.065137365	1.095052154
2.362060547	0.067664392	1.039201286
2.368164063	0.085023755	1.07821574
2.374267578	0.057531768	1.050570909
2.380371094	0.042239715	1.172505432
2.386474609	0.034544272	1.242352826
2.392578125	0.058071986	1.188826741
2.398681641	0.038574161	1.006704477
2.404785156	0.051261393	1.168716806
2.410888672	0.061427539	1.278979095
2.416992188	0.010202594	1.162019707
2.423095703	0.044646984	1.098605912
2.429199219	0.055119973	1.151496618
2.435302734	0.05913839	1.156775234
2.44140625	0.04713622	1.081176806
2.447509766	0.03070142	1.051055122
2.453613281	0.074033214	1.16141242
2.459716797	0.053599361	1.109513022
2.465820313	0.005507924	0.90662738
2.471923828	0.008506375	0.524644632
2.478027344	0.042271326	0.879918292
2.484130859	0.069242415	1.001165918
2.490234375	0.04848334	1.066733746
2.496337891	0.03708055	1.148469789
2.502441406	0.056200389	1.118473715
2.508544922	0.050217319	1.108098627
2.514648438	0.047423826	1.028814315
2.520751953	0.041606889	1.0059958
2.526855469	0.020357627	0.919856786
2.532958984	0.029340103	0.875130123
2.5390625	0.08360072	0.973435298

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
2.08	-0.000341299	1.76517E-06	0.000356613	0.080238012	1.99016E-06	0.006553943
2.085	-0.000332169	1.72183E-06	0.000347856	0.078267692	2.01804E-06	0.006565328
2.09	-0.000299335	1.56086E-06	0.00031533	0.070949165	2.04069E-06	0.006576644
2.095	-0.000251179	1.32325E-06	0.000267319	0.060146851	2.05663E-06	0.006588488
2.1	-0.000202081	1.08004E-06	0.000218179	0.049090175	2.06696E-06	0.006600827
2.105	-0.000164429	8.92691E-07	0.000180325	0.040573209	2.07379E-06	0.006613186
2.11	-0.000146945	8.0469E-07	0.000162545	0.036572679	2.07925E-06	0.006624982
2.115	-0.000152539	8.30951E-07	0.000167852	0.037766616	2.08513E-06	0.006636356
2.12	-0.000173152	9.32108E-07	0.000188292	0.042365662	2.09271E-06	0.006647094
2.125	-0.000193039	1.03035E-06	0.000208142	0.046831903	2.10212E-06	0.00665717
2.13	-0.000201976	1.0747E-06	0.000217104	0.048848294	2.11243E-06	0.006666708
2.135	-0.000202018	1.07493E-06	0.000217151	0.048858975	2.12275E-06	0.006675757
2.14	-0.000199823	1.06389E-06	0.00021492	0.048356988	2.13284E-06	0.006684347
2.145	-0.000199183	1.06037E-06	0.000214208	0.048196708	2.14287E-06	0.006692694
2.15	-0.000204043	1.0839E-06	0.000218964	0.04926687	2.15339E-06	0.006700702
2.155	-0.000219039	1.15764E-06	0.000233863	0.052619246	2.16552E-06	0.006708411
2.16	-0.000241415	1.26829E-06	0.000256221	0.057649681	2.18025E-06	0.006715854
2.165	-0.000260866	1.36493E-06	0.000275746	0.062042936	2.19745E-06	0.006723073
2.17	-0.000271649	1.41883E-06	0.000286636	0.06449308	2.2161E-06	0.006730277
2.175	-0.000277888	1.45015E-06	0.000292966	0.065917349	2.23561E-06	0.006737305
2.18	-0.000283733	1.47955E-06	0.000298906	0.067253741	2.25596E-06	0.006744167
2.185	-0.00028495	1.48617E-06	0.000300243	0.067554758	2.27648E-06	0.006750931
2.19	-0.000276712	1.4459E-06	0.000292106	0.065723903	2.29583E-06	0.006757571
2.195	-0.000264007	1.38317E-06	0.000279431	0.062871923	2.31345E-06	0.006764374
2.2	-0.000253874	1.33296E-06	0.000269286	0.060589278	2.32974E-06	0.006770902
2.205	-0.000243896	1.28351E-06	0.000259293	0.058340982	2.34477E-06	0.006777349
2.21	-0.000231253	1.22072E-06	0.000246606	0.055486419	2.35829E-06	0.006783514
2.215	-0.000222902	1.17892E-06	0.00023816	0.053585976	2.37085E-06	0.006789407
2.22	-0.000223238	1.18015E-06	0.000238408	0.053641857	2.38344E-06	0.006795211
2.225	-0.000226008	1.19364E-06	0.000241134	0.054255208	2.39635E-06	0.006800785
2.23	-0.000228798	1.20726E-06	0.000243885	0.054874181	2.40958E-06	0.006806186
2.235	-0.000236621	1.24585E-06	0.000251685	0.056629017	2.42373E-06	0.006811262
2.24	-0.000245275	1.28896E-06	0.000260394	0.058588656	2.43894E-06	0.006816045
2.245	-0.000241948	1.27305E-06	0.00025718	0.057865508	2.45373E-06	0.00682095
2.25	-0.000224542	1.1872E-06	0.000239832	0.053962187	2.46648E-06	0.006825967
2.255	-0.000204955	1.08994E-06	0.00022018	0.049540443	2.47709E-06	0.006830813
2.26	-0.000196349	1.04654E-06	0.000211412	0.04756762	2.48684E-06	0.006835281
2.265	-0.000205225	1.08957E-06	0.000220106	0.049523739	2.49748E-06	0.006839386
2.27	-0.00022997	1.21144E-06	0.000244731	0.055064452	2.51085E-06	0.006843177
2.275	-0.000262414	1.372E-06	0.000277174	0.062364156	2.52825E-06	0.006846709
2.28	-0.000290822	1.51325E-06	0.000305714	0.068785746	2.54963E-06	0.006850034
2.285	-0.000303601	1.57758E-06	0.000318713	0.071710348	2.57293E-06	0.006853199
2.29	-0.000297711	1.54942E-06	0.000313023	0.070430104	2.59533E-06	0.00685651
2.295	-0.000282343	1.47393E-06	0.000297768	0.066997789	2.61547E-06	0.006860045
2.3	-0.000266717	1.39683E-06	0.00028219	0.063492766	2.63345E-06	0.006863447
2.305	-0.000250971	1.31897E-06	0.000266457	0.059952808	2.64937E-06	0.006866705
2.31	-0.00023498	1.2396E-06	0.00025042	0.056344571	2.66333E-06	0.006869793
2.315	-0.000224368	1.18652E-06	0.000239694	0.05393126	2.67605E-06	0.00687269
2.32	-0.000222794	1.178E-06	0.000237972	0.053543799	2.6886E-06	0.006875396
2.325	-0.000229591	1.21083E-06	0.000244606	0.055036397	2.70192E-06	0.006877914
2.33	-0.00024798	1.30095E-06	0.000262817	0.059133917	2.71746E-06	0.006880251
2.335	-0.000284113	1.47912E-06	0.000298819	0.067234194	2.73786E-06	0.00688275
2.34	-0.000333633	1.72436E-06	0.000348368	0.078382896	2.766E-06	0.006885642
2.345	-0.000379444	1.9523E-06	0.000394412	0.088742669	2.80238E-06	0.006888824
2.35	-0.000406786	2.08958E-06	0.000422141	0.094981818	2.84421E-06	0.006892003
2.355	-0.00041084	2.11194E-06	0.000426657	0.095997781	2.88687E-06	0.00689563
2.36	-0.000389491	2.00857E-06	0.000405769	0.091298131	2.92521E-06	0.006900572
2.365	-0.000342649	1.77853E-06	0.000359288	0.080839754	2.95488E-06	0.006906371
2.37	-0.000281555	1.47691E-06	0.000298345	0.067127577	2.97492E-06	0.006912297
2.375	-0.000226689	1.20499E-06	0.000243405	0.054766144	2.98791E-06	0.006917934
2.38	-0.000190265	1.02378E-06	0.000206793	0.046528462	2.99706E-06	0.006922998
2.385	-0.000167812	9.1167E-07	0.000184142	0.04143186	3.00417E-06	0.006927533
2.39	-0.000152067	8.3272E-07	0.000168191	0.037842898	3.01002E-06	0.006932082
2.395	-0.000144953	7.96417E-07	0.000160856	0.036192638	3.01533E-06	0.0069357
2.4	-0.000147067	8.06005E-07	0.000162794	0.036628574	3.02079E-06	0.006938601
2.405	-0.000148855	8.14323E-07	0.000164474	0.037006753	3.02639E-06	0.0069409
2.41	-0.000145082	7.95069E-07	0.000160584	0.036131384	3.03171E-06	0.006942949
2.415	-0.000145406	7.95759E-07	0.000160723	0.036162779	3.03706E-06	0.006944955
2.42	-0.000159835	8.66175E-07	0.000174952	0.03936421	3.04351E-06	0.006946694
2.425	-0.000186021	9.9509E-07	0.000201001	0.045225183	3.05226E-06	0.006948179
2.43	-0.000217684	1.15155E-06	0.000232615	0.05233837	3.06424E-06	0.006949442
2.435	-0.000251565	1.31954E-06	0.000266559	0.059975678	3.08023E-06	0.00695056
2.44	-0.000278761	1.45524E-06	0.000293975	0.066144479	3.09987E-06	0.006951569
2.445	-0.00028295	1.47766E-06	0.000298507	0.067164065	3.12011E-06	0.006952582
2.45	-0.000258561	1.35844E-06	0.000274416	0.061743565	3.137E-06	0.006954516
2.455	-0.000220837	1.17236E-06	0.000236816	0.05328364	3.14933E-06	0.006956307
2.46	-0.000188117	1.01027E-06	0.000204065	0.045914695	3.15827E-06	0.006957918
2.465	-0.000166657	9.03457E-07	0.000182484	0.041058864	3.16529E-06	0.006959352
2.47	-0.000159121	8.65291E-07	0.000174772	0.039323778	3.17169E-06	0.006960597
2.475	-0.000167614	9.06524E-07	0.000183104	0.041198415	3.17879E-06	0.006961654
2.48	-0.000183341	9.84013E-07	0.000198762	0.04472138	3.18729E-06	0.006962535
2.485	-0.000194118	1.0373E-06	0.000209529	0.04714405	3.19681E-06	0.006963231
2.49	-0.00020106	1.071511E-06	0.000216442	0.048699379	3.20703E-06	0.006963849
2.495	-0.000212144	1.12617E-06	0.000227485	0.051184162	3.2184E-06	0.006964406
2.5	-0.000226889	1.19917E-06	0.000242237	0.054503317	3.23141E-06	0.006964907
2.505	-0.000237624	1.25263E-06	0.000253038	0.056933661	3.24569E-06	0.006965354
2.51	-0.000240557	1.2675E-06	0.000256043	0.057609579	3.26031E-06	0.006965751
2.515	-0.00024096	1.26966E-06	0.00025648	0.057708031	3.27499E-06	0.006966099
2.52	-0.000244806	1.28885E-06	0.000260356	0.058580166	3.29013E-06	0.006966397
2.525	-0.000249209	1.31095E-06	0.000264822	0.059584911	3.30583E-06	0.006966648
2.53	-0.000251506	1.32264E-06	0.000267184	0.060116394	3.32182E-06	0.006966902
2.535	-0.000257583	1.35302E-06	0.000273323	0.061497686	3.33859E-06	0.006967942
2.54	-0.000266584	1.39823E-06	0.000282457	0.063552814	3.35655E-06	0.0069689
2.545	-0.000264107	1.38701E-06	0.000280191	0.063042954	3.37418E-06	0.006969779
2.55	-0.000243512	1.28592E-06	0.000259764	0.058446817	3.38916E-06	0.006970577
2.555	-0.000216684	1.1533E-06	0.000232967	0.052417475	3.40103E-06	0.006971302
2.56	-0.000197634	1.05867E-06	0.000213845	0.048115028	3.4109E-06	0.006971974
2.565	-0.000190373	1.02222E-06	0.00020648	0.04645793	3.42006E-06	0.006972587
2.57	-0.000194967	1.04453E-06	0.000210988	0.047472271	3.42967E-06	0.006973258
2.575	-0.000211674	1.12719E-06	0.000227691	0.051230549	3.44099E-06	0.006973876
2.58	-0.000231196	1.22466E-06	0.000247386	0.055566184	3.4545E-06	0.006974382
2.585	-0.000231686	1.2288E-06	0.000248222	0.055850035	3.46807E-06	0.006974787
2.59	-0.000199227	1.06991E-06	0.000216117	0.048626306	3.4781E-06	0.006975117
2.595	-0.000142705	7.91102E-07	0.000159783	0.035951075	3.48325E-06	0.006975407

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
2.545166016	0.114945931	0.960158687
2.551269531	0.088571021	0.885731553
2.557373047	0.033733955	0.725064057
2.563476563	0.022858333	1.122061816
2.569580078	0.02237219	1.010556126
2.575683594	0.006508407	0.588187266
2.581787109	0.012908131	1.32234768
2.587890625	0.035626125	1.005286476
2.593994141	0.048526771	0.964330033
2.600097656	0.03595953	0.962339867
2.606201172	0.009722695	0.968422727
2.612304688	0.01417947	1.287285211
2.618408203	0.0256103	1.167922736
2.624511719	0.040732194	1.075132218
2.630615234	0.048481898	1.055309651
2.63671875	0.036970587	1.191868857
2.642822266	0.033918159	1.44628238
2.648925781	0.042106701	1.196843245
2.655029297	0.026491093	1.357640736
2.661132813	0.008705987	0.575577951
2.667236328	0.021697558	0.71471884
2.673339844	0.024095899	0.991284262
2.679443359	0.040486982	1.197411589
2.685546875	0.021217999	1.038399637
2.691650391	0.02294842	0.767590549
2.697753906	0.041382804	0.969406378
2.703857422	0.033839012	1.070235697
2.709960938	0.018451269	1.612114042
2.716064453	0.011387812	0.499862742
2.722167969	0.060799229	0.820335492
2.728271484	0.103112998	0.913581025
2.734375	0.095247	0.94766198
2.740478516	0.058673389	0.910628079
2.746582031	0.049834324	0.841506663
2.752685547	0.030344403	0.780711228
2.758789063	0.006891521	0.928882349
2.764892578	0.035988555	0.938557617
2.770996094	0.064253768	0.944952993
2.777099609	0.071716664	0.95258979
2.783203125	0.035791486	0.882880209
2.789306641	0.020603101	1.159544586
2.795410156	0.045140323	1.024336387
2.801513672	0.037698601	0.904081079
2.807617188	0.033353862	0.865561978
2.813720703	0.027258455	0.929616988
2.819824219	0.038127309	0.969846412
2.825927734	0.044744763	0.922510476
2.83203125	0.034979998	0.89164262
2.838134766	0.00994913	0.904385918
2.844238281	0.022938566	0.913789259
2.850341797	0.045380159	0.898479055
2.856445313	0.056703125	0.943522834
2.862548828	0.056965321	0.991612987
2.868652344	0.048651272	1.000991318
2.874755859	0.04775237	0.915375692
2.880859375	0.06498426	0.868473424
2.886962891	0.077532715	0.861768091
2.893066406	0.069814796	0.866758871
2.899169922	0.047442289	0.890176107
2.905273438	0.033047526	0.954916434
2.911376953	0.029238546	1.011403197
2.917480469	0.025196669	0.943799773
2.923583984	0.051706028	0.924585413
2.9296875	0.076909198	0.934288688
2.935791016	0.080931339	0.926911908
2.941894531	0.061689936	0.896710083
2.947998047	0.02996519	0.758935378
2.954101563	0.020395909	0.594636457
2.960205078	0.031785331	0.763256957
2.966308594	0.032301185	0.866088319
2.972412109	0.023625094	0.91333465
2.978515625	0.013081603	1.010686484
2.984619141	0.010367645	0.71554953
2.990722656	0.02783046	0.84022858
2.996826172	0.056315546	1.023387168
3.002929688	0.070105185	1.095755118
3.009033203	0.052811256	1.132694639
3.015136719	0.02386325	1.292846859
3.021240234	0.009247762	1.491953434
3.02734375	0.023309205	0.699245293
3.033447266	0.051780348	0.809275029
3.039550781	0.06051443	0.844871842
3.045654297	0.05270946	0.841893
3.051757813	0.049412661	0.840483275
3.057861328	0.045191403	0.839195709
3.063964844	0.023067633	0.717247851
3.070068359	0.027455188	0.779967553
3.076171875	0.049456024	0.842277788
3.082275391	0.041596678	0.795949359
3.088378906	0.029370289	0.737486588
3.094482422	0.03501599	0.782187942
3.100585938	0.062197761	0.930710645
3.106689453	0.056666634	0.97298208
3.112792969	0.024293433	0.735795953
3.118896484	0.032641988	0.734300846
3.125	0.028540703	0.773492595
3.131103516	0.023351531	1.120705934
3.137207031	0.043866591	1.221648154
3.143310547	0.03181337	1.349658981
3.149414063	0.007629561	0.5447791
3.155517578	0.015054162	0.83184575
3.161621094	0.029370542	1.143733389
3.167724609	0.051274401	1.046495946
3.173828125	0.087816477	0.960432952

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
2.6	-7.89735E-05	4.75527E-07	9.60261E-05	0.021605865	3.48482E-06	0.006975627
2.605	-1.98506E-05	1.81654E-07	3.66559E-05	0.008247581	3.48492E-06	0.006975719
2.61	2.01934E-05	-1.88484E-08	-3.84997E-06	-0.000866243	3.48503E-06	0.006975721
2.615	2.66893E-05	-5.38079E-08	-1.09122E-05	-0.00245525	3.48521E-06	0.006975721
2.62	2.07262E-06	6.56061E-08	1.3217E-05	0.002973831	3.48521E-06	0.006975721
2.625	-3.75606E-05	2.60142E-07	5.25249E-05	0.011818096	3.48556E-06	0.006975721
2.63	-8.22931E-05	4.8062E-07	9.70734E-05	0.021841513	3.48728E-06	0.006975721
2.635	-0.000130094	7.17002E-07	0.000144834	0.032587682	3.49155E-06	0.006975721
2.64	-0.000172647	9.28299E-07	0.000187526	0.042193272	3.49909E-06	0.006975721
2.645	-0.000195502	1.04275E-06	0.000210649	0.047396134	3.50875E-06	0.006975721
2.65	-0.000194365	1.03839E-06	0.000209768	0.047197786	3.51829E-06	0.006975721
2.655	-0.00018121	9.73967E-07	0.00019675	0.044268856	3.52659E-06	0.006975721
2.66	-0.000169332	9.15416E-07	0.00018492	0.0416069	3.53384E-06	0.006975721
2.665	-0.000159169	8.65218E-07	0.000174777	0.039324726	3.54024E-06	0.006975721
2.67	-0.000147211	8.05939E-07	0.000162799	0.036629707	3.54572E-06	0.006975721
2.675	-0.000139505	7.67416E-07	0.000155015	0.034878326	3.55064E-06	0.006975721
2.68	-0.00014108	7.74833E-07	0.000156514	0.035215542	3.55567E-06	0.006975746
2.685	-0.000145396	7.95997E-07	0.00016079	0.036177727	3.56101E-06	0.00697575
2.69	-0.000151582	8.2632E-07	0.000166917	0.037556353	3.56682E-06	0.00697575
2.695	-0.000171354	9.23854E-07	0.000186625	0.041990678	3.57424E-06	0.00697575
2.7	-0.000203742	1.08448E-06	0.000219081	0.049293263	3.58473E-06	0.00697575
2.705	-0.000227605	1.20382E-06	0.000243191	0.054717939	3.59783E-06	0.00697575
2.71	-0.00022905	1.21246E-06	0.000244936	0.055110684	3.61109E-06	0.00697575
2.715	-0.000214908	1.14366E-06	0.000231034	0.051982734	3.62276E-06	0.00697575
2.72	-0.000194319	1.04267E-06	0.000210628	0.04739131	3.6323E-06	0.006975849
2.725	-0.000164597	8.96274E-07	0.000181048	0.040735825	3.63915E-06	0.006976053
2.73	-0.000124013	6.9555E-07	0.000140491	0.031610475	3.64304E-06	0.006976419
2.735	-8.48055E-05	5.00758E-07	0.000101133	0.022755	3.64485E-06	0.006976722
2.74	-5.97669E-05	3.75479E-07	7.58211E-05	0.017059755	3.64576E-06	0.006976901
2.745	-5.0376E-05	3.27356E-07	6.6098E-05	0.014872054	3.6464E-06	0.006976953
2.75	-5.97293E-05	3.71798E-07	7.50783E-05	0.016892624	3.6473E-06	0.006977055
2.755	-9.54778E-05	5.47076E-07	0.000110495	0.02486142	3.6496E-06	0.006977174
2.76	-0.000152219	8.2717E-07	0.00016709	0.037595255	3.65546E-06	0.006977198
2.765	-0.000211171	1.11945E-06	0.000226145	0.050882516	3.66673E-06	0.006977198
2.77	-0.000256087	1.34329E-06	0.00027137	0.061058198	3.68331E-06	0.006977198
2.775	-0.000276059	1.44439E-06	0.000291795	0.065653824	3.70257E-06	0.006977198
2.78	-0.000261518	1.37486E-06	0.000277746	0.062492938	3.71985E-06	0.006977198
2.785	-0.000211708	1.13011E-06	0.000228292	0.051365729	3.73118E-06	0.006977235
2.79	-0.000146156	8.05972E-07	0.000162798	0.036629589	3.73658E-06	0.006977255
2.795	-9.70839E-05	5.61969E-07	0.000113498	0.025537064	3.73896E-06	0.006977255
2.8	-8.24738E-05	4.88103E-07	9.85739E-05	0.022179119	3.74068E-06	0.006977255
2.805	-9.42265E-05	5.45269E-07	0.000110125	0.024778144	3.74292E-06	0.006977255
2.81	-0.000113904	6.42544E-07	0.000129781	0.029200698	3.7462E-06	0.006977255
2.815	-0.000126297	7.04569E-07	0.000142314	0.032020546	3.75024E-06	0.006977255
2.82	-0.000119386	6.71528E-07	0.000135637	0.030518358	3.75384E-06	0.006977255
2.825	-8.72686E-05	5.13577E-07	0.000103721	0.023337268	3.75576E-06	0.006977255
2.83	-3.77321E-05	2.68537E-07	5.42126E-05	0.012197834	3.75612E-06	0.006977255
2.835	9.94017E-06	3.15673E-08	6.3362E-06	0.001425644	3.75615E-06	0.006977255
2.84	4.08838E-05	-1.23417E-07	-2.49748E-05	-0.005619333	3.75657E-06	0.006977255
2.845	5.4063E-05	-1.90867E-07	-3.86008E-05	-0.008685188	3.75731E-06	0.006977255
2.85	5.01208E-05	-1.73848E-07	-3.51617E-05	-0.007911379	3.75794E-06	0.006977255
2.855	2.32556E-05	-4.33627E-08	-8.79549E-06	-0.001978985	3.75808E-06	0.006977255
2.86	-2.37935E-05	1.87711E-07	3.7895E-05	0.00852637	3.75822E-06	0.006977255
2.865	-7.32169E-05	4.31575E-07	8.71682E-05	0.019612853	3.75958E-06	0.006977255
2.87	-0.000111725	6.22098E-07	0.000125663	0.028274205	3.76273E-06	0.006977255
2.875	-0.000141218	7.68298E-07	0.000155202	0.034920457	3.76777E-06	0.006977255
2.88	-0.000164316	8.83107E-07	0.000178398	0.040139572	3.7746E-06	0.006977255
2.885	-0.000177859	9.50736E-07	0.000192062	0.043213917	3.78259E-06	0.006977255
2.89	-0.000184996	9.86427E-07	0.000199273	0.04483637	3.79124E-06	0.006977255
2.895	-0.000195131	1.03669E-06	0.000209428	0.047121267	3.80087E-06	0.006977255
2.9	-0.000210455	1.11264E-06	0.000224773	0.050573977	3.81206E-06	0.006977255
2.905	-0.000226348	1.19152E-06	0.000240709	0.054159547	3.82501E-06	0.006977255
2.91	-0.000241369	1.26609E-06	0.000255775	0.057549317	3.83973E-06	0.00697735
2.915	-0.000258903	1.35314E-06	0.000273362	0.061506384	3.85667E-06	0.006977558
2.92	-0.000279609	1.45623E-06	0.00029419	0.066192695	3.87643E-06	0.006977949
2.925	-0.000293512	1.52624E-06	0.000308333	0.069374927	3.89821E-06	0.006978253
2.93	-0.000289991	1.51026E-06	0.000305105	0.068648535	3.91946E-06	0.006978784
2.935	-0.000273993	1.43236E-06	0.000289364	0.065106871	3.93844E-06	0.006979134
2.94	-0.000251355	1.32156E-06	0.000266975	0.060069481	3.9544E-06	0.006980325
2.945	-0.000212346	1.1297E-06	0.000228208	0.051346731	3.9658E-06	0.006981838
2.95	-0.000154575	8.44245E-07	0.000170531	0.038369492	3.97184E-06	0.006983666
2.955	-9.5492E-05	5.51159E-07	0.000111314	0.025045748	3.97414E-06	0.006984879
2.96	-4.79607E-05	3.14389E-07	6.34773E-05	0.0142824	3.97472E-06	0.00698591
2.965	-1.43605E-05	1.45865E-07	2.94294E-05	0.006621621	3.97478E-06	0.006986938
2.97	-3.33337E-06	8.8371E-08	1.78137E-05	0.00400809	3.97478E-06	0.006987605
2.975	-2.64023E-05	1.99379E-07	4.02444E-05	0.009054985	3.97496E-06	0.00698799
2.98	-8.37848E-05	4.80681E-07	9.7084E-05	0.02184389	3.97673E-06	0.006988212
2.985	-0.000165634	8.84013E-07	0.000178577	0.040179933	3.98366E-06	0.006988519
2.99	-0.000263484	1.36763E-06	0.000276289	0.062164988	4.00121E-06	0.006988824
2.995	-0.000372467	1.90772E-06	0.000385401	0.086715298	4.03627E-06	0.006989078
3	-0.000476378	2.42457E-06	0.000489802	0.110205411	4.09363E-06	0.006989312
3.005	-0.000542234	2.75489E-06	0.000556515	0.125215868	4.16794E-06	0.006989552
3.01	-0.000545408	2.77567E-06	0.00056071	0.126159647	4.24312E-06	0.006989846
3.015	-0.000489149	2.50166E-06	0.000505342	0.113701907	4.30359E-06	0.006990625
3.02	-0.000391034	2.01903E-06	0.000407827	0.091761	4.34224E-06	0.006991851
3.025	-0.00027178	1.42975E-06	0.000288768	0.064972859	4.36091E-06	0.00699372
3.03	-0.000163811	8.93984E-07	0.000180528	0.040618741	4.36769E-06	0.006996187
3.035	-0.000103282	5.91359E-07	0.000119391	0.026862953	4.37039E-06	0.006999295
3.04	-0.000102001	5.81798E-07	0.000117461	0.026428674	4.37302E-06	0.007002242
3.045	-0.000142437	7.79669E-07	0.000157443	0.035424694	4.37814E-06	0.007004968
3.05	-0.000201418	1.07056E-06	0.000216219	0.048649165	4.3884E-06	0.007007345
3.055	-0.000265626	1.38851E-06	0.00028046	0.063103455	4.40623E-06	0.007009848
3.06	-0.000323761	1.67768E-06	0.000338886	0.076249275	4.43272E-06	0.007012289
3.065	-0.00035623	1.84103E-06	0.000371888	0.083674863	4.4648E-06	0.00701504
3.07	-0.000346915	1.79798E-06	0.000363189	0.081717575	4.49521E-06	0.007017722
3.075	-0.000301844	1.57733E-06	0.000318605	0.071686114	4.51824E-06	0.007020598
3.08	-0.000238979	1.26751E-06	0.000256003	0.057600693	4.53268E-06	0.007024359
3.085	-0.000171779	9.34928E-07	0.000188806	0.042481461	4.54013E-06	0.007027716
3.09	-0.000120693	6.80653E-07	0.000137432	0.030922303	4.54381E-06	0.007030544
3.095	-0.000109973	6.25433E-07	0.000126276	0.028412066	4.54687E-06	0.007033224
3.1	-0.000135728	7.51346E-07	0.000151718	0.034136657	4.55153E-06	0.007035433
3.105	-0.000170159	9.21289E-07	0.000186057	0.04186285	4.55885E-06	0.007037902
3.11	-0.000197395	1.05626E-06	0.000213328	0.047998803	4.56869E-06	0.007040248
3.115	-0.000217039	1.15395E-06	0.000233067	0.052440067	4.5806E-06	0.007042221

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
3.179931641	0.106466054	0.934926459
3.186035156	0.088309195	0.935150035
3.192138672	0.085050239	0.941888769
3.198242188	0.05513586	0.943648001
3.204345703	0.001213478	0.146973518
3.210449219	0.026084225	0.915884759
3.216552734	0.023642121	0.944119449
3.22265625	0.021644893	0.873009532
3.228759766	0.019149273	0.852526669
3.234863281	0.015940444	3.427536448
3.240966797	0.026289739	1.207133673
3.247070313	0.021348287	0.951506765
3.253173828	0.015657668	1.144944827
3.259277344	0.032449317	1.258981759
3.265380859	0.047522597	1.132018649
3.271484375	0.047570037	1.053403423
3.277587891	0.039596694	1.000090618
3.283691406	0.022378828	0.957241741
3.289794922	0.011491626	0.631025562
3.295898438	0.024705268	0.789361353
3.302001953	0.030866225	0.88074582
3.308105469	0.036718841	0.928337184
3.314208984	0.042644855	1.026005374
3.3203125	0.037592073	1.102411728
3.326416016	0.048713921	1.031761212
3.332519531	0.089815569	0.962814748
3.338623047	0.113802818	0.95870834
3.344726563	0.097471283	0.954434669
3.350830078	0.074061064	0.932027651
3.356933594	0.047106023	0.900886686
3.363037109	0.015561103	0.702138723
3.369140625	0.013546621	0.842631181
3.375244141	0.019116669	0.879571524
3.381347656	0.026368469	0.884587377
3.387451172	0.026833278	0.938482095
3.393554688	0.019822817	0.793859013
3.399658203	0.0210727	0.631086196
3.405761719	0.016772911	0.507487325
3.411865234	0.007584078	0.331450738
3.41796875	0.011148201	0.979468958
3.424072266	0.031784437	1.359963138
3.430175781	0.0326358	1.422121447
3.436279297	0.010587483	1.493815779
3.442382813	0.007734531	0.625280313
3.448486328	0.007754453	0.763197984
3.454589844	0.007218898	0.626005385
3.460693359	0.029906806	1.190877364
3.466796875	0.063373987	1.152493677
3.472900391	0.083676244	1.113447991
3.479003906	0.081113363	1.098311547
3.485107422	0.056277227	1.171935206
3.491210938	0.025021743	1.890300978
3.497314453	0.014172269	1.446809626
3.503417969	0.01735813	1.405373599
3.509521484	0.014642887	1.228229137
3.515625	0.014107116	0.719759797
3.521728516	0.029912098	0.937173596
3.527832031	0.029880994	1.017739512
3.533935547	0.024650775	1.246922391
3.540039063	0.028567084	1.287058601
3.546142578	0.024141102	1.167740492
3.552246094	0.024341802	1.271147583
3.558349609	0.028595251	1.309507282
3.564453125	0.045489677	1.244936389
3.570556641	0.059540277	1.114440839
3.576660156	0.056755116	1.046218615
3.582763672	0.041386415	1.057527613
3.588867188	0.021753535	1.200673214
3.594970703	0.014367621	1.236711713
3.601074219	0.027181702	1.13674713
3.607177734	0.045535562	1.208546061
3.61328125	0.05752854	1.210177575
3.619384766	0.058913335	1.168548471
3.625488281	0.051981653	1.117143242
3.631591797	0.040792907	1.170617984
3.637695313	0.030749904	1.414660742
3.643798828	0.029256233	1.459391367
3.649902344	0.040595052	1.424723745
3.656005859	0.050257863	1.438911014
3.662109375	0.042065981	1.574182058
3.668212891	0.026933345	1.275676554
3.674316406	0.028338447	1.003141056
3.680419922	0.031440486	1.174993732
3.686523438	0.031576486	1.43448935
3.692626953	0.030502605	1.518725155
3.698730469	0.029183611	1.361654495
3.704833984	0.03665447	1.097736615
3.7109375	0.048831907	1.057257788
3.717041016	0.051583653	1.161335197
3.723144531	0.034944073	1.354078673
3.729248047	0.01364111	1.301223736
3.735351563	0.01598796	1.592645022
3.741455078	0.024497202	1.808876333
3.747558594	0.020195874	4.306564887
3.753662109	0.016130471	1.017597835
3.759765625	0.022188054	0.977308167
3.765869141	0.016460427	1.128015535
3.771972656	0.0102153	0.73334257
3.778076172	0.021861197	0.869531081
3.784179688	0.024662058	0.801547193
3.790283203	0.017156841	0.514843014
3.796386719	0.038911977	0.864220606
3.802490234	0.055205144	1.059217414
3.80859375	0.056808956	1.142020602

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
3.12	-0.000227519	1.20647E-06	0.000243679	0.054827851	4.59368E-06	0.007043908
3.125	-0.000227325	1.20606E-06	0.000243596	0.054809109	4.60674E-06	0.007045364
3.13	-0.00022318	1.18566E-06	0.000239475	0.053881766	4.61933E-06	0.007046622
3.135	-0.000228206	1.21024E-06	0.000244441	0.05499927	4.63249E-06	0.007047687
3.14	-0.00024921	1.314E-06	0.000265406	0.05971642	4.64819E-06	0.007048565
3.145	-0.00027862	1.45994E-06	0.000294891	0.066350585	4.66781E-06	0.007049311
3.15	-0.000307795	1.60529E-06	0.000324259	0.07295818	4.69175E-06	0.007049985
3.155	-0.000336262	1.74779E-06	0.000353049	0.079436131	4.72033E-06	0.007050609
3.16	-0.000354273	1.8396E-06	0.000371598	0.083609653	4.75205E-06	0.007051198
3.165	-0.000336987	1.75759E-06	0.000355028	0.079881315	4.78076E-06	0.00705176
3.17	-0.000271569	1.43712E-06	0.000290274	0.065311697	4.7994E-06	0.007052282
3.175	-0.000173244	9.52442E-07	0.000192345	0.043277667	4.80698E-06	0.007053257
3.18	-6.78341E-05	4.31048E-07	8.70054E-05	0.019576207	4.80814E-06	0.00705451
3.185	2.54504E-05	-3.18008E-08	-6.49525E-06	-0.001461432	4.80831E-06	0.00705562
3.19	9.18637E-05	-3.62772E-07	-7.33528E-05	-0.016504375	4.81044E-06	0.007056378
3.195	0.000120977	-5.09569E-07	-0.000103006	-0.023176303	4.81414E-06	0.007057508
3.2	0.000117958	-4.96869E-07	-0.000100439	-0.022598805	4.81766E-06	0.007059142
3.205	0.000103072	-4.24539E-07	-8.58237E-05	-0.019310341	4.82034E-06	0.007060328
3.21	9.30064E-05	-3.75388E-07	-7.58922E-05	-0.01707574	4.82253E-06	0.007061124
3.215	9.33264E-05	-3.77288E-07	-7.62762E-05	-0.017162134	4.82473E-06	0.007061688
3.22	0.000108705	-4.53643E-07	-9.17048E-05	-0.020633582	4.82772E-06	0.00706209
3.225	0.000139752	-6.08096E-07	-0.000122908	-0.027654353	4.83265E-06	0.007062325
3.23	0.0001671	-7.45422E-07	-0.000150647	-0.033895675	4.83971E-06	0.007062385
3.235	0.000161029	-7.18194E-07	-0.000145145	-0.032657567	4.84626E-06	0.007062385
3.24	0.000113565	-4.85696E-07	-9.81658E-05	-0.022087304	4.84952E-06	0.007062483
3.245	4.73826E-05	-1.59217E-07	-3.21995E-05	-0.007244879	4.85009E-06	0.007062873
3.25	-9.05843E-06	1.20273E-07	2.42708E-05	0.005460921	4.85011E-06	0.007063259
3.255	-4.46953E-05	2.97318E-07	6.00415E-05	0.013509333	4.85061E-06	0.007063521
3.26	-6.42316E-05	3.94659E-07	7.97082E-05	0.017934352	4.85166E-06	0.00706357
3.265	-7.72585E-05	4.59517E-07	9.2812E-05	0.020882697	4.85317E-06	0.00706357
3.27	-9.59658E-05	5.52243E-07	0.000111546	0.025097865	4.85549E-06	0.00706357
3.275	-0.000129206	7.17162E-07	0.000144865	0.032594685	4.85971E-06	0.00706357
3.28	-0.000167703	9.0906E-07	0.000183635	0.041317789	4.86682E-06	0.00706357
3.285	-0.000188583	1.01477E-06	0.000204991	0.046122983	4.87581E-06	0.00706357
3.29	-0.000180081	9.75409E-07	0.000197037	0.044333432	4.88401E-06	0.00706357
3.295	-0.000145941	8.09E-07	0.000163412	0.036767807	4.88939E-06	0.00706357
3.3	-8.75541E-05	5.22237E-07	0.00010547	0.023730809	4.89133E-06	0.007063822
3.305	-2.05477E-06	1.00491E-07	2.02571E-05	0.004557848	4.89133E-06	0.007063947
3.31	0.000100451	-4.06996E-07	-8.22746E-05	-0.018511796	4.89388E-06	0.007064324
3.315	0.000192286	-8.63577E-07	-0.000174514	-0.039265673	4.90322E-06	0.007064571
3.32	0.000247077	-1.13817E-06	-0.000229979	-0.051745307	4.91865E-06	0.007064779
3.325	0.000256482	-1.18853E-06	-0.000240151	-0.054033893	4.93528E-06	0.007064779
3.33	0.000224767	-1.03499E-06	-0.000209126	-0.047053309	4.94805E-06	0.007064779
3.335	0.000161536	-7.24392E-07	-0.000146368	-0.032932756	4.95464E-06	0.007064779
3.34	8.69675E-05	-3.56093E-07	-7.19532E-05	-0.016189461	4.95655E-06	0.007064779
3.345	2.59715E-05	-5.3549E-08	-1.08265E-05	-0.002435957	4.95672E-06	0.007064779
3.35	-9.025E-06	1.21048E-07	2.44486E-05	0.00550094	4.95674E-06	0.007064779
3.355	-1.88231E-05	1.71048E-07	3.45504E-05	0.007773842	4.95683E-06	0.007065043
3.36	-7.86417E-06	1.18031E-07	2.38375E-05	0.005363434	4.95685E-06	0.007065278
3.365	1.77947E-05	-8.33572E-09	-1.69642E-06	-0.000381694	4.95693E-06	0.007065278
3.37	4.90172E-05	-1.63072E-07	-3.29621E-05	-0.007416479	4.95754E-06	0.007065352
3.375	7.16719E-05	-2.76297E-07	-5.58398E-05	-0.012563959	4.95883E-06	0.007065413
3.38	7.05678E-05	-2.72457E-07	-5.50638E-05	-0.012389353	4.96009E-06	0.007065413
3.385	4.06006E-05	-1.25602E-07	-2.53899E-05	-0.005712734	4.96051E-06	0.007065413
3.39	-1.28097E-05	1.3805E-07	2.7883E-05	0.006273675	4.96055E-06	0.007065413
3.395	-7.66651E-05	4.54695E-07	9.18562E-05	0.020667638	4.96204E-06	0.007065413
3.4	-0.000124991	6.95952E-07	0.000140597	0.031634219	4.96599E-06	0.007065413
3.405	-0.000133329	7.40009E-07	0.000149497	0.033636782	4.97048E-06	0.007065413
3.41	-0.000102785	5.91204E-07	0.000119429	0.026871488	4.97315E-06	0.007065413
3.415	-4.98898E-05	3.30814E-07	6.6815E-05	0.015033385	4.97378E-06	0.007065413
3.42	1.03152E-05	3.31534E-08	6.67229E-06	0.001501265	4.9738E-06	0.007065413
3.425	6.15374E-05	-2.20993E-07	-4.46767E-05	-0.010052265	4.97476E-06	0.007065413
3.43	9.61914E-05	-3.93488E-07	-7.95277E-05	-0.017893743	4.9771E-06	0.007065413
3.435	0.000123069	-5.27473E-07	-0.000106598	-0.023984533	4.98093E-06	0.007065413
3.44	0.00014794	-6.51692E-07	-0.000131694	-0.029631241	4.98646E-06	0.007065413
3.445	0.000167633	-7.50572E-07	-0.000151671	-0.034126063	4.99356E-06	0.007065413
3.45	0.000179413	-8.10584E-07	-0.000163796	-0.036854044	5.0017E-06	0.007065413
3.455	0.000176915	-8.00213E-07	-0.0001617	-0.036382493	5.00961E-06	0.007065413
3.46	0.000156578	-7.01438E-07	-0.000141741	-0.031891747	5.0158E-06	0.007065413
3.465	0.000126843	-5.55763E-07	-0.000112306	-0.025268828	5.01987E-06	0.007065413
3.47	9.07936E-05	-3.78607E-07	-7.65105E-05	-0.017214861	5.02195E-06	0.007065413
3.475	4.29682E-05	-1.42764E-07	-2.88582E-05	-0.006493084	5.02242E-06	0.007065413
3.48	-1.06519E-05	1.22592E-07	2.4756E-05	0.00557009	5.02245E-06	0.007065413
3.485	-5.74039E-05	3.54783E-07	7.1668E-05	0.0161253	5.02328E-06	0.007065427
3.49	-9.03445E-05	5.19205E-07	0.000104887	0.023599639	5.02534E-06	0.007065427
3.495	-0.000103586	5.864E-07	0.000118463	0.026654171	5.02806E-06	0.007065427
3.5	-9.82733E-05	5.6147E-07	0.000113426	0.025520762	5.0305E-06	0.007065427
3.505	-8.79984E-05	5.11372E-07	0.000103303	0.023243097	5.03245E-06	0.007065427
3.51	-8.33075E-05	4.88517E-07	9.86845E-05	0.022204003	5.03421E-06	0.007065427
3.515	-8.51859E-05	4.98071E-07	0.000100615	0.022638363	5.03604E-06	0.007065427
3.52	-9.06378E-05	5.25437E-07	0.000106145	0.02388254	5.03812E-06	0.007065427
3.525	-9.10482E-05	5.28108E-07	0.000106684	0.024004006	5.04021E-06	0.007065427
3.53	-7.79359E-05	4.63857E-07	9.37016E-05	0.021082864	5.04175E-06	0.007065427
3.535	-5.35486E-05	3.43413E-07	6.93647E-05	0.015607046	5.04247E-06	0.007065427
3.54	-2.60215E-05	2.06881E-07	4.17772E-05	0.009399879	5.04265E-06	0.007065427
3.545	-4.13639E-06	9.76927E-08	1.97154E-05	0.004435959	5.04265E-06	0.007065427
3.55	3.0624E-07	7.44152E-08	1.50121E-05	0.003377729	5.04265E-06	0.007065427
3.555	-1.96019E-05	1.7181E-07	3.46922E-05	0.007805736	5.04275E-06	0.007065427
3.56	-5.58764E-05	3.50987E-07	7.08967E-05	0.015951747	5.04354E-06	0.007065427
3.565	-9.14839E-05	5.27823E-07	0.000106627	0.023991153	5.04565E-06	0.007065427
3.57	-0.000112676	6.33985E-07	0.000128077	0.028817287	5.04886E-06	0.007065427
3.575	-0.0001142	6.43012E-07	0.0001299	0.029227551	5.05216E-06	0.007065427
3.58	-9.66373E-05	5.5734E-07	0.000112589	0.025332522	5.05452E-06	0.007065427
3.585	-6.43466E-05	3.98119E-07	8.04168E-05	0.018093782	5.05556E-06	0.007065427
3.59	-2.99366E-05	2.2741E-07	4.59239E-05	0.010332877	5.05579E-06	0.007065427
3.595	-1.21364E-05	1.3801E-07	2.78602E-05	0.006268553	5.05583E-06	0.007065427
3.6	-2.20687E-05	1.85576E-07	3.74718E-05	0.008431165	5.05595E-06	0.007065427
3.605	-5.82436E-05	3.63418E-07	7.34068E-05	0.016516521	5.05681E-06	0.007065427
3.61	-0.000112015	6.29273E-07	0.000127124	0.028602991	5.05998E-06	0.007065427
3.615	-0.000168362	9.09168E-07	0.000183671	0.041325982	5.06714E-06	0.007065427
3.62	-0.000207275	1.10407E-06	0.000223045	0.050185047	5.078E-06	0.007065427
3.625	-0.000210936	1.12528E-06	0.000227329	0.05114899	5.08925E-06	0.007065427
3.63	-0.000171271	9.31955E-07	0.000188265	0.042359642	5.09666E-06	0.007065427
3.635	-9.61049E-05	5.61864E-07	0.000113486	0.025534432	5.09899E-06	0.007065427

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
3.814697266	0.052421525	1.131006696
3.820800781	0.049973967	1.036842972
3.826904297	0.052788299	1.028393889
3.833007813	0.062845184	1.168372808
3.839111328	0.077331909	1.307015787
3.845214844	0.080886599	1.345466787
3.851318359	0.06237733	1.330898258
3.857421875	0.043469216	1.212771937
3.863525391	0.05644689	1.179163952
3.869628906	0.071248778	1.240026303
3.875732422	0.073284732	1.30669506
3.881835938	0.063960657	1.368376519
3.887939453	0.048569608	1.525548125
3.894042969	0.034320268	2.077493117
3.900146484	0.02626801	3.143644368
3.90625	0.023464089	4.211513476
3.912353516	0.020843464	3.131832104
3.918457031	0.025242061	2.315178983
3.924560547	0.036914435	1.676967913
3.930664063	0.038274637	1.633911734
3.936767578	0.028554318	2.427269042
3.942871094	0.022954959	66.92462312
3.948974609	0.031677437	3.022500143
3.955078125	0.049491534	1.985003319
3.961181641	0.060267416	1.868565302
3.967285156	0.061618354	2.097975
3.973388672	0.060513961	2.382680487
3.979492188	0.045936223	2.37745285
3.985595703	0.027342325	2.332312158
3.991699219	0.029595359	1.770762737
3.997802734	0.047976688	1.704705644
4.00390625	0.055719257	1.971055038
4.010009766	0.055164871	2.178375685
4.016113281	0.049260132	2.318416802
4.022216797	0.044735133	2.249482479
4.028320313	0.038944914	1.829038433
4.034423828	0.035075101	2.361228103
4.040527344	0.054370122	1.801324084
4.046630859	0.050258713	1.683904356
4.052734375	0.022326948	2.200527254
4.058837891	0.026480715	1.260769914
4.064941406	0.061685719	1.343550921
4.071044922	0.070308574	1.329534939
4.077148438	0.054475888	1.355541406
4.083251953	0.024744343	1.599418419
4.089355469	0.004692011	0.354814013
4.095458984	0.026899904	1.086594828
4.1015625	0.049422553	1.459602567
4.107666016	0.071010042	1.618298761
4.113769531	0.098755547	1.630784683
4.119873047	0.116724842	1.682742678
4.125976563	0.100496381	1.715675613
4.132080078	0.068290268	1.720011276
4.138183594	0.041306166	2.025984368
4.144287109	0.03852921	2.792336775
4.150390625	0.047328632	2.38647554
4.156494141	0.044034691	2.105302486
4.162597656	0.032487149	1.980185143
4.168701172	0.024451313	1.534546451
4.174804688	0.013352626	0.69037841
4.180908203	0.01308293	1.086042862
4.187011719	0.025472367	4.47179926
4.193115234	0.019175212	1.891857835
4.19921875	0.044909319	2.380987105
4.205322266	0.064448604	1.993769641
4.211425781	0.069860605	1.612474861
4.217529297	0.072177658	1.594486974
4.223632813	0.07508461	2.014152147
4.229736328	0.072882292	2.15999632
4.235839844	0.096554596	1.896116951
4.241943359	0.122308482	1.889827888
4.248046875	0.106940583	1.76490398
4.254150391	0.064314088	1.349933233
4.260253906	0.028410757	0.808147817
4.266357422	0.020799935	0.748629917
4.272460938	0.022479362	0.727787447
4.278564453	0.053262344	1.31179633
4.284667969	0.070675968	1.525919177
4.290771484	0.065107138	1.343253731
4.296875	0.069365236	1.282536118
4.302978516	0.080693998	1.48797587
4.309082031	0.075007721	1.612337903
4.315185547	0.063942138	1.43871172
4.321289063	0.07834632	1.497491209
4.327392578	0.09628504	1.737030242
4.333496094	0.089098608	1.887388139
4.339599609	0.062933961	1.588424124
4.345703125	0.052598809	1.204305303
4.351806641	0.065470193	1.384953908
4.357910156	0.085774079	1.93206801
4.364013672	0.095107951	2.657275889
4.370117188	0.075790465	3.411645632
4.376220703	0.047871511	2.786001056
4.382324219	0.056200207	2.129479015
4.388427734	0.069653032	2.216183002
4.39453125	0.078996565	2.239015837
4.400634766	0.097675404	2.59710234
4.406738281	0.102222937	3.058460641
4.412841797	0.090010255	2.993574355
4.418945313	0.097793872	2.783023232
4.425048828	0.128185395	2.980599863
4.431152344	0.134289989	3.011850051
4.437255859	0.111347399	2.481559433
4.443359375	0.116451376	2.165982311

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
3.64	-6.40985E-06	1.18231E-07	2.3852E-05	0.005366693	5.09901E-06	0.007065751
3.645	7.41324E-05	-2.81782E-07	-5.69656E-05	-0.012817254	5.10039E-06	0.007066379
3.65	0.000124862	-5.3553E-07	-0.000108231	-0.024351867	5.10433E-06	0.007066866
3.655	0.000133828	-5.8312E-07	-0.000117845	-0.026515102	5.10886E-06	0.007067832
3.66	0.000102074	-4.28961E-07	-8.6695E-05	-0.019506379	5.11149E-06	0.007068761
3.665	3.65826E-05	-1.07058E-07	-2.16523E-05	-0.004871772	5.11183E-06	0.007069404
3.67	-5.18932E-05	3.29905E-07	6.66354E-05	0.014992966	5.11251E-06	0.007069896
3.675	-0.000142654	7.79881E-07	0.000157548	0.035448318	5.11766E-06	0.007070289
3.68	-0.000211016	1.12059E-06	0.000226382	0.050936004	5.12891E-06	0.007070611
3.685	-0.000239073	1.26284E-06	0.000255118	0.057401528	5.14336E-06	0.007070881
3.69	-0.000219809	1.17105E-06	0.000236571	0.053228583	5.15557E-06	0.007071312
3.695	-0.000159477	8.75312E-07	0.000176815	0.039783314	5.162E-06	0.007072092
3.7	-7.32731E-05	4.50233E-07	9.09274E-05	0.020458674	5.16335E-06	0.007072735
3.705	2.01263E-05	-1.20656E-08	-2.4759E-06	-0.000557078	5.16345E-06	0.00707398
3.71	9.87864E-05	-4.02987E-07	-8.14547E-05	-0.018327308	5.16592E-06	0.00707525
3.715	0.000146315	-6.40866E-07	-0.000129512	-0.02914031	5.17133E-06	0.007076209
3.72	0.000158772	-7.05561E-07	-0.000142582	-0.03208105	5.1777E-06	0.007076843
3.725	0.000136643	-5.98959E-07	-0.000121042	-0.027234457	5.18242E-06	0.00707727
3.73	8.36934E-05	-3.39126E-07	-6.85404E-05	-0.015421586	5.18419E-06	0.00707752
3.735	1.17637E-05	1.58227E-08	3.17755E-06	0.000714949	5.18423E-06	0.007077607
3.74	-6.43567E-05	3.92874E-07	7.93584E-05	0.017855648	5.18527E-06	0.007077607
3.745	-0.000128953	7.14219E-07	0.000144282	0.032463422	5.18948E-06	0.007077607
3.75	-0.000167233	9.06249E-07	0.000183078	0.041192573	5.19655E-06	0.007077607
3.755	-0.000175531	9.50144E-07	0.000191946	0.043187878	5.20433E-06	0.007077607
3.76	-0.0001585	8.68525E-07	0.000175454	0.03947709	5.21068E-06	0.007078096
3.765	-0.000118428	6.72451E-07	0.000135835	0.030562892	5.21423E-06	0.007078806
3.77	-5.9519E-05	3.82382E-07	7.72253E-05	0.01737569	5.21512E-06	0.007079407
3.775	8.20512E-06	4.76767E-08	9.59887E-06	0.002159746	5.21514E-06	0.007079878
3.78	7.3117E-05	-2.74179E-07	-5.54291E-05	-0.012471556	5.21649E-06	0.007080199
3.785	0.000120953	-5.1246E-07	-0.00010357	-0.023303263	5.22019E-06	0.007080349
3.79	0.000141516	-6.161E-07	-0.000124509	-0.02801446	5.22525E-06	0.007080355
3.795	0.000142771	-6.23865E-07	-0.000126077	-0.028367412	5.2304E-06	0.007080355
3.8	0.000140375	-6.13306E-07	-0.000123944	-0.027887353	5.23538E-06	0.007080355
3.805	0.000133713	-5.81846E-07	-0.000117587	-0.026457031	5.2399E-06	0.007080355
3.81	0.000108177	-4.57192E-07	-9.23988E-05	-0.020789739	5.24286E-06	0.007080355
3.815	5.43239E-05	-1.92033E-07	-3.88217E-05	-0.008734872	5.2436E-06	0.007080355
3.82	-2.3769E-05	1.94226E-07	3.92219E-05	0.008824934	5.24375E-06	0.007080577
3.825	-0.000107258	6.08925E-07	0.000123008	0.027676892	5.24665E-06	0.007080726
3.83	-0.000166004	9.02874E-07	0.000182396	0.041039111	5.25362E-06	0.00708078
3.835	-0.000175052	9.51652E-07	0.00019225	0.043256331	5.26136E-06	0.00708078
3.84	-0.000132668	7.45301E-07	0.000150555	0.033874784	5.26581E-06	0.00708078
3.845	-6.15061E-05	3.94948E-07	7.97639E-05	0.017946889	5.26677E-06	0.00708078
3.85	7.55127E-06	5.33634E-08	1.07477E-05	0.002418224	5.26678E-06	0.00708078
3.855	5.48141E-05	-1.81331E-07	-3.66702E-05	-0.008250806	5.26754E-06	0.00708078
3.86	7.85776E-05	-2.99885E-07	-6.06226E-05	-0.01364009	5.2691E-06	0.00708078
3.865	8.84951E-05	-3.4957E-07	-7.06609E-05	-0.015898694	5.27108E-06	0.00708078
3.87	9.72008E-05	-3.92823E-07	-7.93996E-05	-0.0178649	5.27347E-06	0.00708078
3.875	0.000112949	-4.70771E-07	-9.51476E-05	-0.0214082	5.27669E-06	0.00708078
3.88	0.000134746	-5.7885E-07	-0.000116983	-0.026321193	5.28128E-06	0.00708078
3.885	0.000157499	-6.9195E-07	-0.000139833	-0.031462354	5.28755E-06	0.00708078
3.89	0.000179078	-7.99473E-07	-0.000161555	-0.036349828	5.29566E-06	0.00708078
3.895	0.000197434	-8.91294E-07	-0.000180104	-0.040523501	5.30551E-06	0.00708078
3.9	0.000208088	-9.45159E-07	-0.000190986	-0.042971936	5.31645E-06	0.00708078
3.905	0.000207914	-9.45398E-07	-0.000191034	-0.042982702	5.32738E-06	0.00708078
3.91	0.000196148	-8.87977E-07	-0.000179431	-0.040372067	5.3371E-06	0.00708078
3.915	0.000177141	-7.94113E-07	-0.000160465	-0.036104661	5.34503E-06	0.00708078
3.92	0.000164061	-7.2891E-07	-0.00014729	-0.033140274	5.35184E-06	0.00708078
3.925	0.000167989	-7.4766E-07	-0.000151079	-0.033992773	5.35897E-06	0.00708078
3.93	0.000187525	-8.43999E-07	-0.000170546	-0.038372759	5.36786E-06	0.00708078
3.935	0.000215236	-9.81506E-07	-0.000198329	-0.044624035	5.37957E-06	0.00708078
3.94	0.000237755	-1.09424E-06	-0.000221103	-0.04974818	5.39385E-06	0.007081016
3.945	0.00023547	-1.08474E-06	-0.000219182	-0.049316043	5.40787E-06	0.007081885
3.95	0.000206131	-9.40762E-07	-0.00019009	-0.042770315	5.41861E-06	0.0070827
3.955	0.000174075	-7.82067E-07	-0.000158025	-0.035555515	5.42626E-06	0.007083672
3.96	0.000164069	-7.31544E-07	-0.000147816	-0.033258598	5.43307E-06	0.007085725
3.965	0.000186645	-8.42064E-07	-0.000170148	-0.038283333	5.44187E-06	0.007087617
3.97	0.000241264	-1.11184E-06	-0.000224659	-0.050548383	5.45658E-06	0.007089355
3.975	0.000311401	-1.45997E-06	-0.000294979	-0.066370266	5.48109E-06	0.007090969
3.98	0.000366059	-1.73336E-06	-0.000350198	-0.07879461	5.51496E-06	0.007093432
3.985	0.000375053	-1.782E-06	-0.000360021	-0.081004617	5.55051E-06	0.007096926
3.99	0.000325809	-1.54229E-06	-0.000311585	-0.070106662	5.57734E-06	0.00710032
3.995	0.000234999	-1.09539E-06	-0.000221287	-0.049789654	5.5913E-06	0.007103781
4	0.000135881	-6.05445E-07	-0.000122297	-0.027516776	5.59596E-06	0.007107176
4.005	5.08453E-05	-1.83661E-07	-3.70821E-05	-0.008343482	5.59662E-06	0.007110111
4.01	-1.07871E-05	1.2336E-07	2.49443E-05	0.005612467	5.59665E-06	0.007112528
4.015	-4.29003E-05	2.84787E-07	5.75562E-05	0.012950154	5.59711E-06	0.007114777
4.02	-4.99075E-05	3.21724E-07	6.50183E-05	0.014629118	5.59774E-06	0.007119028
4.025	-4.84273E-05	3.1609E-07	6.38799E-05	0.014372968	5.59833E-06	0.007122724
4.03	-5.112E-05	3.30836E-07	6.68592E-05	0.015043313	5.59899E-06	0.007125829
4.035	-5.75685E-05	3.64346E-07	7.36288E-05	0.016566483	5.59983E-06	0.007128534
4.04	-5.83421E-05	3.70203E-07	7.48119E-05	0.016832673	5.60069E-06	0.00713083
4.045	-3.89345E-05	2.76578E-07	5.58935E-05	0.012576038	5.60108E-06	0.007132714
4.05	1.59229E-05	7.37854E-09	1.49934E-06	0.000337351	5.60114E-06	0.007134245
4.055	0.000108534	-4.49874E-07	-9.08887E-05	-0.020449967	5.60412E-06	0.007135588
4.06	0.000215417	-9.79975E-07	-0.000197991	-0.044547873	5.61584E-06	0.007138533
4.065	0.000297644	-1.39033E-06	-0.000280896	-0.063201541	5.63824E-06	0.007141999
4.07	0.000325617	-1.53352E-06	-0.000309823	-0.069710237	5.66503E-06	0.007145297
4.075	0.000288866	-1.35646E-06	-0.000274046	-0.061660309	5.68612E-06	0.007148438
4.08	0.00019101	-8.75845E-07	-0.000176935	-0.039810401	5.69534E-06	0.00715139
4.085	4.91786E-05	-1.7532E-07	-3.53998E-05	-0.007964951	5.69595E-06	0.007154089
4.09	-0.000101648	5.72756E-07	0.000115731	0.026039535	5.69857E-06	0.007156442
4.095	-0.000215058	1.13847E-06	0.000230013	0.051752817	5.71026E-06	0.007158352
4.1	-0.000256713	1.35048E-06	0.000272839	0.061388788	5.72691E-06	0.007159885
4.105	-0.000224592	1.19697E-06	0.00024182	0.054409572	5.73966E-06	0.007162885
4.11	-0.000141925	7.91673E-07	0.000159927	0.035983527	5.74475E-06	0.007165665
4.115	-3.75472E-05	2.76746E-07	5.5888E-05	0.012574794	5.74511E-06	0.007168042
4.12	5.76233E-05	-1.94849E-07	-3.93911E-05	-0.008863006	5.74595E-06	0.007170077
4.125	0.000112609	-4.69044E-07	-9.47862E-05	-0.0213269	5.74915E-06	0.007171825
4.13	0.000118847	-5.01908E-07	-0.000101425	-0.022820697	5.75272E-06	0.007173316
4.135	0.000100653	-4.1262E-07	-8.33833E-05	-0.018761253	5.75528E-06	0.007174556
4.14	8.74741E-05	-3.46932E-07	-7.01102E-05	-0.015774794	5.75722E-06	0.007175554
4.145	9.11525E-05	-3.63944E-07	-7.35479E-05	-0.016548279	5.75932E-06	0.007176418
4.15	0.000117928	-4.94867E-07	-0.000100003	-0.022500564	5.76283E-06	0.007177843
4.155	0.00017617	-7.81711E-07	-0.000157952	-0.035539214	5.77067E-06	0.007179909

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
4.449462891	0.11912614	2.163155607
4.455566406	0.109068865	2.531375638
4.461669922	0.1293422	3.112164621
4.467773438	0.131491506	3.002861932
4.473876953	0.104450152	2.434927589
4.479980469	0.104321083	2.259793651
4.486083984	0.104305879	2.341537444
4.4921875	0.082433533	2.148663767
4.498291016	0.048226343	1.947670444
4.504394531	0.015082454	1.642405409
4.510498047	0.029484888	3.363522101
4.516601563	0.056362774	2.800344163
4.522705078	0.050859951	3.783228181
4.528808594	0.050327153	2.969006353
4.534912109	0.05982872	2.349440654
4.541015625	0.039749648	2.455189875
4.547119141	0.041227143	8.074831
4.553222656	0.025495801	2.084400892
4.559326172	0.034373057	1.366336474
4.565429688	0.033245299	1.253094737
4.571533203	0.012322774	1.024270271
4.577636719	0.079827895	3.541658925
4.583740234	0.125076704	3.174387842
4.58984375	0.081502428	3.777158773
4.595947266	0.031070169	1.298491854
4.602050781	0.099745791	2.157789124
4.608154297	0.087254926	2.224563699
4.614257813	0.04797173	1.845116466
4.620361328	0.043395666	2.042596342
4.626464844	0.060181641	2.345622009
4.632568359	0.067647375	1.81433842
4.638671875	0.086415794	1.628920234
4.644775391	0.105695366	1.806838774
4.650878906	0.097085223	1.804508116
4.656982422	0.085977808	1.528831706
4.663085938	0.090253511	1.49330778
4.669189453	0.064739909	1.263912378
4.675292969	0.03376481	0.791667486
4.681396484	0.056918267	1.254884215
4.6875	0.079067978	1.644017309
4.693603516	0.098334581	1.893023891
4.699707031	0.107948833	2.17603147
4.705810547	0.08478779	2.144658878
4.711914063	0.065003158	1.724793815
4.718017578	0.069053923	1.607869322
4.724121094	0.062145488	1.472021931
4.730224609	0.064056978	1.515818161
4.736328125	0.077187721	1.856155277
4.742431641	0.064224844	1.838673071
4.748535156	0.057038079	1.697565589
4.754638672	0.07359151	2.007868205
4.760742188	0.054924996	1.795727751
4.766845703	0.015274109	1.042000388
4.772949219	0.039442768	3.42379843
4.779052734	0.055607446	2.540927989
4.78515625	0.060280317	2.378791623
4.791259766	0.05549119	2.379085435
4.797363281	0.027083522	1.491164499
4.803466797	0.021034338	1.274216313
4.809570313	0.029941546	1.529278146
4.815673828	0.015986953	0.736273171
4.821777344	0.039786057	1.632743889
4.827880859	0.049778706	1.564429352
4.833984375	0.04553823	1.378902054
4.840087891	0.015426478	0.934525379
4.846191406	0.029943978	2.888743573
4.852294922	0.027813089	4.157595654
4.858398438	0.013466107	1.226988516
4.864501953	0.032375998	1.505642589
4.870605469	0.028502272	1.398178594
4.876708984	0.032938885	1.499501777
4.8828125	0.037768217	1.532762348
4.888916016	0.025151455	1.825640706
4.895019531	0.026219903	2.84747914
4.901123047	0.046361053	1.809175786
4.907226563	0.040235041	1.521791503
4.913330078	0.022285848	1.195623319
4.919433594	0.013627534	1.437176291
4.925537109	0.005207498	1.066400266
4.931640625	0.015244907	1.41527287
4.937744141	0.046792652	1.937609183
4.943847656	0.060736758	2.109710027
4.949951172	0.035816056	2.296138536
4.956054688	0.012242932	1.911193394
4.962158203	0.048122283	2.440988493
4.968261719	0.055528481	2.648803848
4.974365234	0.035261643	2.444237738
4.98046875	0.041012177	1.616602257
4.986572266	0.069702861	1.834687653
4.992675781	0.053456906	1.582645618
4.998779297	0.02253871	0.969247863
5.004882813	0.019091631	1.082775156
5.010986328	0.010629507	1.516858394
5.017089844	0.020646808	1.429728282
5.023193359	0.040387039	1.481397544
5.029296875	0.014823608	0.94750409
5.035400391	0.022871904	8.279528521
5.041503906	0.024055976	5.345650479
5.047607422	0.017547677	3.643778018
5.053710938	0.008178276	0.556332656
5.059814453	0.018661174	0.763814568
5.065917969	0.009731626	0.441463098
5.072021484	0.032921914	2.164089964
5.078125	0.047181139	2.495230088

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
4.16	0.000258863	-1.19076E-06	-0.000240586	-0.054131892	5.78761E-06	0.00718181
4.165	0.000337454	-1.5812E-06	-0.000319459	-0.07187827	5.81639E-06	0.007183593
4.17	0.000385856	-1.82341E-06	-0.000368385	-0.082886699	5.85402E-06	0.007185303
4.175	0.00039919	-1.89245E-06	-0.00038233	-0.086024295	5.8943E-06	0.007186967
4.18	0.000380939	-1.80517E-06	-0.000364694	-0.082056132	5.93097E-06	0.007188591
4.185	0.000330744	-1.55938E-06	-0.00031503	-0.070881641	5.95862E-06	0.007190161
4.19	0.000257445	-1.19819E-06	-0.00024205	-0.054461303	5.97537E-06	0.007191775
4.195	0.000180589	-8.18224E-07	-0.00016528	-0.037188038	5.98361E-06	0.007193192
4.2	0.000107524	-4.56265E-07	-9.21512E-05	-0.020734023	5.98654E-06	0.007194353
4.205	3.16748E-05	-7.97805E-08	-1.60902E-05	-0.003620303	5.98679E-06	0.007195392
4.21	-4.07638E-05	2.81151E-07	5.68261E-05	0.012785869	5.98721E-06	0.007196865
4.215	-8.13476E-05	4.85884E-07	9.81858E-05	0.022091804	5.98888E-06	0.007198439
4.22	-6.48897E-05	4.08772E-07	8.26042E-05	0.018585942	5.98995E-06	0.007201674
4.225	5.73403E-06	6.26678E-08	1.26707E-05	0.00285091	5.98995E-06	0.007204177
4.23	0.000110641	-4.54823E-07	-9.18877E-05	-0.020674731	5.99305E-06	0.007206198
4.235	0.000229936	-1.04572E-06	-0.000211271	-0.047535994	6.00641E-06	0.007208501
4.24	0.000330922	-1.54857E-06	-0.00031286	-0.070393407	6.03409E-06	0.007210486
4.245	0.000371567	-1.75453E-06	-0.000354468	-0.079755344	6.06898E-06	0.00721233
4.25	0.000339857	-1.60225E-06	-0.000323697	-0.072831807	6.09817E-06	0.00721407
4.255	0.000260346	-1.21189E-06	-0.000244822	-0.055084955	6.11531E-06	0.007215928
4.26	0.000160456	-7.189E-07	-0.000145216	-0.03267362	6.12181E-06	0.00721813
4.265	5.59746E-05	-2.01474E-07	-4.06775E-05	-0.009152429	6.1226E-06	0.007219968
4.27	-4.12592E-05	2.81802E-07	5.6957E-05	0.012815329	6.12303E-06	0.007221476
4.275	-0.000116092	6.55911E-07	0.000132534	0.02982004	6.12644E-06	0.007222633
4.28	-0.000149716	8.27417E-07	0.00016718	0.037615394	6.13211E-06	0.007223441
4.285	-0.000128777	7.29476E-07	0.000147389	0.033162578	6.1363E-06	0.007224077
4.29	-4.68929E-05	3.29616E-07	6.65944E-05	0.014983748	6.13685E-06	0.007224368
4.295	9.47652E-05	-3.67608E-07	-7.42762E-05	-0.016712156	6.13912E-06	0.007224472
4.3	0.000267262	-1.22034E-06	-0.000246552	-0.055474303	6.15718E-06	0.007224477
4.305	0.000419075	-1.97361E-06	-0.000398722	-0.089712448	6.20156E-06	0.007224477
4.31	0.000523296	-2.49283E-06	-0.00050359	-0.113307772	6.27077E-06	0.007224477
4.315	0.000589527	-2.8245E-06	-0.0005707574	-0.12837924	6.35861E-06	0.007224477
4.32	0.000625565	-3.00714E-06	-0.00060746	-0.136678517	6.45752E-06	0.007224477
4.325	0.000621847	-2.99326E-06	-0.000604652	-0.136046631	6.55525E-06	0.007224744
4.33	0.000575049	-2.76552E-06	-0.000558636	-0.125693115	6.63883E-06	0.007225677
4.335	0.00050476	-2.42012E-06	-0.000488846	-0.109990361	6.70322E-06	0.007226775
4.34	0.000438759	-2.09465E-06	-0.000423086	-0.095194442	6.75188E-06	0.007228306
4.345	0.000389189	-1.84991E-06	-0.000373638	-0.084068442	6.79016E-06	0.007232998
4.35	0.000353464	-1.6736E-06	-0.0003338017	-0.07605377	6.82174E-06	0.007240528
4.355	0.000326622	-1.54155E-06	-0.000311338	-0.070051	6.8487E-06	0.007248872
4.36	0.000294527	-1.38412E-06	-0.000279533	-0.062895026	6.87062E-06	0.007257618
4.365	0.000233551	-1.08395E-06	-0.000218891	-0.049250489	6.88441E-06	0.007266844
4.37	0.000140969	-6.26212E-07	-0.000126419	-0.028444213	6.88943E-06	0.007275131
4.375	4.77823E-05	-1.6351E-07	-3.29478E-05	-0.00741326	6.89001E-06	0.007284173
4.38	-1.61985E-05	1.5609E-07	3.16126E-05	0.00711284	6.89007E-06	0.007291804
4.385	-4.59164E-05	3.06774E-07	6.20507E-05	0.013961406	6.89061E-06	0.007298377
4.39	-3.87067E-05	2.75036E-07	5.5637E-05	0.01251833	6.89099E-06	0.007303521
4.395	1.46912E-05	1.43753E-08	2.96765E-06	0.00066772	6.89104E-06	0.007307217
4.4	0.000103952	-4.2521E-07	-8.58516E-05	-0.019316612	6.89377E-06	0.00730989
4.405	0.000199369	-8.97036E-07	-0.00018118	-0.040765583	6.90382E-06	0.007311891
4.41	0.000282024	-1.30695E-06	-0.000263997	-0.059399407	6.92392E-06	0.007314462
4.415	0.000347497	-1.63266E-06	-0.0003298	-0.074204942	6.95444E-06	0.007317349
4.42	0.000391038	-1.85036E-06	-0.000373779	-0.084100362	6.99309E-06	0.007319989
4.425	0.000411043	-1.95157E-06	-0.000394225	-0.088700731	7.03579E-06	0.007322442
4.43	0.000418412	-1.98973E-06	-0.000401933	-0.090434953	7.08004E-06	0.007324732
4.435	0.000429392	-2.04532E-06	-0.000413165	-0.092962104	7.12664E-06	0.007326867
4.44	0.0004457	-2.12752E-06	-0.00042977	-0.096698302	7.17684E-06	0.007328856
4.445	0.00044749	-2.13843E-06	-0.000431973	-0.097193825	7.22745E-06	0.007332598
4.45	0.000419514	-2.00191E-06	-0.000404387	-0.090987047	7.27193E-06	0.007336294
4.455	0.000376041	-1.78786E-06	-0.000361136	-0.081255693	7.30767E-06	0.007340091
4.46	0.000339052	-1.60539E-06	-0.000324269	-0.072960461	7.33673E-06	0.007344064
4.465	0.000307155	-1.44826E-06	-0.000292521	-0.065817128	7.36057E-06	0.007350011
4.47	0.000271302	-1.27155E-06	-0.000256817	-0.057783807	7.37917E-06	0.007355779
4.475	0.000237235	-1.1035E-06	-0.000222863	-0.050144195	7.3934E-06	0.007360845
4.48	0.000205514	-9.47224E-07	-0.000191289	-0.043040063	7.40407E-06	0.007365845
4.485	0.000160972	-7.27569E-07	-0.000146911	-0.033055006	7.41062E-06	0.007369926
4.49	0.000102832	-4.39935E-07	-8.88003E-05	-0.019980057	7.4133E-06	0.007373264
4.495	4.89222E-05	-1.72358E-07	-3.47428E-05	-0.007817127	7.4139E-06	0.007376132
4.5	4.77165E-06	4.73616E-08	9.64505E-06	0.002170136	7.41391E-06	0.007378548
4.505	-3.55502E-05	2.48575E-07	5.02936E-05	0.011316066	7.41423E-06	0.00738054
4.51	-6.44667E-05	3.94167E-07	7.9704E-05	0.017933408	7.41528E-06	0.007382135
4.515	-6.11988E-05	3.81111E-07	7.70645E-05	0.017339519	7.41622E-06	0.007383313
4.52	-1.48552E-05	1.54468E-07	3.12687E-05	0.007035457	7.41628E-06	0.007384079
4.525	5.76656E-05	-2.03207E-07	-4.10011E-05	-0.009225236	7.41712E-06	0.007384495
4.53	0.000126062	-5.42105E-07	-0.000109474	-0.024631694	7.42114E-06	0.007385663
4.535	0.00017211	-7.71674E-07	-0.000155856	-0.035067669	7.42862E-06	0.007386862
4.54	0.000176668	-7.96905E-07	-0.000160953	-0.03621451	7.43651E-06	0.007387807
4.545	0.00011691	-5.03558E-07	-0.000101679	-0.022877872	7.43996E-06	0.007388574
4.55	1.54979E-05	-1.63952E-09	-2.6621E-07	-5.98973E-05	7.44003E-06	0.007389174
4.555	-6.03773E-05	3.76703E-07	7.61747E-05	0.017139306	7.44095E-06	0.007389575
4.56	-7.35858E-05	4.45926E-07	9.01588E-05	0.020285727	7.44232E-06	0.007389755
4.565	-3.89924E-05	2.78106E-07	5.62485E-05	0.012655923	7.4427E-06	0.007389761
4.57	2.23146E-05	-2.25901E-08	-4.5091E-06	-0.001014547	7.44283E-06	0.007389761
4.575	0.000107198	-4.40582E-07	-8.89639E-05	-0.020016871	7.44573E-06	0.007389761
4.58	0.000217067	-9.832991E-07	-0.000198612	-0.044687681	7.45764E-06	0.007389761
4.585	0.0003388	-1.58644E-06	-0.000320465	-0.072104569	7.48665E-06	0.007389761
4.59	0.000449862	-2.13863E-06	-0.000432017	-0.097203761	7.5378E-06	0.007389761
4.595	0.000536298	-2.57079E-06	-0.000519315	-0.116845911	7.61049E-06	0.007389761
4.6	0.000570748	-2.74785E-06	-0.000555082	-0.124893431	7.69282E-06	0.007389761
4.605	0.000497846	-2.39481E-06	-0.000483747	-0.108843098	7.75546E-06	0.007389761
4.61	0.000301594	-1.42922E-06	-0.000288653	-0.06494696	7.77845E-06	0.007389761
4.615	4.88605E-05	-1.79372E-07	-3.61551E-05	-0.008134901	7.77906E-06	0.007390115
4.62	-0.000176502	9.39516E-07	0.00018986	0.042718567	7.78693E-06	0.007390969
4.625	-0.00032814	1.69653E-06	0.000342763	0.077121764	7.81414E-06	0.007391213
4.63	-0.000382302	1.97245E-06	0.000398492	0.089660724	7.85108E-06	0.00739168
4.635	-0.000339927	1.76983E-06	0.00035755	0.08044882	7.88029E-06	0.007391802
4.64	-0.000241496	1.28745E-06	0.000260083	0.058518589	7.89503E-06	0.007391802
4.645	-0.000135875	7.67287E-07	0.000154987	0.034872119	7.89969E-06	0.007391802
4.65	-4.00401E-05	2.94469E-07	5.94624E-05	0.013379034	7.9001E-06	0.007391802
4.655	5.61242E-05	-1.80614E-07	-3.65159E-05	-0.008216076	7.9009E-06	0.007391802
4.66	0.000153313	-6.61868E-07	-0.000133736	-0.030090683	7.90684E-06	0.007391802
4.665	0.000229576	-1.04075E-06	-0.000210273	-0.047311492	7.92016E-06	0.007391802
4.67	0.000274069	-1.26266E-06	-0.0002551	-0.057397491	7.93914E-06	0.007391802
4.675	0.000306295	-1.42352E-06	-0.000287594	-0.064708574	7.96285E-06	0.007391802

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
5.084228516	0.026080087	1.733363184
5.090332031	0.018441352	1.573933802
5.096435547	0.025830764	1.895215524
5.102539063	0.014734628	1.682715112
5.108642578	0.005089014	1.029778071
5.114746094	0.009284472	0.944492218
5.120849609	0.012244074	1.361703628
5.126953125	0.02541952	2.549409243
5.133056641	0.0257559	2.283351086
5.139160156	0.006776176	1.408800852
5.145263672	0.009343472	0.73711806
5.151367188	0.010916024	0.6999658
5.157470703	0.007866421	0.945268426
5.163574219	0.02193123	2.729360903
5.169677734	0.037398127	1.720766351
5.17578125	0.037445116	1.41820963
5.181884766	0.01816201	0.996015047
5.187988281	0.005257452	0.713929387
5.194091797	0.010299977	1.006754172
5.200195313	0.012573335	1.621643968
5.206298828	0.012106377	9.325575083
5.212402344	0.025386189	1.778325981
5.218505859	0.034440922	1.509925658
5.224609375	0.028539714	1.145497401
5.230712891	0.036318735	1.097185873
5.236816406	0.034342991	0.97727084
5.242919922	0.020391567	0.85564129
5.249023438	0.016993275	1.736040053
5.255126953	0.004076362	0.963779298
5.261230469	0.01522373	1.264177947
5.267333984	0.025774333	1.440747792
5.2734375	0.028596239	1.401184087
5.279541016	0.02440295	1.307824909
5.285644531	0.02284239	1.363655519
5.291748047	0.019553901	1.493640278
5.297851563	0.010727432	1.253854959
5.303955078	0.019274446	1.421352777
5.310058594	0.043055419	1.469972606
5.316162109	0.049281167	1.396992798
5.322265625	0.035826064	1.241803408
5.328369141	0.041039542	1.248114487
5.334472656	0.058709263	1.42089302
5.340576172	0.04929437	1.425307829
5.346679688	0.01567762	0.933705628
5.352783203	0.014508655	2.079230563
5.358886719	0.016085151	2.947140412
5.364990234	0.039239162	1.648684939
5.37109375	0.060087961	1.505495524
5.377197266	0.064884707	1.381757924
5.383300781	0.060212564	1.31938059
5.389404297	0.043918652	1.163225227
5.395507813	0.037395806	0.964161187
5.401611328	0.058457974	0.987804751
5.407714844	0.085009959	1.063824234
5.413818359	0.082116545	1.08732057
5.419921875	0.056268151	1.044529547
5.426025391	0.042931303	1.036588505
5.432128906	0.036953601	1.112459286
5.438232422	0.036877989	1.274218473
5.444335938	0.042391377	1.249103602
5.450439453	0.051188336	1.076360756
5.456542969	0.057088322	0.96468865
5.462646484	0.050056785	0.879873108
5.46875	0.033875551	0.796986575
5.474853516	0.022466291	0.751506679
5.480957031	0.025011313	0.909184657
5.487060547	0.03443313	1.194655267
5.493164063	0.035840534	1.365526067
5.499267578	0.031007896	1.448058674
5.505371094	0.047640893	1.622319809
5.511474609	0.05508886	1.647384059
5.517578125	0.037368654	1.731820733
5.523681641	0.017758432	1.649497747
5.529785156	0.017106503	1.001453841
5.535888672	0.020256133	1.50145951
5.541992188	0.02540442	6.538544512
5.548095703	0.021946733	3.136148395
5.554199219	0.009504141	10.29268632
5.560302734	0.006462493	1.102887946
5.56640625	0.004788936	4.686377845
5.572509766	0.023334961	1.462382084
5.578613281	0.037548997	1.185221627
5.584716797	0.041431541	1.083566976
5.590820313	0.035215109	1.045903962
5.596923828	0.023780433	1.05227228
5.603027344	0.016605802	1.339915677
5.609130859	0.01578829	2.74033826
5.615234375	0.013212258	11.05389174
5.621337891	0.006920985	2.805366341
5.627441406	0.001342376	0.479773884
5.633544922	0.00881625	5.585563655
5.639648438	0.009648505	3.851828967
5.645751953	0.00526993	2.081536755
5.651855469	0.013754645	1.657971509
5.657958984	0.01296599	0.903970026
5.6640625	0.003368323	0.271033953
5.670166016	0.008580023	1.102992732
5.676269531	0.018809902	1.251283614
5.682373047	0.030596508	1.33492963
5.688476563	0.04101832	1.380814439
5.694580078	0.037761887	1.236647084
5.700683594	0.019439394	0.856481446
5.706787109	0.005336579	0.373998111
5.712890625	0.014331994	0.590476903

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
4.68	0.000340428	-1.59407E-06	-0.000322043	-0.072459627	7.99214E-06	0.007391802
4.685	0.000362602	-1.70616E-06	-0.000344685	-0.077554106	8.02537E-06	0.007391802
4.69	0.000356561	-1.67894E-06	-0.000339185	-0.076316634	8.05751E-06	0.007391802
4.695	0.000319244	-1.49671E-06	-0.000302364	-0.068031823	8.08326E-06	0.007391802
4.7	0.000249368	-1.15263E-06	-0.00023284	-0.05238889	8.09898E-06	0.007391802
4.705	0.000151871	-6.70136E-07	-0.000135353	-0.030454534	8.10481E-06	0.007391802
4.71	6.09292E-05	-2.17355E-07	-4.38751E-05	-0.009871897	8.10575E-06	0.007392183
4.715	3.3245E-05	-7.53814E-08	-1.51922E-05	-0.003418239	8.10603E-06	0.007392895
4.72	9.47324E-05	-3.748E-07	-7.5693E-05	-0.017030933	8.1083E-06	0.007393182
4.725	0.000211388	-9.49371E-07	-0.000191786	-0.043151776	8.11959E-06	0.007393182
4.73	0.000337468	-1.57282E-06	-0.000317745	-0.071492695	8.14837E-06	0.007393751
4.735	0.000459989	-2.18039E-06	-0.000440473	-0.099106457	8.20185E-06	0.007394054
4.74	0.000569048	-2.72334E-06	-0.000550139	-0.123781281	8.28369E-06	0.007394075
4.745	0.000633203	-3.04583E-06	-0.000615273	-0.138436464	8.38503E-06	0.007394075
4.75	0.000637129	-3.07058E-06	-0.000620268	-0.139560398	8.48762E-06	0.007394075
4.755	0.000599639	-2.88967E-06	-0.000583714	-0.131335664	8.5785E-06	0.007394411
4.76	0.000531692	-2.55749E-06	-0.000516596	-0.116234039	8.64995E-06	0.00739449
4.765	0.000420981	-2.01282E-06	-0.000406546	-0.091472864	8.69474E-06	0.007394864
4.77	0.000274999	-1.29145E-06	-0.000260806	-0.05868144	8.71385E-06	0.007395462
4.775	0.000133999	-5.92102E-07	-0.000119524	-0.026892899	8.71839E-06	0.007396549
4.78	2.70991E-05	-5.97085E-08	-1.1976E-05	-0.002694602	8.71858E-06	0.007399342
4.785	-4.21575E-05	2.87562E-07	5.81729E-05	0.013088906	8.71903E-06	0.007402367
4.79	-6.15239E-05	3.88988E-07	7.86607E-05	0.017698652	8.71998E-06	0.0074052
4.795	-7.51595E-06	1.27359E-07	2.57954E-05	0.005803971	8.72E-06	0.007408129
4.8	0.000112741	-4.63974E-07	-9.36844E-05	-0.021078984	8.72321E-06	0.007410928
4.805	0.000253375	-1.159E-06	-0.000234106	-0.052673824	8.73944E-06	0.00741306
4.81	0.000375712	-1.76571E-06	-0.000356677	-0.08025227	8.77511E-06	0.007416191
4.815	0.000472605	-2.24802E-06	-0.00045411	-0.102174644	8.83156E-06	0.007419163
4.82	0.000534144	-2.55691E-06	-0.000516509	-0.116214581	8.90367E-06	0.007421987
4.825	0.000529247	-2.53798E-06	-0.00051268	-0.115353104	8.97447E-06	0.007425417
4.83	0.000450799	-2.15399E-06	-0.000435092	-0.097895722	9.02583E-06	0.007429814
4.835	0.000341342	-1.61406E-06	-0.000326	-0.073350019	9.05528E-06	0.007433971
4.84	0.000244008	-1.13211E-06	-0.000228626	-0.051440885	9.07033E-06	0.007437826
4.845	0.000167436	-7.51563E-07	-0.000151748	-0.034143197	9.07741E-06	0.00744129
4.85	0.000119145	-5.09659E-07	-0.000102877	-0.023147434	9.081E-06	0.007444273
4.855	0.000122841	-5.24257E-07	-0.000105828	-0.023811401	9.08481E-06	0.00744672
4.86	0.000180201	-8.05223E-07	-0.000162601	-0.036585134	9.09302E-06	0.007449219
4.865	0.000257815	-1.18819E-06	-0.000239979	-0.053995385	9.10982E-06	0.007452721
4.87	0.000326996	-1.53088E-06	-0.000309219	-0.069574172	9.13684E-06	0.007455813
4.875	0.000381372	-1.80145E-06	-0.000363883	-0.081873749	9.1736E-06	0.007458549
4.88	0.000404453	-1.91847E-06	-0.000387526	-0.087193241	9.21495E-06	0.007460968
4.885	0.000362223	-1.71269E-06	-0.000345945	-0.077837627	9.24811E-06	0.007463079
4.89	0.000258133	-1.19883E-06	-0.000242119	-0.05447676	9.26495E-06	0.007464854
4.895	0.000154172	-6.82491E-07	-0.000137796	-0.031004102	9.27096E-06	0.007466305
4.9	0.000101863	-4.19938E-07	-8.47519E-05	-0.019069176	9.27358E-06	0.007467385
4.905	0.000102393	-4.18529E-07	-8.44686E-05	-0.019005429	9.27623E-06	0.007468203
4.91	0.000151725	-6.58811E-07	-0.00013302	-0.029929588	9.28205E-06	0.0074688
4.915	0.000253324	-1.15889E-06	-0.000234063	-0.052664245	9.29827E-06	0.007469189
4.92	0.000382156	-1.79613E-06	-0.00036281	-0.081632312	9.33518E-06	0.007470368
4.925	0.000494997	-2.35664E-06	-0.000476049	-0.10711105	9.39711E-06	0.00747216
4.93	0.000568105	-2.72187E-06	-0.000549831	-0.123712066	9.47868E-06	0.00747379
4.935	0.000603908	-2.90287E-06	-0.000586394	-0.131938629	9.57085E-06	0.007475353
4.94	0.000611611	-2.94496E-06	-0.000594895	-0.133851483	9.66539E-06	0.007476854
4.945	0.000585043	-2.81748E-06	-0.000569137	-0.128055725	9.7519E-06	0.007478289
4.95	0.000519367	-2.4956E-06	-0.000504099	-0.113422289	9.82008E-06	0.007479645
4.955	0.000439933	-2.10411E-06	-0.000424998	-0.095624511	9.86899E-06	0.007480897
4.96	0.000366754	-1.74275E-06	-0.000351988	-0.079197278	9.90299E-06	0.007482151
4.965	0.00028569	-1.34192E-06	-0.000271008	-0.060976762	9.92362E-06	0.007485071
4.97	0.000196759	-9.00965E-07	-0.000181923	-0.0409326	9.9334E-06	0.007487732
4.975	0.000126782	-5.52617E-07	-0.00011155	-0.025098756	9.93746E-06	0.007490959
4.98	7.67956E-05	-3.02973E-07	-6.11187E-05	-0.013751716	9.93895E-06	0.007494968
4.985	2.56661E-05	-4.72974E-08	-9.47004E-06	-0.00213076	9.93912E-06	0.007498574
4.99	-1.43053E-05	1.54649E-07	3.1324E-05	0.007047894	9.93917E-06	0.007501801
4.995	3.46478E-06	7.2174E-08	1.46583E-05	0.003298114	9.93918E-06	0.007504422
5	0.000102349	-4.12316E-07	-8.32362E-05	-0.018728144	9.94182E-06	0.007506493
5.005	0.000255761	-1.16897E-06	-0.000236114	-0.053125582	9.95836E-06	0.007508188
5.01	0.000424029	-2.00184E-06	-0.000404375	-0.090984264	1.00038E-05	0.007511581
5.015	0.000580102	-2.77702E-06	-0.000560972	-0.126218682	1.00889E-05	0.007515236
5.02	0.000689141	-3.32207E-06	-0.000671059	-0.150988166	1.02089E-05	0.007518831
5.025	0.000711398	-3.439E-06	-0.000694673	-0.156301332	1.03368E-05	0.007522458
5.03	0.000643543	-3.10904E-06	-0.000628	-0.14130011	1.04415E-05	0.00752613
5.035	0.000528954	-2.54531E-06	-0.000514097	-0.115671914	1.05122E-05	0.007529781
5.04	0.000413864	-1.97688E-06	-0.000399253	-0.089831989	1.05555E-05	0.007533302
5.045	0.00030968	-1.46111E-06	-0.000295053	-0.066386994	1.05797E-05	0.007536877
5.05	0.000217468	-1.00332E-06	-0.000202572	-0.045578612	1.05917E-05	0.007541555
5.055	0.00015659	-6.99556E-07	-0.000141208	-0.031771823	1.05979E-05	0.007546058
5.06	0.000130169	-5.66432E-07	-0.000114316	-0.025721123	1.06021E-05	0.007550164
5.065	0.000112584	-4.7746E-07	-9.63431E-05	-0.021677202	1.06053E-05	0.007553526
5.07	0.000100659	-4.16132E-07	-8.39546E-05	-0.018889784	1.06079E-05	0.00755635
5.075	0.000115909	-4.89055E-07	-9.86899E-05	-0.022205223	1.06113E-05	0.007558719
5.08	0.000157035	-6.90722E-07	-0.000139439	-0.031373733	1.06175E-05	0.007560725
5.085	0.000203692	-9.20636E-07	-0.000185894	-0.041826178	1.0628E-05	0.00756239
5.09	0.00025037	-1.15103E-06	-0.000232445	-0.052300182	1.06439E-05	0.007563742
5.095	0.00030747	-1.43336E-06	-0.000289489	-0.065135	1.06678E-05	0.007564808
5.1	0.000373588	-1.76144E-06	-0.000355772	-0.080048734	1.0703E-05	0.007565668
5.105	0.000419365	-1.99031E-06	-0.000402013	-0.090452851	1.07475E-05	0.007566431
5.11	0.000418615	-1.98944E-06	-0.000401835	-0.090412834	1.07918E-05	0.00756825
5.115	0.000378684	-1.79401E-06	-0.000362346	-0.081527835	1.0828E-05	0.007571446
5.12	0.000315187	-1.48096E-06	-0.000299092	-0.067295781	1.08531E-05	0.007574485
5.125	0.000236551	-1.09157E-06	-0.000220418	-0.049594029	1.08673E-05	0.007577325
5.13	0.00017005	-7.60317E-07	-0.000153491	-0.03453557	1.08746E-05	0.007579914
5.135	0.000151575	-6.6561E-07	-0.000134357	-0.03023039	1.08804E-05	0.007582211
5.14	0.000179614	-8.01643E-07	-0.000161845	-0.036415029	1.08885E-05	0.00758429
5.145	0.000218977	-9.94826E-07	-0.000200879	-0.04519779	1.09006E-05	0.007586234
5.15	0.000255436	-1.17386E-06	-0.000237053	-0.053337024	1.09171E-05	0.007588053
5.155	0.000312001	-1.45235E-06	-0.000293322	-0.065997483	1.09417E-05	0.007589756
5.16	0.000398917	-1.8822E-06	-0.000380171	-0.08553847	1.0982E-05	0.00759136
5.165	0.000485512	-2.31256E-06	-0.000467116	-0.105101138	1.10415E-05	0.007592889
5.17	0.00053682	-2.56988E-06	-0.000519099	-0.116797349	1.11144E-05	0.007594367
5.175	0.000540518	-2.59211E-06	-0.00052359	-0.11780786	1.11882E-05	0.007595807
5.18	0.000497737	-2.38385E-06	-0.000481509	-0.1083396	1.12508E-05	0.00759721
5.185	0.000425911	-2.03025E-06	-0.000410062	-0.092264009	1.12967E-05	0.007598559
5.19	0.000365275	-1.72998E-06	-0.000349394	-0.078613567	1.13304E-05	0.007599833
5.195	0.000351108	-1.65876E-06	-0.000335004	-0.075375839	1.13616E-05	0.007601012

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
5.718994141	0.036802591	0.839456406
5.725097656	0.054141727	0.970296645
5.731201172	0.052100595	0.993947877
5.737304688	0.029821936	0.826723619
5.743408203	0.005431484	0.263538605
5.749511719	0.002695544	0.137179813
5.755615234	0.013796168	0.557971528
5.76171875	0.029490613	0.895418632
5.767822266	0.036734847	0.946091527
5.773925781	0.036721118	0.903824614
5.780029297	0.025403345	0.772470366
5.786132813	0.013319184	0.584492475
5.792236328	0.017407184	0.726639851
5.798339844	0.030321928	1.005819669
5.804443359	0.030160786	0.890065442
5.810546875	0.026762827	0.678497692
5.816650391	0.032800968	0.730148087
5.822753906	0.027090866	0.68090285
5.828857422	0.019731235	0.607531644
5.834960938	0.023455593	0.745806831
5.841064453	0.028609146	0.899205803
5.847167969	0.025858526	0.733276527
5.853271484	0.033307049	0.631970683
5.859375	0.045727986	0.710486851
5.865478516	0.043300186	0.765711074
5.871582031	0.032127785	0.776953992
5.877685547	0.025194292	0.735125592
5.883789063	0.021412108	0.675308353
5.889892578	0.018243727	0.657913803
5.895996094	0.021175854	0.868613008
5.902099609	0.020375828	1.142990108
5.908203125	0.011453858	1.301080878
5.914306641	0.005766407	1.006519367
5.920410156	0.008631346	0.906553699
5.926513672	0.011290413	1.000795037
5.932617188	0.008899342	1.20932021
5.938720703	0.013494736	1.027415587
5.944824219	0.02204162	1.020981502
5.950927734	0.02321989	1.005134574
5.95703125	0.012393514	0.865224413
5.963134766	0.005356688	1.18262715
5.969238281	0.019778517	3.928314978
5.975341797	0.02965605	2.248851024
5.981445313	0.029325112	1.627610875
5.987548828	0.019482757	1.369280944
5.993652344	0.011699171	1.196977743
5.999755859	0.01361724	1.047245583
6.005859375	0.01935031	1.020261405
6.011962891	0.01300868	0.812402078
6.018066406	0.015892529	0.96620558
6.024169922	0.017290617	1.456913501
6.030273438	0.012756251	4.384885134
6.036376953	0.014937143	4.670423207
6.042480469	0.019983041	1.761643654
6.048583984	0.026558811	1.381849907
6.0546875	0.021490771	1.204504832
6.060791016	0.007261406	0.753646514
6.066894531	0.009200563	1.312027596
6.072998047	0.01457339	1.326042844
6.079101563	0.016132377	0.923081142
6.085205078	0.009588746	0.588839324
6.091308594	0.004460716	0.509843001
6.097412109	0.012526884	4.841253645
6.103515625	0.022051005	1.396401795
6.109619141	0.025467199	1.250344108
6.115722656	0.016343402	1.175914017
6.121826172	0.011672888	0.690756441
6.127929688	0.01664701	0.750094667
6.134033203	0.018969274	0.783677544
6.140136719	0.016662528	0.780659975
6.146240234	0.013668995	0.76914976
6.15234375	0.016481561	0.893204574
6.158447266	0.023666421	1.020903389
6.164550781	0.022550313	0.960456551
6.170654297	0.019099876	0.977852975
6.176757813	0.014458671	1.108541778
6.182861328	0.01177167	1.436218385
6.188964844	0.016031816	1.299766747
6.195068359	0.023472746	1.18014517
6.201171875	0.026510123	1.390268476
6.207275391	0.022032502	1.605519388
6.213378906	0.011628146	1.805281508
6.219482422	0.009852727	1.268823922
6.225585938	0.014261627	0.936148752
6.231689453	0.014210871	0.850331171
6.237792969	0.017560864	0.91698808
6.243896484	0.015574342	0.94472276
6.25	0.010291551	0.923093297
6.256103516	0.00877138	1.031976848
6.262207031	0.008125366	0.833420628
6.268310547	0.009800834	0.755961436
6.274414063	0.014181729	0.953757397
6.280517578	0.016548804	1.291184331
6.286621094	0.02277013	1.789459269
6.292724609	0.022542678	1.999970281
6.298828125	0.012907083	2.343819228
6.304931641	0.003502113	2.151893144
6.311035156	0.007615544	1.254421025
6.317138672	0.011306525	1.511960819
6.323242188	0.010593183	2.354400401
6.329345703	0.009355985	3.923870472
6.335449219	0.013218488	4.951957286
6.341552734	0.020258974	2.720442528
6.34765625	0.022250578	1.707672809

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
5.2	0.000371795	-1.76102E-06	-0.000355667	-0.080025053	1.13965E-05	0.007602089
5.205	0.000374297	-1.77473E-06	-0.000358437	-0.080648273	1.14319E-05	0.007603069
5.21	0.000330447	-1.55887E-06	-0.000314822	-0.070834913	1.14595E-05	0.007603949
5.215	0.000270713	-1.26296E-06	-0.000255036	-0.057383106	1.1478E-05	0.007604717
5.22	0.000226563	-1.04345E-06	-0.000210687	-0.047404653	1.1491E-05	0.007605354
5.225	0.000186798	-8.45667E-07	-0.000170731	-0.038414375	1.14998E-05	0.007605846
5.23	0.000142117	-6.22912E-07	-0.000125729	-0.028288932	1.15049E-05	0.007606178
5.235	0.000118589	-5.03743E-07	-0.000101654	-0.022872122	1.15085E-05	0.007606804
5.24	0.000137018	-5.92045E-07	-0.000119496	-0.026886693	1.15132E-05	0.007609513
5.245	0.000184246	-8.23567E-07	-0.000166278	-0.037412495	1.15218E-05	0.007612126
5.25	0.000245237	-1.12381E-06	-0.000226942	-0.051062024	1.1537E-05	0.007614558
5.255	0.000322901	-1.50724E-06	-0.000304413	-0.068492998	1.15633E-05	0.007616846
5.26	0.000406519	-1.92157E-06	-0.000388124	-0.087327887	1.16051E-05	0.007619035
5.265	0.000461093	-2.19355E-06	-0.000443071	-0.099690975	1.16589E-05	0.007621174
5.27	0.000473427	-2.25649E-06	-0.000455788	-0.102552391	1.17155E-05	0.007623294
5.275	0.000471139	-2.24626E-06	-0.000453721	-0.10208717	1.17716E-05	0.007625402
5.28	0.000476114	-2.27174E-06	-0.000458869	-0.103245568	1.18289E-05	0.007627496
5.285	0.000483442	-2.3091E-06	-0.000466416	-0.104943706	1.1888E-05	0.007629577
5.29	0.000495706	-2.37101E-06	-0.000478923	-0.107757691	1.19501E-05	0.007631646
5.295	0.00052033	-2.49487E-06	-0.000503946	-0.113387817	1.20185E-05	0.00763371
5.3	0.000527833	-2.53572E-06	-0.000512199	-0.115244865	1.20889E-05	0.007635781
5.305	0.0004704	-2.25612E-06	-0.000455701	-0.102532802	1.21448E-05	0.007638808
5.31	0.000341988	-1.62398E-06	-0.000327978	-0.073795092	1.21744E-05	0.007642251
5.315	0.000178838	-8.17408E-07	-0.000165022	-0.037129902	1.21825E-05	0.007647631
5.32	1.37336E-05	1.33975E-09	3.74676E-07	8.43021E-05	1.21825E-05	0.007653765
5.325	-0.000135331	7.43187E-07	0.000150221	0.033799623	1.21872E-05	0.007659187
5.33	-0.000239551	1.26578E-06	0.000255774	0.057549105	1.22017E-05	0.007663665
5.335	-0.000253391	1.34306E-06	0.00027138	0.061060543	1.22179E-05	0.007667042
5.34	-0.000148142	8.30757E-07	0.000167865	0.037769562	1.22234E-05	0.007669437
5.345	5.81412E-05	-1.84319E-07	-3.72223E-05	-0.008375012	1.22243E-05	0.007671271
5.35	0.000312869	-1.4434E-06	-0.000291581	-0.065605731	1.2249E-05	0.00767293
5.355	0.000557124	-2.65526E-06	-0.000536372	-0.120683617	1.23275E-05	0.007674437
5.36	0.000730323	-3.51952E-06	-0.000710933	-0.159960025	1.24623E-05	0.007676089
5.365	0.000777652	-3.76287E-06	-0.000760074	-0.17101664	1.26151E-05	0.007678095
5.37	0.000695749	-3.36519E-06	-0.000679718	-0.152936536	1.27375E-05	0.00768051
5.375	0.000551139	-2.65338E-06	-0.000535898	-0.120577059	1.28142E-05	0.00768324
5.38	0.000413773	-1.974E-06	-0.000398642	-0.089694453	1.28575E-05	0.007686109
5.385	0.000309972	-1.45846E-06	-0.000294492	-0.066260628	1.28818E-05	0.007688945
5.39	0.000259167	-1.20361E-06	-0.000243008	-0.054676783	1.28988E-05	0.007691682
5.395	0.000279632	-1.30134E-06	-0.000262755	-0.059119868	1.29185E-05	0.007694808
5.4	0.000350469	-1.64989E-06	-0.000333183	-0.074966069	1.29496E-05	0.007697545
5.405	0.000435267	-2.06934E-06	-0.000417934	-0.094035082	1.29975E-05	0.007700525
5.41	0.000518787	-2.48398E-06	-0.000501707	-0.112884001	1.30655E-05	0.007703025
5.415	0.000589199	-2.83528E-06	-0.000572681	-0.128853257	1.31532E-05	0.007705284
5.42	0.000625453	-3.01892E-06	-0.000609782	-0.137200862	1.32521E-05	0.007707649
5.425	0.000606803	-2.9314E-06	-0.000592097	-0.133221785	1.33452E-05	0.007710325
5.43	0.000530451	-2.55736E-06	-0.000516519	-0.116216853	1.34163E-05	0.007713286
5.435	0.000431119	-2.06753E-06	-0.000417549	-0.093948632	1.34632E-05	0.007716405
5.44	0.00034786	-1.65583E-06	-0.00033437	-0.075233194	1.34938E-05	0.007720033
5.445	0.000280006	-1.32005E-06	-0.000266532	-0.059969649	1.35136E-05	0.00772335
5.45	0.000218165	-1.01377E-06	-0.000204658	-0.046048137	1.35257E-05	0.00772715
5.455	0.000168545	-7.67833E-07	-0.000154978	-0.034869956	1.35329E-05	0.007730713
5.46	0.000120568	-5.30369E-07	-0.000107009	-0.0240771	1.35365E-05	0.007733428
5.465	5.26086E-05	-1.93856E-07	-3.90346E-05	-0.008782793	1.35372E-05	0.007735328
5.47	-2.7694E-05	2.05077E-07	4.15461E-05	0.00934787	1.35374E-05	0.007736484
5.475	-8.75527E-05	5.04399E-07	0.000102005	0.022951042	1.35394E-05	0.007737062
5.48	-0.000106248	6.00611E-07	0.000121438	0.027323519	1.35422E-05	0.007739082
5.485	-9.15095E-05	5.3105E-07	0.000107382	0.024160935	1.35443E-05	0.007740998
5.49	-5.41909E-05	3.49313E-07	7.06601E-05	0.015898518	1.35451E-05	0.007742603
5.495	1.00444E-05	3.36976E-08	6.88845E-06	0.001549901	1.35451E-05	0.007744039
5.5	9.09156E-05	-3.65746E-07	-7.38179E-05	-0.016609023	1.35472E-05	0.007745333
5.505	0.000155378	-6.85439E-07	-0.000138408	-0.031141893	1.35533E-05	0.007746509
5.51	0.000190467	-8.60051E-07	-0.000173686	-0.039079355	1.35625E-05	0.007748241
5.515	0.000212021	-9.67307E-07	-0.000195355	-0.043954886	1.35738E-05	0.0077482
5.52	0.000230384	-1.05864E-06	-0.000213806	-0.048106421	1.35872E-05	0.007751248
5.525	0.000242346	-1.11828E-06	-0.000225856	-0.050817506	1.36021E-05	0.007752537
5.53	0.000251957	-1.16608E-06	-0.000235513	-0.052990353	1.36181E-05	0.007753695
5.535	0.000271696	-1.26419E-06	-0.000255334	-0.057450175	1.36368E-05	0.007754729
5.54	0.000289926	-1.35597E-06	-0.000273876	-0.06162206	1.3658E-05	0.007755649
5.545	0.000266739	-1.24367E-06	-0.000251183	-0.05651616	1.3676E-05	0.007756465
5.55	0.000193224	-8.81219E-07	-0.000177948	-0.040038229	1.36854E-05	0.007757161
5.555	0.000115721	-4.9682E-07	-0.00010028	-0.022563048	1.36888E-05	0.007757695
5.56	7.35256E-05	-2.85954E-07	-5.76765E-05	-0.012977205	1.36902E-05	0.00775803
5.565	5.93491E-05	-2.13788E-07	-4.3096E-05	-0.009696593	1.36911E-05	0.007758227
5.57	5.61154E-05	-1.95851E-07	-3.94721E-05	-0.008881216	1.36919E-05	0.007758295
5.575	6.98971E-05	-2.62042E-07	-5.28469E-05	-0.011890544	1.36931E-05	0.007758295
5.58	0.000109989	-4.5908E-07	-9.26606E-05	-0.020848626	1.36962E-05	0.007758295
5.585	0.000159567	-7.04637E-07	-0.000142277	-0.03201224	1.37026E-05	0.007758295
5.59	0.000187052	-8.42421E-07	-0.000170116	-0.038276099	1.37114E-05	0.007758295
5.595	0.00017073	-7.64188E-07	-0.000154308	-0.034719269	1.37188E-05	0.007758295
5.6	9.76594E-05	-4.04653E-07	-8.16607E-05	-0.018373666	1.37212E-05	0.007758295
5.605	-2.09747E-05	1.82811E-07	3.7031E-05	0.008331967	1.37213E-05	0.007758295
5.61	-0.000120865	6.81284E-07	0.000137732	0.030989709	1.3725E-05	0.007758295
5.615	-0.000127777	7.21855E-07	0.000145922	0.032832544	1.37292E-05	0.007758295
5.62	-3.52166E-05	2.69125E-07	5.44447E-05	0.012250055	1.37295E-05	0.007758295
5.625	0.000101695	-4.06002E-07	-8.19614E-05	-0.018441324	1.37321E-05	0.007758295
5.63	0.000229581	-1.03919E-06	-0.000209886	-0.047224453	1.37454E-05	0.007758295
5.635	0.000322335	-1.50041E-06	-0.000303061	-0.068188762	1.37717E-05	0.007758295
5.64	0.000366603	-1.72278E-06	-0.000347984	-0.078296429	1.38056E-05	0.007758295
5.645	0.000353756	-1.662555E-06	-0.000335814	-0.075558199	1.38373E-05	0.007758295
5.65	0.000293825	-1.368E-06	-0.000276296	-0.062166697	1.38591E-05	0.007758295
5.655	0.00022244	-1.01464E-06	-0.0002049	-0.046102567	1.38716E-05	0.007758295
5.66	0.000177213	-7.89017E-07	-0.000159314	-0.035845625	1.38795E-05	0.007758295
5.665	0.000176308	-7.81979E-07	-0.000157892	-0.035525812	1.38874E-05	0.007758295
5.67	0.000222446	-1.008E-06	-0.000203563	-0.045801679	1.38999E-05	0.007758295
5.675	0.00030294	-1.40538E-06	-0.000283855	-0.063867316	1.39231E-05	0.007758295
5.68	0.000383757	-1.80629E-06	-0.000364854	-0.082092212	1.39603E-05	0.007758295
5.685	0.000428059	-2.02784E-06	-0.00040961	-0.092162147	1.40066E-05	0.007758295
5.69	0.000427746	-2.02854E-06	-0.00040975	-0.092193698	1.40529E-05	0.007758295
5.695	0.000406026	-1.92239E-06	-0.0003883	-0.087367604	1.40945E-05	0.007758295
5.7	0.000383792	-1.81304E-06	-0.000366205	-0.082396118	1.41318E-05	0.007758295
5.705	0.000361729	-1.7041E-06	-0.000344193	-0.077443424	1.41648E-05	0.007758295
5.71	0.000348318	-1.63725E-06	-0.000330686	-0.074404382	1.41955E-05	0.007758295
5.715	0.000365009	-1.71923E-06	-0.000347252	-0.078131657	1.42292E-05	0.007758295

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
6.353759766	0.018705097	1.332139864
6.359863281	0.018618206	1.430285591
6.365966797	0.026226457	1.527299034
6.372070313	0.032852778	1.456034861
6.378173828	0.030517677	1.412194119
6.384277344	0.022483512	1.225130974
6.390380859	0.018702877	1.144253341
6.396484375	0.019164225	1.441067158
6.402587891	0.023148106	1.678697438
6.408691406	0.025335309	1.470646344
6.414794922	0.023227324	1.014081151
6.420898438	0.01873747	0.831367624
6.427001953	0.014839748	0.966276362
6.433105469	0.017390913	1.185843624
6.439208984	0.021795329	1.012178405
6.4453125	0.025681569	0.995902956
6.451416016	0.0251612	1.091599099
6.457519531	0.02150345	1.177114575
6.463623047	0.021454536	1.390873543
6.469726563	0.023465386	1.819755598
6.475830078	0.025735288	2.265745894
6.481933594	0.028432877	2.182216296
6.488037109	0.023290868	2.712556203
6.494140625	0.014064889	2.91007795
6.500244141	0.017099614	1.520981559
6.506347656	0.022326612	1.281586219
6.512451172	0.0204198	1.117292597
6.518554688	0.017622605	1.170462502
6.524658203	0.019652908	1.51190241
6.530761719	0.019910058	2.037230327
6.536865234	0.017651538	2.025914201
6.54296875	0.015206134	1.442109196
6.549072266	0.019988852	1.297774147
6.555175781	0.023523792	1.241976452
6.561279297	0.01970826	1.085892402
6.567382813	0.012892625	0.93388831
6.573486328	0.007032041	0.76814741
6.579589844	0.002253522	0.304119149
6.585693359	0.008202543	0.749664008
6.591796875	0.013718167	0.881301705
6.597900391	0.021007475	1.100548112
6.604003906	0.030878839	1.347050048
6.610107422	0.038185997	1.434834422
6.616210938	0.039433172	1.518156731
6.622314453	0.035442586	1.806335105
6.628417969	0.028803968	2.515923239
6.634521484	0.024941728	2.863736551
6.640625	0.025309393	2.155722906
6.646728516	0.023516406	1.672576153
6.652832031	0.019266743	1.506066996
6.658935547	0.021901472	2.070540724
6.665039063	0.027592471	2.716949842
6.671142578	0.029765458	2.697745094
6.677246094	0.028605934	2.451880195
6.683349609	0.030181222	2.74614609
6.689453125	0.038197332	2.203519996
6.695556641	0.044383581	1.848789519
6.701660156	0.041168265	1.690861572
6.707763672	0.033249594	1.560123335
6.713867188	0.027824253	1.658235211
6.719970703	0.021964142	2.214828174
6.726074219	0.016509317	4.034708015
6.732177734	0.013079104	2.091169314
6.73828125	0.013923655	1.37073862
6.744384766	0.021256644	1.732486896
6.750488281	0.028544863	2.23891602
6.756591797	0.033133876	2.385952724
6.762695313	0.03308096	2.200660412
6.768798828	0.026305527	2.383046529
6.774902344	0.019420683	2.69256762
6.781005859	0.01606787	2.051523683
6.787109375	0.012764742	1.695711273
6.793212891	0.011893074	1.144556169
6.799316406	0.016268633	1.132835995
6.805419922	0.021649353	1.5305831
6.811523438	0.026028761	2.457107261
6.817626953	0.029165143	3.10081739
6.823730469	0.027626121	2.841704654
6.829833984	0.022598077	2.058245521
6.8359375	0.018842529	2.472144536
6.842041016	0.020903242	6.774399934
6.848144531	0.018772484	3.757442872
6.854248047	0.014740728	1.882421851
6.860351563	0.019033638	1.660431281
6.866455078	0.021912795	1.615652901
6.872558594	0.02159697	1.573495344
6.878662109	0.016888856	1.697054623
6.884765625	0.014213647	2.824880952
6.890869141	0.015676029	3.015862075
6.896972656	0.015941451	1.776952419
6.903076172	0.018797019	1.230895137
6.909179688	0.016840433	1.220038549
6.915283203	0.010455688	1.503901014
6.921386719	0.007420201	1.808857464
6.927490234	0.004614866	2.376070928
6.93359375	0.016835182	2.994427161
6.939697266	0.030652391	2.475398793
6.945800781	0.036809742	2.078511342
6.951904297	0.031918314	1.886938057
6.958007813	0.023668853	1.59868517
6.964111328	0.020080768	1.351691015
6.970214844	0.021043877	1.245452557
6.976318359	0.024940406	1.188297708
6.982421875	0.033549832	1.243525287

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
5.72	0.000399819	-1.89222E-06	-0.000382205	-0.085996048	1.42696E-05	0.007758482
5.725	0.000405346	-1.9218E-06	-0.000388182	-0.08734097	1.43111E-05	0.00775859
5.73	0.000354685	-1.67341E-06	-0.000337992	-0.076048105	1.43429E-05	0.007760055
5.735	0.000258932	-1.20049E-06	-0.000242438	-0.054548618	1.43598E-05	0.007762792
5.74	0.000147264	-6.46613E-07	-0.000130534	-0.029370107	1.43653E-05	0.007765599
5.745	5.70452E-05	-1.9653E-07	-3.96038E-05	-0.008910858	1.43661E-05	0.007768654
5.75	2.42885E-05	-2.90056E-08	-5.75992E-06	-0.001295982	1.43663E-05	0.007770955
5.755	7.73669E-05	-2.85721E-07	-5.76324E-05	-0.012967282	1.43678E-05	0.007772531
5.76	0.000222015	-9.97201E-07	-0.000201387	-0.045312056	1.43803E-05	0.007773627
5.765	0.000413836	-1.94568E-06	-0.000393011	-0.088427382	1.44235E-05	0.00777445
5.77	0.000587955	-2.81001E-06	-0.000567609	-0.127712013	1.45109E-05	0.00777511
5.775	0.000712843	-3.43299E-06	-0.000693444	-0.156024873	1.46393E-05	0.00777613
5.78	0.000768442	-3.71456E-06	-0.000750316	-0.16882099	1.47886E-05	0.007777844
5.785	0.000731987	-3.54046E-06	-0.000715137	-0.160905881	1.4924E-05	0.007779624
5.79	0.000628637	-3.03304E-06	-0.000612609	-0.137837022	1.50239E-05	0.007781423
5.795	0.000515205	-2.47322E-06	-0.000499502	-0.112388024	1.5091E-05	0.007783132
5.8	0.000411257	-1.95895E-06	-0.000395604	-0.089010957	1.51337E-05	0.007784647
5.805	0.000315374	-1.48338E-06	-0.000299528	-0.067393908	1.51589E-05	0.00778593
5.81	0.000246118	-1.13832E-06	-0.00022982	-0.051709526	1.51742E-05	0.007786918
5.815	0.000219813	-1.00528E-06	-0.000202945	-0.045662564	1.51864E-05	0.007787564
5.82	0.000234895	-1.07725E-06	-0.000217488	-0.048934839	1.52003E-05	0.007788511
5.825	0.000285251	-1.32453E-06	-0.000267453	-0.060176851	1.52209E-05	0.007789927
5.83	0.00035708	-1.67929E-06	-0.000339134	-0.076305066	1.52531E-05	0.007791358
5.835	0.000429719	-2.03938E-06	-0.000411888	-0.092674863	1.52998E-05	0.007793121
5.84	0.000484536	-2.31242E-06	-0.000467051	-0.105086527	1.53591E-05	0.007794662
5.845	0.000500776	-2.39506E-06	-0.000483748	-0.108843388	1.54225E-05	0.007796668
5.85	0.000478275	-2.28496E-06	-0.000461501	-0.103837816	1.54803E-05	0.007799947
5.855	0.000464471	-2.21603E-06	-0.000447573	-0.100703905	1.55348E-05	0.007802883
5.86	0.000502592	-2.40368E-06	-0.00048549	-0.109235345	1.55987E-05	0.007805458
5.865	0.000575837	-2.76669E-06	-0.00055883	-0.125736686	1.56825E-05	0.007807694
5.87	0.000645768	-3.11522E-06	-0.000629239	-0.141578787	1.57879E-05	0.007809648
5.875	0.000687587	-3.32633E-06	-0.000671889	-0.151175003	1.59074E-05	0.007811377
5.88	0.000668622	-3.23793E-06	-0.000654025	-0.147155681	1.60204E-05	0.007812909
5.885	0.000564801	-2.72909E-06	-0.000551211	-0.124022391	1.6101E-05	0.007814225
5.89	0.000400845	-1.91999E-06	-0.000387739	-0.087241241	1.61416E-05	0.007815338
5.895	0.000233161	-1.08899E-06	-0.000219856	-0.04946769	1.61553E-05	0.007816247
5.9	0.000108533	-4.68325E-07	-9.44775E-05	-0.021257432	1.61583E-05	0.007817013
5.905	4.89203E-05	-1.67892E-07	-3.3791E-05	-0.007602967	1.61589E-05	0.007819111
5.91	6.04905E-05	-2.19368E-07	-4.41937E-05	-0.009943587	1.61598E-05	0.007821599
5.915	0.000143778	-6.26661E-07	-0.00012649	-0.02846036	1.61651E-05	0.007823688
5.92	0.000278906	-1.29293E-06	-0.000261107	-0.05874899	1.61847E-05	0.007825509
5.925	0.00042083	-1.99591E-06	-0.000403131	-0.09070456	1.62295E-05	0.0078271
5.93	0.000533568	-2.55693E-06	-0.00051647	-0.11620568	1.63014E-05	0.007828498
5.935	0.000600582	-2.89355E-06	-0.00058446	-0.131503497	1.63926E-05	0.007829733
5.94	0.000601071	-2.90203E-06	-0.000586181	-0.131890677	1.64839E-05	0.007830823
5.945	0.000518977	-2.5016E-06	-0.00050527	-0.113685853	1.6552E-05	0.007832061
5.95	0.000370681	-1.77152E-06	-0.000357762	-0.080496379	1.65867E-05	0.007833896
5.955	0.000197465	-9.15329E-07	-0.000184785	-0.041576545	1.65966E-05	0.007836902
5.96	3.34248E-05	-1.02108E-07	-2.0503E-05	-0.004613165	1.65969E-05	0.007839344
5.965	-0.000108609	6.04153E-07	0.000122153	0.027484419	1.65998E-05	0.007842479
5.97	-0.000214391	1.13297E-06	0.000228962	0.051516478	1.66115E-05	0.007845001
5.975	-0.000252945	1.33057E-06	0.000268871	0.060495888	1.66276E-05	0.007847229
5.98	-0.00021054	1.12733E-06	0.000227804	0.05125597	1.66388E-05	0.00784923
5.985	-0.000114247	6.55816E-07	0.000132533	0.029819854	1.66421E-05	0.00785045
5.99	3.11053E-06	7.83552E-08	1.5861E-05	0.003568726	1.66421E-05	0.007850992
5.995	0.000129632	-5.45971E-07	-0.000110272	-0.0248112	1.66464E-05	0.007851129
6	0.000253468	-1.15875E-06	-0.000234065	-0.052664666	1.66626E-05	0.007851129
6.005	0.000352613	-1.65093E-06	-0.000333489	-0.075034984	1.6694E-05	0.007851821
6.01	0.000417226	-1.973E-06	-0.000398548	-0.089673227	1.6738E-05	0.007853739
6.015	0.000453416	-2.15473E-06	-0.000435258	-0.097933091	1.679E-05	0.007855561
6.02	0.000460027	-2.19033E-06	-0.000442449	-0.099550943	1.68435E-05	0.007857295
6.025	0.000429536	-2.04203E-06	-0.000412483	-0.092808586	1.68901E-05	0.00785894
6.03	0.000372276	-1.76008E-06	-0.000355513	-0.079990366	1.69251E-05	0.007860486
6.035	0.000313757	-1.47044E-06	-0.000296991	-0.066822908	1.695E-05	0.007861913
6.04	0.000273189	-1.26849E-06	-0.000256187	-0.057642165	1.69689E-05	0.007863203
6.045	0.000262567	-1.21398E-06	-0.000245175	-0.055164292	1.69863E-05	0.007864341
6.05	0.000294564	-1.37025E-06	-0.00027675	-0.062268763	1.70082E-05	0.007865323
6.055	0.00037224	-1.75367E-06	-0.000354222	-0.079700026	1.70433E-05	0.007866159
6.06	0.000468	-2.22911E-06	-0.000450281	-0.101313181	1.70986E-05	0.007866871
6.065	0.000524975	-2.51528E-06	-0.000508086	-0.11431933	1.71683E-05	0.007867488
6.07	0.000498236	-2.38809E-06	-0.000482385	-0.108536632	1.7231E-05	0.007868025
6.075	0.000393079	-1.87126E-06	-0.000377957	-0.085040255	1.72701E-05	0.007868909
6.08	0.000254785	-1.1874E-06	-0.000239789	-0.053952487	1.72865E-05	0.007869866
6.085	0.000137094	-6.02512E-07	-0.000121624	-0.027365378	1.72912E-05	0.007870416
6.09	7.94128E-05	-3.12961E-07	-6.31286E-05	-0.01420393	1.72928E-05	0.007870521
6.095	8.36226E-05	-3.3011E-07	-6.65947E-05	-0.014983814	1.72946E-05	0.007870521
6.1	0.000112701	-4.71971E-07	-9.52594E-05	-0.021433356	1.72978E-05	0.007870699
6.105	0.00012997	-5.566E-07	-0.000112359	-0.025280877	1.73021E-05	0.007872474
6.11	0.000128615	-5.49203E-07	-0.000110865	-0.024944595	1.73062E-05	0.007874088
6.115	0.000120424	-5.07461E-07	-0.00010243	-0.02304681	1.73099E-05	0.007875927
6.12	0.000120677	-5.0671E-07	-0.000102279	-0.023012663	1.73136E-05	0.007878842
6.125	0.000147235	-6.35411E-07	-0.000128284	-0.028863862	1.73191E-05	0.007881285
6.13	0.000216281	-9.74239E-07	-0.000196745	-0.044267586	1.73309E-05	0.007883328
6.135	0.000330636	-1.53825E-06	-0.0003107	-0.069907392	1.73585E-05	0.007885171
6.14	0.000468236	-2.21943E-06	-0.000448318	-0.100871492	1.74139E-05	0.007886889
6.145	0.000587175	-2.81068E-06	-0.000567752	-0.127744173	1.75011E-05	0.007888564
6.15	0.00065436	-3.14733E-06	-0.000635749	-0.143043637	1.76093E-05	0.007890265
6.155	0.000663326	-3.19619E-06	-0.000645617	-0.145263935	1.77205E-05	0.007892034
6.16	0.000622794	-2.99961E-06	-0.000605897	-0.136326746	1.78185E-05	0.007893875
6.165	0.000546275	-2.62392E-06	-0.000529986	-0.119246847	1.78939E-05	0.007895759
6.17	0.000449649	-2.14748E-06	-0.000433724	-0.097587942	1.7945E-05	0.007897639
6.175	0.000344782	-1.62901E-06	-0.000328974	-0.074019232	1.79751E-05	0.007900733
6.18	0.00024049	-1.11205E-06	-0.000224535	-0.050520452	1.79897E-05	0.007903728
6.185	0.000149807	-6.60936E-07	-0.000133403	-0.030015683	1.79954E-05	0.007906507
6.19	9.42745E-05	-3.82252E-07	-7.71061E-05	-0.017348869	1.79976E-05	0.007908822
6.195	0.000101232	-4.11993E-07	-8.31174E-05	-0.018701426	1.80002E-05	0.007910749
6.2	0.000178197	-7.89063E-07	-0.000159308	-0.03584423	1.80082E-05	0.007912422
6.205	0.000290281	-1.34231E-06	-0.00027109	-0.060995271	1.80295E-05	0.007913905
6.21	0.000385995	-1.81689E-06	-0.000366973	-0.082568836	1.80672E-05	0.007915264
6.215	0.000436215	-2.06742E-06	-0.000417588	-0.093957278	1.81153E-05	0.007916556
6.22	0.000443592	-2.10558E-06	-0.000425297	-0.095691806	1.8165E-05	0.007917812
6.225	0.000439896	-2.08771E-06	-0.000421685	-0.09487912	1.82139E-05	0.007919037
6.23	0.000465245	-2.21292E-06	-0.000446983	-0.100571077	1.82686E-05	0.007920231
6.235	0.000523738	-2.50327E-06	-0.00050564	-0.113768946	1.8338E-05	0.007922152

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
6.988525391	0.043404299	1.347415551
6.994628906	0.042462292	1.365659815
7.000732422	0.037001664	1.422792946
7.006835938	0.033996903	1.530852702
7.012939453	0.036482493	1.603206795
7.019042969	0.046071142	1.621275256
7.025146484	0.055216597	1.645886097
7.03125	0.051923708	1.630302205
7.037353516	0.039864218	1.558724759
7.043457031	0.033779959	1.752855574
7.049560547	0.037320287	2.406275207
7.055664063	0.042452819	2.43667362
7.061767578	0.040380563	1.830002437
7.067871094	0.032054231	1.383370255
7.073974609	0.024848136	1.24761718
7.080078125	0.020971809	1.30449976
7.086181641	0.019595575	1.376693954
7.092285156	0.021370078	1.468095861
7.098388672	0.021506615	1.446030354
7.104492188	0.01435554	1.217703109
7.110595703	0.006858856	0.710609707
7.116699219	0.009412155	0.725276274
7.122802734	0.015170513	1.284525772
7.12890625	0.019643754	3.037439776
7.135009766	0.018302659	3.656174209
7.141113281	0.01476391	2.344918513
7.147216797	0.011776955	1.317272607
7.153320313	0.00872543	0.816092269
7.159423828	0.005030797	0.444954504
7.165527344	0.004621652	0.302015051
7.171630859	0.010244834	0.584662469
7.177734375	0.004946224	0.320241242
7.183837891	0.006614224	0.501298936
7.189941406	0.01130136	1.114927831
7.196044922	0.006720628	1.294822095
7.202148438	0.00463283	1.103876967
7.208251953	0.005391748	0.954415841
7.214355469	0.006061308	0.620536792
7.220458984	0.010758425	0.812802624
7.2265625	0.014432665	1.122576757
7.232666016	0.013360997	1.14176711
7.238769531	0.011272005	1.138508495
7.244873047	0.008593061	1.153792483
7.250976563	0.005032247	0.634330696
7.257080078	0.016078316	1.483182003
7.263183594	0.022346778	1.671142347
7.269287109	0.019184357	1.321998735
7.275390625	0.01586165	1.05669375
7.281494141	0.020211048	1.40207613
7.287597656	0.024523811	1.710615318
7.293701172	0.021098307	1.236081075
7.299804688	0.021485805	1.028198478
7.305908203	0.030353474	1.356031934
7.312011719	0.03307314	1.579749462
7.318115234	0.027569412	1.467348608
7.32421875	0.021502436	1.151962989
7.330322266	0.023158009	1.200400224
7.336425781	0.025135777	1.442801963
7.342529297	0.024799316	1.622419474
7.348632813	0.026865021	1.659853655
7.354736328	0.028614469	1.636439262
7.360839844	0.024801049	1.567240234
7.366943359	0.01912894	1.136259853
7.373046875	0.014888248	0.745187779
7.379150391	0.008466298	0.444192795
7.385253906	0.007326873	0.445939246
7.391357422	0.008358846	0.624210169
7.397460938	0.015213953	1.653184173
7.403564453	0.020714812	3.74567585
7.409667969	0.023067988	3.915412903
7.415771484	0.025563658	3.0675435
7.421875	0.02163138	2.848877656
7.427978516	0.016555289	2.048952736
7.434082031	0.010476932	1.241113356
7.440185547	0.007060451	1.268347053
7.446289063	0.004764134	0.934519264
7.452392578	0.021092729	2.87041252
7.458496094	0.030235709	3.009334173
7.464599609	0.025406718	1.835856198
7.470703125	0.020314309	1.286271601
7.476806641	0.011447104	0.933415325
7.482910156	0.005541506	0.622685532
7.489013672	0.007723591	1.069309474
7.495117188	0.004203092	0.904725111
7.501220703	0.014297735	2.170001035
7.507324219	0.019450481	1.736214054
7.513427734	0.023514106	1.681076034
7.51953125	0.024175854	1.901715658
7.525634766	0.027595513	2.045029454
7.531738281	0.029392135	1.834311244
7.537841797	0.021483673	1.345460108
7.543945313	0.013050385	0.869956599
7.550048828	0.01066947	0.742072185
7.556152344	0.008941507	0.75233747
7.562255859	0.004646746	0.51347087
7.568359375	0.001231418	0.144364376
7.574462891	0.007709599	0.848812162
7.580566406	0.024503227	1.917067364
7.586669922	0.038436669	2.135342806
7.592773438	0.034240493	1.596261177
7.598876953	0.018233723	0.827856698
7.604980469	0.006174275	0.309272036
7.611083984	0.001806247	0.105398445
7.6171875	0.007459214	0.493581

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
6.24	0.000569727	-2.7339E-06	-0.000552231	-0.124251978	1.842E-05	0.007925109
6.245	0.000549097	-2.636E-06	-0.000532449	-0.119801026	1.84962E-05	0.007928534
6.25	0.000448377	-2.14052E-06	-0.000432334	-0.097275094	1.8547E-05	0.007931899
6.255	0.000306917	-1.44016E-06	-0.000290832	-0.06543711	1.85708E-05	0.007935078
6.26	0.00019011	-8.58214E-07	-0.00017326	-0.038983549	1.858E-05	0.007938303
6.265	0.000150302	-6.55071E-07	-0.000132221	-0.029749685	1.85857E-05	0.007941737
6.27	0.000204916	-9.19054E-07	-0.000185562	-0.041751363	1.85963E-05	0.007944651
6.275	0.000340773	-1.58684E-06	-0.000320488	-0.072109825	1.86256E-05	0.007947293
6.28	0.000524021	-2.49226E-06	-0.000503413	-0.113268005	1.8695E-05	0.007949839
6.285	0.000705878	-3.39428E-06	-0.000685629	-0.154266537	1.8821E-05	0.007952247
6.29	0.000846677	-4.09578E-06	-0.000827296	-0.186141642	1.90021E-05	0.007954988
6.295	0.000935081	-4.53958E-06	-0.000916905	-0.206303609	1.92231E-05	0.007959325
6.3	0.00096279	-4.68409E-06	-0.000946081	-0.212868256	1.94574E-05	0.007964148
6.305	0.000912646	-4.44345E-06	-0.000897459	-0.201928169	1.96679E-05	0.007969488
6.31	0.000789177	-3.83861E-06	-0.000775248	-0.174430827	1.98253E-05	0.007975234
6.315	0.000616956	-2.99029E-06	-0.000603857	-0.1358678	1.99215E-05	0.007981793
6.32	0.000418021	-2.00713E-06	-0.000405241	-0.091179182	1.99657E-05	0.007988514
6.325	0.00022183	-1.03457E-06	-0.000208782	-0.046975949	1.99781E-05	0.007994891
6.33	6.33732E-05	-2.46114E-07	-4.95251E-05	-0.011143158	1.99792E-05	0.008000546
6.335	-3.52323E-05	2.4791E-07	5.02555E-05	0.01130749	1.99795E-05	0.008004794
6.34	-6.17037E-05	3.85691E-07	7.80831E-05	0.017568705	1.99804E-05	0.0080111
6.345	-1.61215E-05	1.66342E-07	3.37611E-05	0.007596241	1.99805E-05	0.008016239
6.35	8.38904E-05	-3.2404E-07	-6.53223E-05	-0.014697518	1.99823E-05	0.008020258
6.355	0.000212251	-9.57144E-07	-0.000193235	-0.04347796	1.99937E-05	0.008023693
6.36	0.000331372	-1.54725E-06	-0.000312454	-0.070302148	2.00214E-05	0.008028708
6.365	0.000402744	-1.90289E-06	-0.0003843	-0.086467467	2.00624E-05	0.00803332
6.37	0.000419477	-1.98825E-06	-0.000401545	-0.090347561	2.01069E-05	0.008037999
6.375	0.000403274	-1.90954E-06	-0.000385641	-0.086769155	2.0148E-05	0.008043843
6.38	0.000382694	-1.80762E-06	-0.000365046	-0.082135278	2.0185E-05	0.008049542
6.385	0.000386983	-1.82748E-06	-0.000369058	-0.083038069	2.02228E-05	0.008055119
6.39	0.000432577	-2.05149E-06	-0.000414321	-0.093222163	2.02701E-05	0.008061109
6.395	0.000513751	-2.45259E-06	-0.000495345	-0.111452689	2.03369E-05	0.008067999
6.4	0.000604841	-2.90473E-06	-0.000586681	-0.132003124	2.04293E-05	0.008074953
6.405	0.00066457	-3.20371E-06	-0.000647073	-0.145591357	2.05409E-05	0.008082104
6.41	0.000667767	-3.22362E-06	-0.000651092	-0.146495766	2.06536E-05	0.008089535
6.415	0.000628478	-3.03261E-06	-0.000612497	-0.137811766	2.07535E-05	0.008097248
6.42	0.000570463	-2.74791E-06	-0.000554971	-0.124868408	2.08357E-05	0.008105417
6.425	0.000507398	-2.43718E-06	-0.00049219	-0.110742651	2.09008E-05	0.008115477
6.43	0.000449161	-2.14954E-06	-0.000434073	-0.097666341	2.09518E-05	0.008124964
6.435	0.000391795	-1.86576E-06	-0.000376739	-0.084766306	2.09906E-05	0.00813374
6.44	0.000326291	-1.54099E-06	-0.000311125	-0.070003179	2.10175E-05	0.008142273
6.445	0.000266631	-1.24393E-06	-0.000251112	-0.056500179	2.10354E-05	0.008150594
6.45	0.0002373	-1.09614E-06	-0.000221256	-0.049782629	2.10497E-05	0.008158298
6.455	0.000246211	-1.13776E-06	-0.000229666	-0.051674945	2.1065E-05	0.008166727
6.46	0.000282017	-1.31353E-06	-0.000265181	-0.059665787	2.10851E-05	0.008174597
6.465	0.000318207	-1.49254E-06	-0.000301352	-0.067804279	2.11107E-05	0.008182013
6.47	0.000331908	-1.56091E-06	-0.000315166	-0.070912366	2.11385E-05	0.008189062
6.475	0.000329156	-1.54746E-06	-0.000312448	-0.070300838	2.11659E-05	0.008195762
6.48	0.000333338	-1.56772E-06	-0.000316542	-0.071221901	2.1194E-05	0.008202108
6.485	0.000359361	-1.69597E-06	-0.000342457	-0.077052741	2.12266E-05	0.008208103
6.49	0.000409344	-1.94351E-06	-0.000392471	-0.088306084	2.1269E-05	0.008213784
6.495	0.000465902	-2.22518E-06	-0.000449379	-0.101110251	2.13239E-05	0.008219223
6.5	0.00048996	-2.34769E-06	-0.000474131	-0.106679394	2.13845E-05	0.008224499
6.505	0.000449896	-2.15335E-06	-0.000434863	-0.097844223	2.14357E-05	0.008229756
6.51	0.000344044	-1.63222E-06	-0.000329566	-0.074152338	2.14656E-05	0.008237761
6.515	0.000197682	-9.07887E-07	-0.000183225	-0.041225673	2.14755E-05	0.00824536
6.52	6.37882E-05	-2.41732E-07	-4.86554E-05	-0.010947457	2.14765E-05	0.008252938
6.525	7.86791E-06	4.11607E-08	8.48943E-06	0.001910121	2.14765E-05	0.008259842
6.53	6.38352E-05	-2.29632E-07	-4.62273E-05	-0.010401134	2.14775E-05	0.00826581
6.535	0.000210642	-9.52695E-07	-0.000192322	-0.043272431	2.14888E-05	0.008270942
6.54	0.000384867	-1.81571E-06	-0.00036668	-0.082502888	2.15262E-05	0.008275502
6.545	0.000510272	-2.44095E-06	-0.00049299	-0.110922815	2.1592E-05	0.008279822
6.55	0.0005374	-2.58147E-06	-0.000521377	-0.117309757	2.1665E-05	0.008284129
6.555	0.000465978	-2.23319E-06	-0.000451004	-0.101475872	2.17199E-05	0.008290113
6.56	0.000338559	-1.60471E-06	-0.000324019	-0.072904235	2.17488E-05	0.008297124
6.565	0.000221416	-1.02352E-06	-0.000206598	-0.046484519	2.17612E-05	0.008303824
6.57	0.000168707	-7.59045E-07	-0.000153167	-0.0344625	2.17684E-05	0.008310053
6.575	0.000191534	-8.68437E-07	-0.000175271	-0.039435914	2.17777E-05	0.00831645
6.58	0.000264683	-1.22859E-06	-0.000248041	-0.05580933	2.17954E-05	0.008322377
6.585	0.000346846	-1.6358E-06	-0.000330318	-0.074321565	2.18258E-05	0.008327941
6.59	0.000394904	-1.87638E-06	-0.000378925	-0.085258095	2.18652E-05	0.008333263
6.595	0.000380376	-1.80809E-06	-0.000365127	-0.082153657	2.19018E-05	0.008338411
6.6	0.000302169	-1.42378E-06	-0.000287473	-0.064681438	2.19249E-05	0.008343361
6.605	0.000191545	-8.76687E-07	-0.000176935	-0.039810364	2.19341E-05	0.008347993
6.61	9.59536E-05	-4.01482E-07	-8.09309E-05	-0.018209458	2.19365E-05	0.008352208
6.615	4.57187E-05	-1.4919E-07	-2.99638E-05	-0.00674185	2.1937E-05	0.008356058
6.62	4.86053E-05	-1.59338E-07	-3.20158E-05	-0.00720355	2.19376E-05	0.008359496
6.625	0.000101893	-4.19533E-07	-8.4591E-05	-0.019032974	2.19402E-05	0.00836253
6.63	0.000186971	-8.38645E-07	-0.000169274	-0.038086541	2.19491E-05	0.008365283
6.635	0.000275869	-1.27847E-06	-0.000258138	-0.058081046	2.19683E-05	0.008367835
6.64	0.000351001	-1.65162E-06	-0.000333527	-0.075043585	2.19994E-05	0.008370238
6.645	0.000405743	-1.92489E-06	-0.000388734	-0.087465147	2.2041E-05	0.008372539
6.65	0.000436741	-2.08137E-06	-0.000420347	-0.09457808	2.20892E-05	0.008374771
6.655	0.000437184	-2.08708E-06	-0.000421501	-0.094837648	2.21376E-05	0.008376953
6.66	0.000399922	-1.90604E-06	-0.000384919	-0.086606837	2.2178E-05	0.008379084
6.665	0.000331471	-1.56991E-06	-0.000317001	-0.071325228	2.22057E-05	0.00838114
6.67	0.000239398	-1.11612E-06	-0.000225315	-0.050695793	2.22202E-05	0.008383078
6.675	0.000118678	-5.19564E-07	-0.000104789	-0.023577624	2.22238E-05	0.00838484
6.68	-2.143E-05	1.74818E-07	3.54879E-05	0.007984769	2.22239E-05	0.008386349
6.685	-0.000148919	8.09044E-07	0.000163586	0.036806859	2.22295E-05	0.008387521
6.69	-0.000233452	1.23258E-06	0.000249122	0.056052544	2.22433E-05	0.00838829
6.695	-0.000252734	1.33421E-06	0.000269648	0.060670873	2.22594E-05	0.008388787
6.7	-0.000199834	1.07826E-06	0.00021793	0.049034362	2.22695E-05	0.008389051
6.705	-9.45906E-05	5.61639E-07	0.000113545	0.025547716	2.22718E-05	0.0083891
6.71	3.13718E-05	-5.96464E-08	-1.19791E-05	-0.002695288	2.2272E-05	0.0083891
6.715	0.000149755	-6.45321E-07	-0.000130302	-0.029317917	2.22777E-05	0.0083891
6.72	0.000244192	-1.11363E-06	-0.000224909	-0.050604456	2.22928E-05	0.0083891
6.725	0.00031931	-1.48685E-06	-0.000300304	-0.067568303	2.23185E-05	0.0083891
6.73	0.00037933	-1.78605E-06	-0.000360743	-0.081167219	2.23549E-05	0.0083891
6.735	0.000406866	-1.92524E-06	-0.000388859	-0.087493345	2.23967E-05	0.0083891
6.74	0.000388819	-1.83863E-06	-0.000371359	-0.083555724	2.2435E-05	0.0083891
6.745	0.000341728	-1.607E-06	-0.000324556	-0.073025132	2.24645E-05	0.0083891
6.75	0.000296385	-1.38254E-06	-0.000279202	-0.062820538	2.24867E-05	0.0083891
6.755	0.000276211	-1.28164E-06	-0.000258815	-0.058233481	2.2506E-05	0.0083891

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
7.623291016	0.021976838	1.550061837
7.629394531	0.031941191	2.333405737
7.635498047	0.026584627	2.076946532
7.641601563	0.010900351	0.724059546
7.647705078	0.010022271	0.528906828
7.653808594	0.024508438	1.193823171
7.659912109	0.035876709	1.643970056
7.666015625	0.039448294	1.688624829
7.672119141	0.032200103	1.353676286
7.678222656	0.020104469	0.834047201
7.684326172	0.012629391	0.523761086
7.690429688	0.011401471	0.474764978
7.696533203	0.01673842	0.635428323
7.702636719	0.03267702	1.10763628
7.708740234	0.041965466	1.419200199
7.71484375	0.035991039	1.341755652
7.720947266	0.023782504	1.004717519
7.727050781	0.015789264	0.716999765
7.733154297	0.013488767	0.611269385
7.739257813	0.017688736	0.813259922
7.745361328	0.023394782	1.227152703
7.751464844	0.022698759	1.520914653
7.757568359	0.016288832	1.331175794
7.763671875	0.012349605	1.212995628
7.769775391	0.00649238	1.031147335
7.775878906	0.013863727	7.97995507
7.781982422	0.019567837	27.51539347
7.788085938	0.009512228	1.810492797
7.794189453	0.006043194	0.547471531
7.800292969	0.005500047	0.421122787
7.806396484	0.015355707	1.273089774
7.8125	0.017501253	1.775744413
7.818603516	0.011330538	1.734936385
7.824707031	0.010532081	2.020220497
7.830810547	0.009487958	1.194319025
7.836914063	0.006688515	0.628586785
7.843017578	0.008688191	0.829064666
7.849121094	0.008205733	1.166770873
7.855224609	0.00087892	0.282506781
7.861328125	0.010477374	5.626572401
7.867431641	0.014195334	4.973249815
7.873535156	0.01598481	2.73706048
7.879638672	0.015801649	1.879615285
7.885742188	0.014411423	1.578509303
7.891845703	0.016511769	1.735004847
7.897949219	0.024805438	2.345061013
7.904052734	0.030288318	2.269038221
7.91015625	0.024034451	1.418107639
7.916259766	0.017432781	0.802998379
7.922363281	0.017050146	0.697803696
7.928466797	0.013440626	0.5708768
7.934570313	0.008069738	0.381332668
7.940673828	0.001068388	0.057506883
7.946777344	0.004093437	0.25343664
7.952880859	0.003799849	0.266437332
7.958984375	0.006728862	0.478743319
7.965087891	0.014005276	0.798810626
7.971191406	0.021547385	0.933127257
7.977294922	0.023326041	0.864597053
7.983398438	0.021487691	0.752663108
7.989501953	0.026395816	0.948623025
7.995605469	0.027476169	1.129180885
8.001708984	0.020052695	0.960036071
8.0078125	0.013794502	0.737313338
8.013916016	0.010653486	0.622219954
8.020019531	0.01150797	0.640872254
8.026123047	0.020130945	0.948445033
8.032226563	0.023570419	1.015874535
8.038330078	0.02166752	0.935177134
8.044433594	0.024029962	1.021694128
8.050537109	0.02222623	0.950094761
8.056640625	0.01521336	0.698816471
8.062744141	0.01244955	0.631549199
8.068847656	0.010798506	0.578243014
8.074951172	0.008760518	0.467819872
8.081054688	0.011380768	0.596303849
8.087158203	0.011436119	0.628581003
8.093261719	0.005661322	0.351416342
8.099365234	0.002689465	0.184720012
8.10546875	0.002075368	0.140123928
8.111572266	0.002247143	0.136251082
8.117675781	0.007699128	0.431200024
8.123779297	0.007751776	0.495575551
8.129882813	0.001240954	0.119561707
8.135986328	0.008981533	1.012030108
8.142089844	0.005531533	0.504285918
8.148193359	0.003108408	0.251099129
8.154296875	0.006132267	0.510576989
8.160400391	0.012976851	1.138715714
8.166503906	0.021107142	1.66480372
8.172607422	0.023581113	1.927696053
8.178710938	0.01703101	2.041541148
8.184814453	0.008107099	1.384540312
8.190917969	0.008898621	1.185369666
8.197021484	0.019887635	1.729683044
8.203125	0.032413	2.072156638
8.209228516	0.0389439	2.113698623
8.215332031	0.034980227	1.985350346
8.221435547	0.023456693	1.68861727
8.227539063	0.013018978	1.193161491
8.233642578	0.009002822	0.806203398
8.239746094	0.008657003	0.667956094
8.245849609	0.009782567	0.724177929
8.251953125	0.009713853	0.776550722

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
6.76	0.000294752	-1.37213E-06	-0.0002771	-0.062347557	2.25279E-05	0.0083891
6.765	0.000351641	-1.65335E-06	-0.000333924	-0.075132989	2.25592E-05	0.0083891
6.77	0.000418755	-1.98714E-06	-0.000401363	-0.090306768	2.26035E-05	0.0083891
6.775	0.000452611	-2.15799E-06	-0.000435875	-0.098071795	2.26553E-05	0.0083891
6.78	0.0004323	-2.06099E-06	-0.000416274	-0.093661605	2.27025E-05	0.0083891
6.785	0.000368288	-1.74662E-06	-0.000352754	-0.07936957	2.27368E-05	0.0083891
6.79	0.000282902	-1.32478E-06	-0.00026752	-0.060192001	2.2757E-05	0.0083891
6.795	0.000199852	-9.12684E-07	-0.00018426	-0.041458519	2.27671E-05	0.0083891
6.8	0.000141791	-6.22675E-07	-0.000125669	-0.028275424	2.27722E-05	0.0083891
6.805	0.000130781	-5.64541E-07	-0.000113924	-0.025632892	2.27765E-05	0.008389588
6.81	0.000179889	-8.04267E-07	-0.000162363	-0.036531733	2.27847E-05	0.00839104
6.815	0.000271869	-1.25806E-06	-0.000254055	-0.057162283	2.28034E-05	0.008392161
6.82	0.000364326	-1.7168E-06	-0.000346738	-0.078016145	2.28369E-05	0.008393046
6.825	0.000415506	-1.97341E-06	-0.000398584	-0.089681449	2.28805E-05	0.008393893
6.83	0.000393384	-1.86818E-06	-0.00037732	-0.084896977	2.29197E-05	0.008394725
6.835	0.00029375	-1.3781E-06	-0.000278296	-0.062616529	2.29415E-05	0.008395535
6.84	0.000159792	-7.15128E-07	-0.000144348	-0.032478201	2.29479E-05	0.008396292
6.845	5.19635E-05	-1.78551E-07	-3.59435E-05	-0.008087281	2.29486E-05	0.008396957
6.85	2.42661E-06	7.09987E-08	1.44705E-05	0.003255865	2.29486E-05	0.008397496
6.855	8.63299E-06	4.47643E-08	9.16868E-06	0.002062952	2.29486E-05	0.008397894
6.86	5.75954E-05	-1.93527E-07	-3.89807E-05	-0.008770656	2.29495E-05	0.008398153
6.865	0.000149669	-6.45965E-07	-0.000130397	-0.029339275	2.29551E-05	0.008398288
6.87	0.000283178	-1.30538E-06	-0.000263624	-0.059315473	2.29754E-05	0.008398328
6.875	0.000420355	-1.98598E-06	-0.000401124	-0.090252906	2.302E-05	0.008398328
6.88	0.000508265	-2.42531E-06	-0.000489871	-0.110221063	2.30853E-05	0.008398328
6.885	0.000523145	-2.50427E-06	-0.00050582	-0.113809402	2.31545E-05	0.008398328
6.89	0.000463999	-2.21659E-06	-0.00044769	-0.100730302	2.32089E-05	0.008398328
6.895	0.000340071	-1.60659E-06	-0.00032444	-0.072999072	2.32382E-05	0.008398328
6.9	0.000189529	-8.61833E-07	-0.000173972	-0.039143774	2.32472E-05	0.008398328
6.905	6.9247E-05	-2.63955E-07	-5.31872E-05	-0.011967113	2.32484E-05	0.008398328
6.91	8.26775E-06	4.17126E-08	8.56223E-06	0.001926501	2.32485E-05	0.008398328
6.915	-5.49674E-06	1.13689E-07	2.31023E-05	0.005198009	2.32485E-05	0.008398328
6.92	1.01099E-05	4.01672E-08	8.24613E-06	0.00185538	2.32485E-05	0.008398328
6.925	5.81396E-05	-1.93837E-07	-3.90368E-05	-0.008783272	2.32493E-05	0.008398328
6.93	0.000143988	-6.15681E-07	-0.000124271	-0.027961041	2.32546E-05	0.008398328
6.935	0.000251302	-1.14522E-06	-0.000231261	-0.052033661	2.32705E-05	0.008398328
6.94	0.000358326	-1.67482E-06	-0.000338255	-0.076107467	2.3303E-05	0.008398328
6.945	0.000457204	-2.16542E-06	-0.000437368	-0.098407898	2.33558E-05	0.008398328
6.95	0.000535269	-2.55442E-06	-0.000515951	-0.116088882	2.34282E-05	0.008398328
6.955	0.000571895	-2.73903E-06	-0.000553238	-0.124478542	2.35109E-05	0.008398328
6.96	0.000575598	-2.75997E-06	-0.000557468	-0.125430307	2.35946E-05	0.008398328
6.965	0.000580776	-2.78728E-06	-0.000562985	-0.126671548	2.36799E-05	0.008398328
6.97	0.00059565	-2.86267E-06	-0.000578212	-0.130097683	2.37696E-05	0.008398328
6.975	0.00059797	-2.87632E-06	-0.000580969	-0.130717926	2.38599E-05	0.008398328
6.98	0.000580064	-2.78951E-06	-0.000563427	-0.126771081	2.3945E-05	0.008398328
6.985	0.00056151	-2.6987E-06	-0.000545079	-0.122642801	2.40247E-05	0.008398387
6.99	0.000562127	-2.70256E-06	-0.000545858	-0.122817996	2.41045E-05	0.00839917
6.995	0.000578474	-2.78487E-06	-0.000562491	-0.126560363	2.41891E-05	0.008399785
7	0.000590817	-2.84812E-06	-0.000575271	-0.129435904	2.42773E-05	0.008400218
7.005	0.000590072	-2.84688E-06	-0.000575021	-0.12937976	2.43653E-05	0.008401427
7.01	0.000574552	-2.77272E-06	-0.000560034	-0.12600776	2.44488E-05	0.008402446
7.015	0.000531654	-2.563E-06	-0.000517658	-0.116473151	2.45202E-05	0.008403637
7.02	0.000463969	-2.22964E-06	-0.000450302	-0.101317954	2.45746E-05	0.008405209
7.025	0.000401092	-1.91901E-06	-0.000387541	-0.087196784	2.46153E-05	0.008406364
7.03	0.000349654	-1.66503E-06	-0.000336227	-0.075651094	2.46462E-05	0.008407426
7.035	0.000284394	-1.34287E-06	-0.00027114	-0.061006449	2.46666E-05	0.008410027
7.04	0.000200324	-9.26857E-07	-0.000187094	-0.042096217	2.46767E-05	0.008412945
7.045	0.000118348	-5.2004E-07	-0.000104909	-0.023604598	2.46803E-05	0.008414999
7.05	4.90364E-05	-1.75132E-07	-3.52337E-05	-0.007927585	2.46809E-05	0.008416459
7.055	-9.79714E-06	1.18579E-07	2.40979E-05	0.005422017	2.46809E-05	0.008417564
7.06	-4.9077E-05	3.16442E-07	6.40668E-05	0.014415031	2.46815E-05	0.008419048
7.065	-4.41368E-05	2.96021E-07	5.99388E-05	0.013486224	2.4682E-05	0.008419949
7.07	1.25566E-05	1.86063E-08	3.88432E-06	0.000873971	2.46821E-05	0.008420529
7.075	8.99878E-05	-3.63337E-07	-7.32882E-05	-0.01648985	2.46841E-05	0.008422386
7.08	0.000158681	-7.03448E-07	-0.000142006	-0.031951263	2.46905E-05	0.008424092
7.085	0.000220478	-1.01036E-06	-0.000204014	-0.045903044	2.47028E-05	0.008425457
7.09	0.000267962	-1.24783E-06	-0.000251989	-0.056697591	2.47209E-05	0.008426628
7.095	0.000266639	-1.24474E-06	-0.000251364	-0.056556965	2.47389E-05	0.008427616
7.1	0.000207524	-9.547E-07	-0.000192759	-0.043370728	2.47498E-05	0.008428419
7.105	0.000134115	-5.91643E-07	-0.000119402	-0.026865545	2.47543E-05	0.008429018
7.11	9.66676E-05	-4.0501E-07	-8.16938E-05	-0.018381106	2.47567E-05	0.008429392
7.115	0.000102686	-4.33665E-07	-8.74842E-05	-0.019683954	2.47593E-05	0.008429529
7.12	0.000126337	-5.50657E-07	-0.000111124	-0.025002894	2.47634E-05	0.008429529
7.125	0.000143424	-6.36288E-07	-0.000128426	-0.028895938	2.47686E-05	0.008429529
7.13	0.00012873	-5.65554E-07	-0.000114134	-0.025680059	2.47728E-05	0.008429529
7.135	5.69209E-05	-2.11693E-07	-4.26358E-05	-0.009593046	2.47736E-05	0.008429529
7.14	-4.75751E-05	3.06681E-07	6.2094E-05	0.01397115	2.47741E-05	0.008430183
7.145	-0.000109143	6.15754E-07	0.000124527	0.028018626	2.47772E-05	0.008430971
7.15	-8.07938E-05	4.80844E-07	9.72667E-05	0.021885011	2.47788E-05	0.008431714
7.155	2.84334E-05	-5.54973E-08	-1.11036E-05	-0.002498308	2.4779E-05	0.008432247
7.16	0.000193652	-8.71476E-07	-0.000175964	-0.0395919	2.47885E-05	0.008432478
7.165	0.000373963	-1.76595E-06	-0.000356668	-0.080250315	2.48238E-05	0.0084326
7.17	0.000498849	-2.39006E-06	-0.000482746	-0.10861774	2.48867E-05	0.008432667
7.175	0.000510188	-2.45398E-06	-0.000495654	-0.111522151	2.49525E-05	0.008432715
7.18	0.000413057	-1.97948E-06	-0.000399778	-0.089950048	2.49956E-05	0.008432749
7.185	0.000276309	-1.30525E-06	-0.000263553	-0.059299487	2.50149E-05	0.008432753
7.19	0.000176992	-8.13248E-07	-0.000164153	-0.036934339	2.50228E-05	0.008432753
7.195	0.000140071	-6.29127E-07	-0.000126955	-0.028564945	2.50278E-05	0.008432753
7.2	0.000149902	-6.76788E-07	-0.000136586	-0.03073181	2.50335E-05	0.008432753
7.205	0.000192326	-8.86859E-07	-0.000179033	-0.040282415	2.50428E-05	0.008432753
7.21	0.00024058	-1.12779E-06	-0.000227714	-0.051235632	2.50575E-05	0.008432753
7.215	0.000245446	-1.1558E-06	-0.000233374	-0.052509183	2.50727E-05	0.008432753
7.22	0.000184846	-8.59846E-07	-0.000173573	-0.039053922	2.50813E-05	0.008432753
7.225	8.43235E-05	-3.64936E-07	-7.35827E-05	-0.016556118	2.50831E-05	0.008432753
7.23	-2.6687E-05	1.83203E-07	3.71493E-05	0.008358593	2.50833E-05	0.008432753
7.235	-0.0001426	7.56668E-07	0.000152991	0.034422951	2.50884E-05	0.008432753
7.24	-0.000258793	1.33297E-06	0.000269396	0.060614151	2.51054E-05	0.008432753
7.245	-0.000351858	1.79634E-06	0.000362975	0.081669375	2.51367E-05	0.008432753
7.25	-0.000407366	2.07442E-06	0.000419131	0.094304446	2.51786E-05	0.008432753
7.255	-0.000441762	2.24784E-06	0.000454153	0.102184413	2.52279E-05	0.008432753
7.26	-0.000465906	2.37067E-06	0.000478957	0.10776533	2.52828E-05	0.008432753
7.265	-0.000468692	2.38784E-06	0.000482422	0.108544967	2.53383E-05	0.008432753
7.27	-0.00045671	2.33117E-06	0.000470972	0.105968659	2.5391E-05	0.008432753
7.275	-0.000451086	2.30541E-06	0.000465767	0.104797614	2.54425E-05	0.008432753

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
8.258056641	0.007961224	0.705783363
8.264160156	0.007001515	0.642296404
8.270263672	0.007259619	0.66009921
8.276367188	0.007927832	0.679916329
8.282470703	0.011662494	0.867977331
8.288574219	0.017067208	1.101116742
8.294677734	0.019573489	1.161117073
8.30078125	0.020104951	1.087350412
8.306884766	0.017768002	0.899169926
8.312988281	0.01195224	0.641191707
8.319091797	0.009543987	0.52963046
8.325195313	0.013881161	0.688327686
8.331298828	0.014737647	0.735608437
8.337402344	0.009251356	0.589085473
8.343505859	0.014076984	0.922789738
8.349609375	0.017898799	0.985553476
8.355712891	0.018669516	0.983757339
8.361816406	0.0227987	1.123158721
8.367919922	0.026420483	1.145025372
8.374023438	0.028364974	1.149890412
8.380126953	0.024548584	1.080335988
8.386230469	0.015572344	0.812175267
8.392333984	0.012310887	0.770787932
8.3984375	0.017760116	1.247980789
8.404541016	0.020671467	1.447635191
8.410644531	0.016013331	1.266814751
8.416748047	0.008707896	0.800789085
8.422851563	0.003404587	0.37522964
8.428955078	0.002690997	0.376902264
8.435058594	0.003770701	0.508520771
8.441162109	0.006680618	0.786830079
8.447265625	0.002181178	0.296332159
8.453369141	0.007504905	1.282074751
8.459472656	0.012667022	2.437451956
8.465576172	0.013940215	2.782102104
8.471679688	0.014557317	4.536587722
8.477783203	0.013422541	3.038365259
8.483886719	0.012414228	1.929993168
8.489990234	0.013748973	2.328978713
8.49609375	0.016135192	4.975068125
8.502197266	0.016384417	7.419151844
8.508300781	0.014324712	3.22193917
8.514404297	0.012284222	2.53424837
8.520507813	0.012128601	3.310877634
8.526611328	0.01387405	2.749746354
8.532714844	0.017957738	2.068958638
8.538818359	0.022979646	1.947837061
8.544921875	0.025579833	1.924942771
8.551025391	0.025445995	1.732935851
8.557128906	0.026136701	1.526056298
8.563232422	0.028147342	1.432647322
8.569335938	0.029572393	1.411174831
8.575439453	0.027506358	1.321288791
8.581542969	0.02063757	1.086007219
8.587646484	0.016034264	1.005099263
8.59375	0.015892926	1.287234631
8.599853516	0.01753004	1.732386495
8.605957031	0.022457251	1.996128723
8.612060547	0.028075064	1.887410599
8.618164063	0.029187879	1.610490169
8.624267578	0.02463295	1.329460968
8.630371094	0.021442074	1.232155936
8.636474609	0.023713372	1.436203903
8.642578125	0.028669366	1.685552685
8.648681641	0.03176596	1.699459074
8.654785156	0.030807793	1.437994863
8.660888672	0.026080335	1.114701629
8.666992188	0.018148632	0.85144955
8.673095703	0.010602872	0.656266785
8.679199219	0.009845197	0.799457067
8.685302734	0.01520061	1.164873121
8.69140625	0.022377844	1.268930187
8.697509766	0.026355213	1.188059706
8.703613281	0.024413503	1.024174242
8.709716797	0.018927229	0.838293453
8.715820313	0.014716447	0.74341419
8.721923828	0.012014868	0.734094449
8.728027344	0.012108753	0.883258873
8.734130859	0.018966327	1.497178045
8.740234375	0.024865789	2.108121895
8.746337891	0.02250193	2.235612156
8.752441406	0.014296633	1.21414741
8.758544922	0.014246843	0.930510419
8.764648438	0.012557068	0.962300596
8.770751953	0.006794732	1.049658831
8.776855469	0.005180431	1.543890197
8.782958984	0.004139917	1.029551573
8.7890625	0.004292072	0.914896817
8.795166016	0.007089706	1.543478216
8.801269531	0.009725289	2.562236465
8.807373047	0.012247493	2.28280477
8.813476563	0.012768518	2.13873058
8.819580078	0.01130867	2.573114282
8.825683594	0.010971464	3.94698409
8.831787109	0.013819782	3.310941007
8.837890625	0.015601974	3.223107832
8.843994141	0.01676224	1.919627636
8.850097656	0.016712263	1.300762764
8.856201172	0.016509487	1.138901969
8.862304688	0.016291598	1.230421612
8.868408203	0.013772632	1.326160409
8.874511719	0.013958584	1.392006732
8.880615234	0.019977632	1.456891338
8.88671875	0.023678044	1.379774219

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
7.28	-0.00044627	2.28387E-06	0.000461415	0.103818348	2.54928E-05	0.008432753
7.285	-0.000422152	2.16691E-06	0.00043778	0.098500602	2.55378E-05	0.008432753
7.29	-0.000376418	1.94238E-06	0.000392413	0.088292873	2.55736E-05	0.008433638
7.295	-0.00032051	1.66666E-06	0.000336692	0.075755723	2.55996E-05	0.008435105
7.3	-0.000262385	1.37908E-06	0.0002786	0.062684925	2.5617E-05	0.008436799
7.305	-0.000202211	1.08053E-06	0.000218281	0.049113184	2.56273E-05	0.008438162
7.31	-0.000153885	8.39114E-07	0.000169508	0.03813923	2.56333E-05	0.008440657
7.315	-0.000157525	8.53618E-07	0.00017244	0.038798941	2.56396E-05	0.008442295
7.32	-0.000233379	1.2262E-06	0.000247723	0.055737679	2.56534E-05	0.00844461
7.325	-0.000348121	1.79362E-06	0.000362369	0.081533101	2.5684E-05	0.008446557
7.33	-0.00045789	2.33885E-06	0.000472526	0.106318292	2.5737E-05	0.008447843
7.335	-0.000539712	2.74775E-06	0.000555102	0.124897929	2.58106E-05	0.008448588
7.34	-0.00056792	2.89295E-06	0.000584423	0.131495086	2.58921E-05	0.008450569
7.345	-0.000515598	2.63993E-06	0.000533296	0.119991712	2.59593E-05	0.008452126
7.35	-0.000392652	2.03565E-06	0.000411201	0.092520257	2.59983E-05	0.008453219
7.355	-0.000247877	1.32061E-06	0.000266736	0.060015666	2.60138E-05	0.00845399
7.36	-0.000122243	6.98239E-07	0.000141002	0.03172548	2.60176E-05	0.00845501
7.365	-2.40517E-05	2.1042E-07	4.24557E-05	0.009552539	2.60177E-05	0.008457483
7.37	3.66751E-05	-9.32398E-08	-1.88857E-05	-0.004249277	2.60181E-05	0.008460846
7.375	3.01306E-05	-6.44496E-08	-1.30661E-05	-0.002939879	2.60183E-05	0.008463999
7.38	-4.14508E-05	2.87967E-07	5.81427E-05	0.013082097	2.60187E-05	0.008466663
7.385	-0.000115294	6.5464E-07	0.000132229	0.029751562	2.60221E-05	0.008470482
7.39	-0.000129898	7.29897E-07	0.000147434	0.033172709	2.60264E-05	0.008475459
7.395	-7.87108E-05	4.79248E-07	9.67877E-05	0.021777234	2.60279E-05	0.00847993
7.4	1.88723E-05	-2.35243E-09	-5.20826E-07	-0.000117186	2.6028E-05	0.008483855
7.405	0.00014721	-6.38298E-07	-0.000128987	-0.029022111	2.60335E-05	0.008487164
7.41	0.000268442	-1.24217E-06	-0.000250962	-0.056466494	2.60517E-05	0.008491327
7.415	0.000321515	-1.51125E-06	-0.000305313	-0.068695472	2.60778E-05	0.008497046
7.42	0.000278763	-1.30632E-06	-0.000263904	-0.059378507	2.60975E-05	0.008501965
7.425	0.000165051	-7.48489E-07	-0.000151193	-0.034018327	2.61044E-05	0.008508792
7.43	1.48092E-05	-7.53157E-09	-1.49024E-06	-0.000335304	2.61044E-05	0.008515689
7.435	-0.00014575	7.87204E-07	0.000159065	0.035789724	2.61098E-05	0.008521792
7.44	-0.000277116	1.44039E-06	0.000291017	0.065478735	2.61292E-05	0.0085272 6
7.445	-0.000335303	1.73316E-06	0.000350155	0.078784956	2.61576E-05	0.008532379
7.45	-0.000317479	1.64906E-06	0.000333162	0.07496148	2.61831E-05	0.008537219
7.455	-0.000272603	1.42892E-06	0.000288681	0.064953113	2.62019E-05	0.008541761
7.46	-0.00024998	1.31731E-06	0.00026613	0.05987924	2.62177E-05	0.008545973
7.465	-0.000262789	1.38064E-06	0.000278926	0.062758405	2.62351E-05	0.008549833
7.47	-0.00031136	1.62128E-06	0.000327551	0.073698864	2.62596E-05	0.008553342
7.475	-0.000390636	2.01531E-06	0.00040715	0.09160882	2.62982E-05	0.008556525
7.48	-0.000460946	2.36745E-06	0.000478279	0.10761276	2.63519E-05	0.008559424
7.485	-0.000467384	2.40517E-06	0.000485895	0.109326468	2.64071E-05	0.008563912
7.49	-0.000396601	2.06025E-06	0.000416202	0.093645528	2.64468E-05	0.008569596
7.495	-0.00027889	1.48131E-06	0.000299228	0.067326277	2.64665E-05	0.008574746
7.5	-0.000143191	8.11601E-07	0.000163922	0.03688248	2.64717E-05	0.008579396
7.505	3.04794E-06	8.81341E-08	1.77656E-05	0.003997249	2.64717E-05	0.008583433
7.51	0.000148172	-6.31924E-07	-0.000127693	-0.028730878	2.64772E-05	0.008586938
7.515	0.000255762	-1.16838E-06	-0.000236057	-0.053112777	2.64938E-05	0.008589863
7.52	0.000301395	-1.39894E-06	-0.000282628	-0.063591333	2.65167E-05	0.00859214
7.525	0.000305224	-1.42207E-06	-0.000287299	-0.064642303	2.65403E-05	0.008593787
7.53	0.000286125	-1.33143E-06	-0.000268984	-0.060521436	2.6561E-05	0.008595066
7.535	0.000229756	-1.05594E-06	-0.000213318	-0.047996567	2.65743E-05	0.00859602
7.54	0.000141295	-6.1982E-07	-0.0001252	-0.028170097	2.65793E-05	0.008596666
7.545	6.47075E-05	-2.40238E-07	-4.85089E-05	-0.010914504	2.65804E-05	0.008597405
7.55	2.47264E-05	-4.08165E-08	-8.21864E-06	-0.001849195	2.65806E-05	0.008599162
7.555	1.04947E-05	3.12863E-08	6.34851E-06	0.001428415	2.65806E-05	0.008600807
7.56	1.52495E-05	9.46562E-09	1.93924E-06	0.00043633	2.65806E-05	0.008602231
7.565	4.17698E-05	-1.20423E-07	-2.43065E-05	-0.005468955	2.65811E-05	0.00860343
7.57	7.61113E-05	-2.90032E-07	-5.85774E-05	-0.013179922	2.65826E-05	0.008604398
7.575	9.04378E-05	-3.61297E-07	-7.2977E-05	-0.016419822	2.65846E-05	0.008605123
7.58	8.28068E-05	-3.23171E-07	-6.5273E-05	-0.014686421	2.65864E-05	0.008605601
7.585	9.54681E-05	-3.84094E-07	-7.75831E-05	-0.017456196	2.65887E-05	0.008605833
7.59	0.000163229	-7.17768E-07	-0.000145002	-0.032625471	2.65954E-05	0.008605856
7.595	0.000266226	-1.22754E-06	-0.000247998	-0.05579958	2.66133E-05	0.008605856
7.6	0.000370138	-1.74363E-06	-0.000352249	-0.079256065	2.66479E-05	0.008605856
7.605	0.000463251	-2.20787E-06	-0.000446012	-0.100352619	2.67022E-05	0.008605856
7.61	0.000519729	-2.49263E-06	-0.000503524	-0.113292811	2.67704E-05	0.008605856
7.615	0.00049992	-2.40048E-06	-0.000484903	-0.109103087	2.68336E-05	0.008606128
7.62	0.0004159	-1.9888E-06	-0.000401719	-0.090386884	2.68773E-05	0.008606443
7.625	0.000328418	-1.55765E-06	-0.000314608	-0.07078673	2.69046E-05	0.008606724
7.63	0.00026585	-1.24905E-06	-0.000252259	-0.056758197	2.69224E-05	0.008607392
7.635	0.000203042	-9.39367E-07	-0.000189692	-0.042680594	2.69329E-05	0.008607758
7.64	0.00012686	-5.6264E-07	-0.000113583	-0.025556071	2.69369E-05	0.008607774
7.645	6.71458E-05	-2.66152E-07	-5.36859E-05	-0.012079317	2.69381E-05	0.008609009
7.65	4.10985E-05	-1.36336E-07	-2.7461E-05	-0.006178715	2.69385E-05	0.008609746
7.655	1.81883E-05	-2.30854E-08	-4.58267E-06	-0.001031101	2.69386E-05	0.008609943
7.66	-2.92409E-05	2.11258E-07	4.27574E-05	0.00962041	2.69388E-05	0.008609943
7.665	-9.08331E-05	5.16314E-07	0.000104381	0.023485637	2.69409E-05	0.008609943
7.67	-0.000158366	8.51255E-07	0.000172039	0.038708782	2.69472E-05	0.008609943
7.675	-0.000242087	1.26723E-06	0.000256063	0.05761417	2.6962E-05	0.008609943
7.68	-0.000320942	1.66132E-06	0.000335665	0.075524569	2.69881E-05	0.008609943
7.685	-0.000335118	1.73719E-06	0.000350987	0.078972168	2.70164E-05	0.008609943
7.69	-0.000258907	1.36499E-06	0.000275782	0.06205096	2.70334E-05	0.008609943
7.695	-0.000134725	7.52516E-07	0.000152032	0.03420719	2.7038E-05	0.008609943
7.7	-1.61266E-05	1.64826E-07	3.32977E-05	0.007491981	2.7038E-05	0.008610237
7.705	7.30218E-05	-2.79211E-07	-5.64091E-05	-0.012692049	2.70394E-05	0.008610417
7.71	0.000111703	-4.75071E-07	-9.59767E-05	-0.021594764	2.70425E-05	0.00861059
7.715	7.42114E-05	-2.94098E-07	-5.94089E-05	-0.013367001	2.70439E-05	0.00861059
7.72	-2.51135E-05	1.95114E-07	3.94385E-05	0.008873665	2.70441E-05	0.00861059
7.725	-0.000122733	6.79069E-07	0.000137218	0.030874149	2.70479E-05	0.00861059
7.73	-0.000168648	9.08885E-07	0.00018365	0.041321174	2.70551E-05	0.00861059
7.735	-0.000166212	8.9941E-07	0.000181734	0.040890237	2.70621E-05	0.00861059
7.74	-0.000132312	7.33744E-07	0.00014826	0.033358406	2.70665E-05	0.008610656
7.745	-6.87694E-05	4.2054E-07	8.4975E-05	0.019119368	2.70677E-05	0.008610984
7.75	6.3433E-06	4.85193E-08	9.8088E-06	0.002206979	2.70677E-05	0.008611016
7.755	6.02736E-05	-2.19829E-07	-4.44087E-05	-0.009991958	2.70686E-05	0.008611016
7.76	9.26528E-05	-3.81451E-07	-7.70623E-05	-0.017339027	2.70708E-05	0.008611016
7.765	0.000126202	-5.48723E-07	-0.000110856	-0.024942534	2.70748E-05	0.008611016
7.77	0.000156257	-6.99339E-07	-0.000141282	-0.03178854	2.7081E-05	0.008611016
7.775	0.000159278	-7.16459E-07	-0.00014474	-0.032566573	2.70874E-05	0.008611016
7.78	0.000144236	-6.43225E-07	-0.000129942	-0.029237048	2.70927E-05	0.008611016
7.785	0.000153245	-6.88043E-07	-0.000138999	-0.031274693	2.70986E-05	0.008611016
7.79	0.000201723	-9.2893E-07	-0.000187663	-0.042224086	2.71089E-05	0.008611016
7.795	0.000250745	-1.17448E-06	-0.000237265	-0.053384582	2.71248E-05	0.008611016

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
8.892822266	0.023283859	1.306186217
8.898925781	0.02124184	1.346458779
8.905029297	0.020349971	1.640551915
8.911132813	0.02036976	2.084353502
8.917236328	0.022482507	2.17150041
8.923339844	0.025293401	1.803891873
8.929443359	0.027633783	1.516596534
8.935546875	0.029013961	1.400995911
8.941650391	0.028604124	1.314615576
8.947753906	0.029609814	1.2531173
8.953857422	0.033062299	1.294017955
8.959960938	0.033813078	1.349060476
8.966064453	0.029463677	1.290539926
8.972167969	0.02535178	1.195613667
8.978271484	0.02643868	1.175343385
8.984375	0.030826912	1.163169766
8.990478516	0.0340596	1.136889467
8.996582031	0.034290132	1.114281714
9.002685547	0.03062426	1.039830477
9.008789063	0.022140002	0.851393638
9.014892578	0.013667597	0.621332376
9.020996094	0.014121739	0.67603551
9.027099609	0.01794212	0.798654986
9.033203125	0.018750069	0.818987062
9.039306641	0.017475045	0.784742414
9.045410156	0.01646172	0.751951844
9.051513672	0.014843309	0.737000612
9.057617188	0.011954879	0.687878087
9.063720703	0.009244261	0.56303435
9.069824219	0.006880024	0.482096561
9.075927734	0.010982853	0.9335868
9.08203125	0.018838042	1.545653465
9.088134766	0.021540378	1.79318536
9.094238281	0.014528656	2.319159631
9.100341797	0.009464311	2.402825306
9.106445313	0.006715861	2.452532648
9.112548828	0.012217295	1.722925247
9.118652344	0.01737497	1.555268077
9.124755859	0.016773654	1.666297136
9.130859375	0.014345973	2.395444662
9.136962891	0.013454301	3.925271577
9.143066406	0.012265375	2.880714236
9.149169922	0.008836834	2.647442087
9.155273438	0.006195543	22.24818705
9.161376953	0.008585575	6.628760825
9.167480469	0.013541426	10.66284626
9.173583984	0.015763623	3.624701285
9.1796875	0.015190377	2.232300396
9.185791016	0.012710169	1.426023887
9.191894531	0.011384685	0.998986503
9.197998047	0.012037557	0.85533027
9.204101563	0.013741947	0.868662731
9.210205078	0.019665021	1.227480197
9.216308594	0.023970924	1.478537062
9.222412109	0.022814369	1.393721994
9.228515625	0.020502966	1.218993841
9.234619141	0.020886621	1.272150948
9.240722656	0.023697537	1.487790843
9.246826172	0.030514003	1.646222778
9.252929688	0.038549786	1.864488181
9.259033203	0.041799084	1.973161518
9.265136719	0.040042063	1.754761001
9.271240234	0.036149127	1.438119913
9.27734375	0.032079465	1.258488192
9.283447266	0.028239304	1.185215716
9.289550781	0.025039477	1.187765717
9.295654297	0.022604629	1.167299843
9.301757813	0.023383486	1.110686399
9.307861328	0.02942659	1.187344408
9.313964844	0.036412025	1.37656979
9.320068359	0.040182993	1.518626033
9.326171875	0.040068555	1.455630144
9.332275391	0.035790227	1.275522908
9.338378906	0.029455756	1.091845856
9.344482422	0.025456693	0.99644768
9.350585938	0.025263449	1.042327581
9.356689453	0.025661635	1.110284573
9.362792969	0.022329898	1.011076343
9.368896484	0.016183732	0.777090928
9.375	0.013694626	0.688882863
9.381103516	0.017173296	0.880346829
9.387207031	0.020845517	1.090419045
9.393310547	0.019468756	1.075861871
9.399414063	0.014665914	0.927609231
9.405517578	0.008920796	0.702874923
9.411621094	0.004344826	0.401150363
9.417724609	0.002948588	0.291798583
9.423828125	0.002047111	0.22938536
9.429931641	0.005537985	0.690678101
9.436035156	0.008322821	1.053078548
9.442138672	0.005336501	0.763621452
9.448242188	0.001944124	0.374751962
9.454345703	0.008543827	2.190699585
9.460449219	0.012429529	3.811143471
9.466552734	0.014113427	6.904565896
9.47265625	0.014442714	16.35420796
9.478759766	0.014295138	3.605924571
9.484863281	0.014282959	2.051710051
9.490966797	0.015337518	1.65617879
9.497070313	0.017447753	1.60594565
9.503173828	0.018298039	1.638232518
9.509277344	0.017228256	1.570742443
9.515380859	0.016515555	1.493520341
9.521484375	0.018884389	1.707686102

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
7.8	0.000257024	-1.20971E-06	-0.000244381	-0.054985804	2.71415E-05	0.008611016
7.805	0.000214214	-1.00195E-06	-0.000202401	-0.045540184	2.71531E-05	0.008611016
7.81	0.000129578	-5.8648E-07	-0.000118454	-0.026652042	2.71573E-05	0.008611016
7.815	1.11542E-05	-2.23032E-09	-4.09769E-07	-9.21981E-05	2.71573E-05	0.008611016
7.82	-0.000103381	5.65214E-07	0.000114232	0.0257022	2.716E-05	0.008611016
7.825	-0.000159019	8.42661E-07	0.000170283	0.038313622	2.71664E-05	0.008611016
7.83	-0.000150726	8.02561E-07	0.00016218	0.036490445	2.71722E-05	0.008611016
7.835	-0.00014054	7.50548E-07	0.00015167	0.034125699	2.71772E-05	0.008611016
7.84	-0.00018586	9.72052E-07	0.000196422	0.04419499	2.71859E-05	0.008611016
7.845	-0.000283663	1.45417E-06	0.000293817	0.066108807	2.72062E-05	0.008611016
7.85	-0.000404402	2.05129E-06	0.000414431	0.093247014	2.72476E-05	0.008611016
7.855	-0.000534651	2.69707E-06	0.00054486	0.122593553	2.73198E-05	0.008611016
7.86	-0.000651773	3.28005E-06	0.000662588	0.149082403	2.74272E-05	0.008611016
7.865	-0.000708604	3.56636E-06	0.000720401	0.162090177	2.75541E-05	0.008611016
7.87	-0.000689787	3.47784E-06	0.000702514	0.158065686	2.76743E-05	0.008611016
7.875	-0.000636476	3.21674E-06	0.000649755	0.146194905	2.77767E-05	0.008611016
7.88	-0.000588375	2.97996E-06	0.000601914	0.135430544	2.78642E-05	0.00861126
7.885	-0.000557831	2.82919E-06	0.00057145	0.128576345	2.79429E-05	0.008611427
7.89	-0.000561673	2.84806E-06	0.000575264	0.129434507	2.80226E-05	0.008611824
7.895	-0.000610739	3.09152E-06	0.000624458	0.140502996	2.81169E-05	0.008613839
7.9	-0.00067223	3.39864E-06	0.000686513	0.154465473	2.82311E-05	0.008616047
7.905	-0.000691139	3.49675E-06	0.000706337	0.15892572	2.83518E-05	0.008617679
7.91	-0.000649309	3.29391E-06	0.000665349	0.149703579	2.84584E-05	0.008621503
7.915	-0.000581362	2.96008E-06	0.000597897	0.134526761	2.85438E-05	0.00862414
7.92	-0.000523475	2.67487E-06	0.000540272	0.121561091	2.86131E-05	0.008626187
7.925	-0.000471183	2.41713E-06	0.000488198	0.109844489	2.86692E-05	0.008629151
7.93	-0.000414344	2.13644E-06	0.000431487	0.097084627	2.87126E-05	0.008635355
7.935	-0.000366736	1.9009E-06	0.000383902	0.086377897	2.87465E-05	0.008641825
7.94	-0.000325513	1.69723E-06	0.000342754	0.077119608	2.87733E-05	0.00864868
7.945	-0.000262806	1.38724E-06	0.00028013	0.063029308	2.87908E-05	0.008657555
7.95	-0.000180568	9.79196E-07	0.000197699	0.044482216	2.8799E-05	0.008668603
7.955	-0.000118464	6.68951E-07	0.000135027	0.030380968	2.88026E-05	0.008682303
7.96	-0.000104545	5.96427E-07	0.000120376	0.027084646	2.88053E-05	0.008695012
7.965	-0.000135385	7.45835E-07	0.000150566	0.033877364	2.881E-05	0.008705999
7.97	-0.000198275	1.05483E-06	0.000213001	0.047925245	2.88199E-05	0.008715838
7.975	-0.000281726	1.46706E-06	0.000296292	0.066665769	2.884E-05	0.008724219
7.98	-0.000356599	1.83882E-06	0.000371401	0.08356531	2.88721E-05	0.008731736
7.985	-0.000382122	1.96749E-06	0.000397399	0.08941471	2.8909E-05	0.008744449
7.99	-0.000358982	1.85435E-06	0.000374536	0.084270541	2.89416E-05	0.008756362
7.995	-0.000342433	1.77184E-06	0.000357865	0.080519653	2.89712E-05	0.008767658
8	-0.000376906	1.94126E-06	0.000392097	0.088221862	2.90071E-05	0.008778308
8.005	-0.000455566	2.33052E-06	0.000470741	0.105916821	2.90596E-05	0.008788324
8.01	-0.000551942	2.80945E-06	0.000567496	0.127686536	2.91366E-05	0.008797763
8.015	-0.000634976	3.22493E-06	0.000651428	0.146571275	2.92385E-05	0.008806697
8.02	-0.000648509	3.29897E-06	0.000666384	0.149936425	2.93448E-05	0.008815186
8.025	-0.000539722	2.76799E-06	0.000559095	0.125796483	2.94184E-05	0.008825131
8.03	-0.000320627	1.68798E-06	0.000340891	0.07670046	2.94444E-05	0.008839389
8.035	-6.65718E-05	4.29918E-07	8.67409E-05	0.019516697	2.94455E-05	0.008852662
8.04	0.000141901	-6.07028E-07	-0.000122715	-0.027610829	2.94506E-05	0.008864935
8.045	0.000261637	-1.20738E-06	-0.000243973	-0.05489392	2.94679E-05	0.008876062
8.05	0.000283129	-1.32232E-06	-0.000267188	-0.060117382	2.94881E-05	0.008885916
8.055	0.000206148	-9.49144E-07	-0.000191784	-0.043151351	2.94989E-05	0.008894464
8.06	5.13371E-05	-1.88062E-07	-3.80095E-05	-0.008552127	2.94995E-05	0.008902772
8.065	-0.000122233	6.69559E-07	0.000135256	0.030432634	2.95033E-05	0.008914694
8.07	-0.000266437	1.38452E-06	0.00027969	0.062930213	2.95213E-05	0.008925784
8.075	-0.000374995	1.9247E-06	0.000388808	0.087481791	2.95568E-05	0.008936223
8.08	-0.00043359	2.21894E-06	0.000448243	0.100854717	2.96043E-05	0.008947853
8.085	-0.000422958	2.17035E-06	0.000438424	0.098645442	2.96495E-05	0.008962691
8.09	-0.000379997	1.9596E-06	0.000395841	0.089064139	2.9686E-05	0.008976955
8.095	-0.000368254	1.90165E-06	0.00038413	0.086429313	2.97203E-05	0.008990586
8.1	-0.000400403	2.06141E-06	0.000416412	0.093692727	2.97608E-05	0.009003558
8.105	-0.00043566	2.23828E-06	0.00045215	0.101733856	2.98088E-05	0.009015894
8.11	-0.000430922	2.21828E-06	0.000448108	0.100824374	2.98557E-05	0.009027622
8.115	-0.000379185	1.96532E-06	0.000396995	0.089323844	2.98921E-05	0.009043747
8.12	-0.000297404	1.56261E-06	0.000315625	0.071015661	2.99144E-05	0.009059153
8.125	-0.000195247	1.05768E-06	0.000213608	0.048061698	2.99241E-05	0.009073613
8.13	-9.43385E-05	5.56876E-07	0.00011243	0.025296671	2.99263E-05	0.00908725
8.135	-3.95118E-05	2.82573E-07	5.70135E-05	0.012828029	2.99267E-05	0.00909999
8.14	-3.79356E-05	2.72325E-07	5.49439E-05	0.012362372	2.99271E-05	0.009111754
8.145	-4.06806E-05	2.84852E-07	5.74751E-05	0.012931907	2.99275E-05	0.009122523
8.15	-1.98874E-05	1.80857E-07	3.64647E-05	0.00820456	2.99276E-05	0.009132291
8.155	-4.60636E-06	1.03109E-07	2.07579E-05	0.004670526	2.99276E-05	0.009141028
8.16	-2.17213E-05	1.85561E-07	3.74186E-05	0.008419187	2.99277E-05	0.009148714
8.165	-5.72324E-05	3.59874E-07	7.26404E-05	0.01634409	2.99285E-05	0.009155815
8.17	-9.6234E-05	5.51951E-07	0.000111451	0.025076401	2.99309E-05	0.009164636
8.175	-0.000151637	8.25559E-07	0.000166733	0.037514997	2.99367E-05	0.009172676
8.18	-0.000224056	1.18473E-06	0.000239301	0.053842797	2.99494E-05	0.009180088
8.185	-0.000279029	1.45933E-06	0.000294781	0.066325735	2.99691E-05	0.00918696
8.19	-0.000289298	1.51351E-06	0.000305726	0.068788429	2.99902E-05	0.009193337
8.195	-0.000255285	1.34835E-06	0.000272353	0.061279509	3.00067E-05	0.009199225
8.2	-0.000179121	9.73794E-07	0.000196673	0.044251432	3.00148E-05	0.009206541
8.205	-6.78515E-05	4.23726E-07	8.55343E-05	0.019245218	3.00159E-05	0.009213804
8.21	4.2722E-05	-1.25434E-07	-2.54117E-05	-0.005717637	3.00164E-05	0.009220162
8.215	0.000111505	-4.69558E-07	-9.49289E-05	-0.021359006	3.00196E-05	0.009225743
8.22	0.000135492	-5.92195E-07	-0.000119702	-0.026933061	3.00242E-05	0.009230531
8.225	0.000139054	-6.13415E-07	-0.000123989	-0.027897525	3.00291E-05	0.009234499
8.23	0.000128442	-5.64542E-07	-0.000114114	-0.025675538	3.00332E-05	0.009237703
8.235	9.14339E-05	-3.84799E-07	-7.77943E-05	-0.017503726	3.00354E-05	0.009240374
8.24	3.6498E-05	-1.15181E-07	-2.33166E-05	-0.005246233	3.00357E-05	0.009242547
8.245	-9.55721E-06	1.11576E-07	2.24996E-05	0.00506242	3.00357E-05	0.009244255
8.25	-4.51506E-05	2.86637E-07	5.787E-05	0.01302074	3.00362E-05	0.009245586
8.255	-9.69002E-05	5.41559E-07	0.000109375	0.024609319	3.00386E-05	0.009246747
8.26	-0.000173519	9.2052E-07	0.000185938	0.041836053	3.00462E-05	0.009247763
8.265	-0.000247123	1.28621E-06	0.000259818	0.058458951	3.00617E-05	0.009248656
8.27	-0.000287151	1.48675E-06	0.000300332	0.067574598	3.00825E-05	0.009251933
8.275	-0.000287894	1.49285E-06	0.000301562	0.067851474	3.01034E-05	0.009256462
8.28	-0.000256727	1.34033E-06	0.000270744	0.060917317	3.01201E-05	0.009261348
8.285	-0.000203353	1.07664E-06	0.000217464	0.048929312	3.01306E-05	0.009266031
8.29	-0.000152644	8.24368E-07	0.000166492	0.037460589	3.01364E-05	0.00927047
8.295	-0.000140977	7.64116E-07	0.000154318	0.0347215	3.01415E-05	0.009274628
8.3	-0.000176866	9.39828E-07	0.000189823	0.042710096	3.01494E-05	0.009278496
8.305	-0.000219234	1.14951E-06	0.000232191	0.052242867	3.01615E-05	0.009282101
8.31	-0.000218876	1.14888E-06	0.000232063	0.05221427	3.01736E-05	0.009285552
8.315	-0.000167778	8.96592E-07	0.000181085	0.040744226	3.01807E-05	0.009288875

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
9.527587891	0.024006854	1.892312998
9.533691406	0.026715687	1.776862483
9.539794922	0.024278181	1.558359407
9.545898438	0.02049386	1.394051987
9.552001953	0.019937783	1.3585546
9.558105469	0.020961334	1.319295895
9.564208984	0.023898699	1.238546604
9.5703125	0.029250528	1.229418134
9.576416016	0.030291411	1.220610898
9.582519531	0.027247642	1.246697409
9.588623047	0.0270687	1.368021035
9.594726563	0.031158585	1.428292156
9.600830078	0.036480481	1.424340091
9.606933594	0.042206645	1.501798712
9.613037109	0.045037738	1.610132212
9.619140625	0.040206059	1.618738841
9.625244141	0.03272393	1.524074786
9.631347656	0.030999212	1.447935445
9.637451172	0.03662709	1.497433077
9.643554688	0.042037347	1.513935934
9.649658203	0.042058119	1.430439361
9.655761719	0.038829954	1.341691811
9.661865234	0.034453392	1.369508006
9.66796875	0.030221361	1.53306697
9.674072266	0.02822781	1.637363279
9.680175781	0.028584453	1.462198199
9.686279297	0.031260471	1.286788204
9.692382813	0.034991299	1.28752059
9.698486328	0.033901125	1.318372881
9.704589844	0.027287381	1.296025265
9.710693359	0.021858623	1.315074974
9.716796875	0.021076676	1.426597282
9.722900391	0.02094601	1.40854977
9.729003906	0.019746652	1.231629621
9.735107422	0.019747737	1.200761309
9.741210938	0.017630172	1.270984046
9.747314453	0.013258228	1.239404704
9.753417969	0.012250875	1.177421638
9.759521484	0.015080439	1.322638756
9.765625	0.013046198	1.379631638
9.771728516	0.004677444	0.784084834
9.777832031	0.004347794	0.975281684
9.783935547	0.004175214	1.311160388
9.790039063	0.002433219	0.82806646
9.796142578	0.002799872	1.030575928
9.802246094	0.003608135	1.354294549
9.808349609	0.009230165	3.22141226
9.814453125	0.010659557	2.921490592
9.820556641	0.006694596	1.314740562
9.826660156	0.008004635	1.417571029
9.832763672	0.012411654	2.601365661
9.838867188	0.014911013	3.808620651
9.844970703	0.016800049	2.858741167
9.851074219	0.017616318	2.248779274
9.857177734	0.015331162	1.88304877
9.86328125	0.012902238	1.449676083
9.869384766	0.01630891	1.74275167
9.875488281	0.016020745	2.008332875
9.881591797	0.013529384	1.851048793
9.887695313	0.016894865	1.983029113
9.893798828	0.0234043	2.271191041
9.899902344	0.023015527	2.021307111
9.906005859	0.015315752	1.288095002
9.912109375	0.013478025	1.032312309
9.918212891	0.018360808	1.241951287
9.924316406	0.023432822	1.472207216
9.930419922	0.025595163	1.587628778
9.936523438	0.024306854	1.542140219
9.942626953	0.022787112	1.531668278
9.948730469	0.023735309	1.588673764
9.954833984	0.025369924	1.547532427
9.9609375	0.025860542	1.372847726
9.967041016	0.027032124	1.259387894
9.973144531	0.027420506	1.289814249
9.979248047	0.024866366	1.368898529
9.985351563	0.021292094	1.365229521
9.991455078	0.017880846	1.208838496
9.997558594	0.013633483	0.998614932
10.00366211	0.009584966	0.851145579
10.00976563	0.009299122	0.995335946
10.01586914	0.011326004	1.105322046
10.02197266	0.014487948	1.062818069
10.02807617	0.016704437	1.051661329
10.03417969	0.016426086	1.117852116
10.0402832	0.015133595	1.276637957
10.04638672	0.012861151	1.316932534
10.05249023	0.009052863	1.01184343
10.05859375	0.007370693	0.796532556
10.06469727	0.009361776	0.902359465
10.07080078	0.01055071	0.899117595
10.0769043	0.010822192	0.820046489
10.08300781	0.011837678	0.85166634
10.08911133	0.010385356	0.818240303
10.09521484	0.008474498	0.816980181
10.10131836	0.005051659	0.608345908
10.10742188	0.003042182	0.403187436
10.11352539	0.012176688	1.465392111
10.11962891	0.019462149	2.212854792
10.12573242	0.019818698	2.540652726
10.13183594	0.012115456	1.983176716
10.13793945	0.005827207	1.319036067
10.14404297	0.010842813	2.675651325
10.15014648	0.013481235	1.995555941
10.15625	0.01261916	1.304903068

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
8.32	-8.63835E-05	4.92755E-07	9.94909E-05	0.022385445	3.01826E-05	0.009292046
8.325	-2.05477E-06	7.20622E-08	1.44954E-05	0.003261464	3.01826E-05	0.009295028
8.33	3.39765E-05	-1.12177E-07	-2.27267E-05	-0.005113518	3.01829E-05	0.009297785
8.335	-2.95919E-05	1.9563E-07	3.94692E-05	0.008880564	3.01831E-05	0.009300301
8.34	-0.000185489	9.62163E-07	0.000194346	0.043727796	3.01918E-05	0.009302607
8.345	-0.000385065	1.94788E-06	0.000393486	0.088534302	3.02293E-05	0.009304771
8.35	-0.000589454	2.96042E-06	0.000598013	0.134553014	3.03171E-05	0.009306886
8.355	-0.000767724	3.8465E-06	0.000776965	0.174817163	3.04661E-05	0.009309044
8.36	-0.000891314	4.46411E-06	0.000901667	0.202875132	3.06669E-05	0.009311327
8.365	-0.000946079	4.74209E-06	0.000957792	0.215503248	3.08931E-05	0.009313791
8.37	-0.000935694	4.69728E-06	0.000948735	0.213465448	3.11144E-05	0.009316461
8.375	-0.000887913	4.46611E-06	0.000902026	0.202955865	3.13136E-05	0.009319333
8.38	-0.000830845	4.18815E-06	0.000845862	0.190318861	3.14881E-05	0.009322385
8.385	-0.000753183	3.80815E-06	0.000769086	0.173044288	3.16315E-05	0.009325589
8.39	-0.000635043	3.22704E-06	0.00065168	0.146628003	3.17334E-05	0.009328908
8.395	-0.000487954	2.50085E-06	0.000504971	0.113618586	3.17936E-05	0.009332286
8.4	-0.000327994	1.7088E-06	0.000344969	0.077617988	3.18208E-05	0.009335905
8.405	-0.000172467	9.35917E-07	0.000188849	0.042491047	3.18283E-05	0.009339878
8.41	-6.63081E-05	4.04388E-07	8.1488E-05	0.018334799	3.18294E-05	0.009345399
8.415	-5.09406E-05	3.20754E-07	6.45972E-05	0.014534374	3.18301E-05	0.009350838
8.42	-0.000126238	6.8652E-07	0.000138504	0.031163346	3.18341E-05	0.009356069
8.425	-0.000265098	1.36888E-06	0.000276373	0.062183818	3.18519E-05	0.009360211
8.43	-0.000438416	2.22427E-06	0.00044919	0.101067664	3.19004E-05	0.009363664
8.435	-0.000624405	3.14506E-06	0.000635203	0.142920608	3.1999E-05	0.009367497
8.44	-0.000797897	4.00694E-06	0.000809301	0.182092745	3.21599E-05	0.009371757
8.445	-0.000919831	4.61616E-06	0.000932357	0.209780269	3.23737E-05	0.00937598
8.45	-0.00096913	4.86672E-06	0.000982954	0.221164746	3.26111E-05	0.009380749
8.455	-0.000967391	4.86402E-06	0.000982405	0.221041147	3.28476E-05	0.009386166
8.46	-0.000938499	4.72629E-06	0.000954576	0.214779625	3.30702E-05	0.009391731
8.465	-0.000877882	4.43119E-06	0.000894949	0.201363488	3.3265E-05	0.009397386
8.47	-0.000778668	3.94427E-06	0.000796568	0.17922779	3.34183E-05	0.009408303
8.475	-0.000645918	3.29008E-06	0.000664397	0.149489343	3.35237E-05	0.00942133
8.48	-0.000486786	2.5035E-06	0.000505491	0.113735476	3.35836E-05	0.009434367
8.485	-0.000323952	1.69597E-06	0.000342363	0.077031682	3.36101E-05	0.009449423
8.49	-0.00020599	1.10778E-06	0.000223552	0.050299134	3.36208E-05	0.009466378
8.495	-0.000176366	9.55619E-07	0.000192817	0.043383732	3.36287E-05	0.009481822
8.5	-0.00023323	1.23287E-06	0.000248838	0.055988653	3.36424E-05	0.009496763
8.505	-0.000323772	1.67984E-06	0.000339149	0.076308559	3.36689E-05	0.009511078
8.51	-0.000384081	1.97976E-06	0.000399746	0.089942855	3.37062E-05	0.009523969
8.515	-0.000388837	2.00543E-06	0.000404932	0.091109781	3.37444E-05	0.009535669
8.52	-0.000353725	1.83296E-06	0.000370083	0.083268753	3.37761E-05	0.00954656
8.525	-0.000306594	1.59559E-06	0.000322929	0.07265907	3.37998E-05	0.009556601
8.53	-0.000276406	1.4488E-06	0.000292461	0.065803749	3.38191E-05	0.009565706
8.535	-0.000277608	1.45313E-06	0.000293337	0.06600086	3.38386E-05	0.009578345
8.54	-0.000291104	1.51897E-06	0.000306641	0.068994256	3.386E-05	0.009590176
8.545	-0.000296672	1.54571E-06	0.000312043	0.070209729	3.38823E-05	0.009600702
8.55	-0.000312599	1.62312E-06	0.000327685	0.073729137	3.3907E-05	0.009610157
8.555	-0.000366105	1.88669E-06	0.000380941	0.085711814	3.39408E-05	0.009620354
8.56	-0.000446524	2.28514E-06	0.000461445	0.103825114	3.39912E-05	0.009630321
8.565	-0.000510287	2.60335E-06	0.000525735	0.118290305	3.4057E-05	0.0963976
8.57	-0.000517701	2.64383E-06	0.000533912	0.120130158	3.41248E-05	0.009648764
8.575	-0.000464513	2.38369E-06	0.000481347	0.108302963	3.41793E-05	0.009657337
8.58	-0.00038122	1.97266E-06	0.000398297	0.08961674	3.42161E-05	0.009665387
8.585	-0.000301346	1.5766E-06	0.000318276	0.071611993	3.4239E-05	0.009672769
8.59	-0.000247452	1.30761E-06	0.00026393	0.059384195	3.42545E-05	0.009679348
8.595	-0.000236068	1.24832E-06	0.000251952	0.056689088	3.42686E-05	0.009685561
8.6	-0.000263865	1.38336E-06	0.000279238	0.062828494	3.42862E-05	0.009692372
8.605	-0.000311261	1.61617E-06	0.000326279	0.073412687	3.43106E-05	0.009701725
8.61	-0.000376295	1.93685E-06	0.000391073	0.087991533	3.43464E-05	0.009711539
8.615	-0.000464639	2.37414E-06	0.000479424	0.107870441	3.4401E-05	0.009720715
8.62	-0.000550444	2.80108E-06	0.00056568	0.127278105	3.44776E-05	0.0097293
8.625	-0.000589086	2.99655E-06	0.00060517	0.136163279	3.45653E-05	0.009737826
8.63	-0.000556565	2.84027E-06	0.000573591	0.129058081	3.46436E-05	0.009748053
8.635	-0.000463145	2.3814E-06	0.000480875	0.108196807	3.46978E-05	0.009757917
8.64	-0.000341607	1.78147E-06	0.000359662	0.08092395	3.47273E-05	0.009767227
8.645	-0.000215933	1.15945E-06	0.000233996	0.052649123	3.47391E-05	0.009775737
8.65	-8.97581E-05	5.33602E-07	0.000107576	0.024204547	3.47411E-05	0.009783186
8.655	2.84883E-05	-5.45567E-08	-1.12182E-05	-0.002524104	3.47413E-05	0.009789363
8.66	0.000122154	-5.22492E-07	-0.000105726	-0.023788341	3.47451E-05	0.009794455
8.665	0.000179003	-8.09387E-07	-0.000163668	-0.036825232	3.47532E-05	0.009798429
8.67	0.000179425	-8.17822E-07	-0.000165367	-0.037207592	3.47613E-05	0.009801428
8.675	0.000107791	-4.69114E-07	-9.49073E-05	-0.02135414	3.47642E-05	0.009803721
8.68	-1.28821E-05	1.24479E-07	2.50272E-05	0.00563113	3.47643E-05	0.009805416
8.685	-0.000134605	7.25853E-07	0.000146526	0.032968449	3.47689E-05	0.009806621
8.69	-0.000223269	1.16543E-06	0.000235332	0.052949717	3.47815E-05	0.009807468
8.695	-0.000266013	1.37849E-06	0.000278374	0.062634067	3.47994E-05	0.009809244
8.7	-0.000265638	1.37783E-06	0.000278241	0.06260419	3.48172E-05	0.009810972
8.705	-0.000243224	1.26696E-06	0.000255837	0.057563399	3.48321E-05	0.009812507
8.71	-0.000232766	1.21406E-06	0.000245149	0.055158533	3.48458E-05	0.009813851
8.715	-0.000255067	1.32313E-06	0.000267187	0.060117145	3.48623E-05	0.009815001
8.72	-0.000296571	1.52814E-06	0.000308606	0.069436302	3.48845E-05	0.009815969
8.725	-0.000329986	1.69397E-06	0.000342106	0.076973806	3.4912E-05	0.009816778
8.73	-0.000345802	1.77287E-06	0.000358044	0.080559911	3.49422E-05	0.009817467
8.735	-0.000346415	1.77624E-06	0.000358726	0.080713379	3.49726E-05	0.009818086
8.74	-0.000334637	1.71768E-06	0.000346892	0.078050749	3.50009E-05	0.009818635
8.745	-0.000322035	1.65416E-06	0.000334058	0.075163047	3.50271E-05	0.009819111
8.75	-0.000322143	1.6529E-06	0.000333804	0.075105848	3.50533E-05	0.00981951
8.755	-0.000338721	1.73286E-06	0.000349959	0.078740885	3.50823E-05	0.009819832
8.76	-0.000378116	1.92563E-06	0.000388905	0.087503553	3.51185E-05	0.009820083
8.765	-0.000447388	2.26676E-06	0.000457813	0.103007946	3.5169E-05	0.009820275
8.77	-0.000535852	2.70398E-06	0.000546131	0.122879395	3.52416E-05	0.00982043
8.775	-0.0006299	3.16996E-06	0.000640255	0.144057367	3.53419E-05	0.009820575
8.78	-0.000724696	3.64083E-06	0.000735362	0.165456414	3.54746E-05	0.009820739
8.785	-0.000804658	4.03952E-06	0.000815887	0.183574636	3.56383E-05	0.009820952
8.79	-0.000857655	4.30534E-06	0.000869576	0.195654558	3.58242E-05	0.009821238
8.795	-0.000892357	4.48085E-06	0.000905023	0.203630207	3.60254E-05	0.009821613
8.8	-0.000901249	4.52917E-06	0.000914781	0.205825717	3.62307E-05	0.009822177
8.805	-0.000861055	4.33447E-06	0.000875441	0.196974228	3.64181E-05	0.009826126
8.81	-0.000778548	3.92899E-06	0.00079351	0.17853986	3.65713E-05	0.009830112
8.815	-0.000680214	3.4432E-06	0.00069536	0.15645592	3.66883E-05	0.009834094
8.82	-0.000593967	3.01507E-06	0.000608862	0.13699401	3.67774E-05	0.009838219
8.825	-0.000558866	2.83841E-06	0.000573171	0.128963536	3.68564E-05	0.009843068
8.83	-0.000594628	3.01258E-06	0.000608364	0.136881934	3.69457E-05	0.009849074
8.835	-0.000679318	3.43073E-06	0.000692854	0.155892253	3.70624E-05	0.009856205

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
10.16235352	0.012224165	1.40277521
10.16845703	0.006854088	1.400391931
10.17456055	0.004041632	1.65623949
10.18066406	0.008449754	2.491370636
10.18676758	0.01566757	1.739349949
10.19287109	0.015758473	1.225982852
10.19897461	0.011283186	0.858661919
10.20507813	0.009388545	0.870168497
10.21118164	0.008532002	1.177449467
10.21728516	0.009946547	1.698118743
10.22338867	0.009808056	1.160889634
10.22949219	0.010658438	0.821437348
10.2355957	0.010137501	0.629521819
10.24169922	0.009932189	0.653172466
10.24780273	0.012122184	0.941203799
10.25390625	0.01660243	1.306869831
10.26000977	0.018173425	1.299740998
10.26611328	0.013483502	0.914963545
10.2722168	0.007662764	0.513193023
10.27832031	0.004606591	0.322915234
10.28442383	0.003430711	0.262693227
10.29052734	0.00814766	0.603212343
10.29663086	0.012741772	0.909490924
10.30273438	0.012026652	0.944870208
10.30883789	0.011669939	0.996411669
10.31494141	0.0106152	0.891003361
10.32104492	0.008046733	0.671758815
10.32714844	0.008727647	0.703376752
10.33325195	0.011825006	0.902997755
10.33935547	0.009450259	0.758548699
10.34545898	0.004879436	0.40554621
10.3515625	0.010970557	0.887637975
10.35766602	0.012404871	1.100781797
10.36376953	0.012503413	1.322695605
10.36987305	0.005924201	0.673663417
10.37597656	0.006322198	0.70642233
10.38208008	0.007555233	0.800888386
10.38818359	0.004977015	0.536449558
10.39428711	0.013963522	1.485040605
10.40039063	0.015220537	1.527369618
10.40649414	0.007721175	0.824816611
10.41259766	0.001667634	0.215689687
10.41870117	0.003601144	0.595222268
10.42480469	0.006385103	1.337217986
10.4309082	0.016644961	4.613189836
10.43701172	0.022448035	7.918796081
10.44311523	0.020647326	6.12262891
10.44921875	0.015681718	3.299347367
10.45532227	0.011936759	2.37845564
10.46142578	0.008277392	1.789653876
10.4675293	0.006197394	1.278276697
10.47363281	0.005199156	0.921963794
10.47973633	0.005641163	0.84334761
10.48583984	0.010854208	1.501250841
10.49194336	0.011523723	1.853048003
10.49804688	0.009006475	1.851795395
10.50415039	0.008011834	1.405222415
10.51025391	0.011282078	1.370780277
10.51635742	0.015500989	1.500373563
10.52246094	0.015911964	1.381819901
10.52856445	0.01128391	0.936092864
10.53466797	0.006160118	0.541978437
10.54077148	0.005289629	0.519462415
10.546875	0.006693622	0.623401118
10.55297852	0.008041044	0.608606994
10.55908203	0.00972173	0.62084754
10.56518555	0.008742345	0.52876762
10.57128906	0.005535296	0.349926206
10.57739258	0.00499297	0.353028948
10.58349609	0.008383649	0.666190797
10.58959961	0.013935071	1.104102025
10.59570313	0.016167484	1.198381013
10.60180664	0.011386705	0.860544999
10.60791016	0.005149982	0.399333909
10.61401367	0.001924181	0.141961958
10.62011719	0.004353452	0.312155943
10.6262207	0.011810119	0.872342712
10.63232422	0.015964643	1.243775845
10.63842773	0.013473878	1.13381843
10.64453125	0.007595015	0.668607897
10.65063477	0.00526364	0.448947529
10.65673828	0.00359968	0.301739859
10.6628418	0.00204137	0.167733895
10.66894531	0.004467929	0.358402868
10.67504883	0.007393687	0.613794675
10.68115234	0.009399719	0.798318243
10.68725586	0.01114735	0.92493974
10.69335938	0.009106959	0.7466695
10.69946289	0.003746221	0.321000288
10.70556641	0.001312613	0.130149387
10.71166992	0.004216331	0.493285011
10.71777344	0.008031983	0.949830114
10.72387695	0.010017312	1.143598043
10.72998047	0.009917485	1.210261121
10.73608398	0.009623585	1.221266713
10.7421875	0.010476281	1.233363214
10.74829102	0.010336896	1.115311626
10.75439453	0.008523419	0.998261879
10.76049805	0.007468725	1.003542356
10.76660156	0.008834505	1.186257569
10.77270508	0.006770811	0.938248438
10.77880859	0.007363741	1.16403548
10.78491211	0.010665394	1.745715098
10.79101563	0.009612813	1.670811055

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
8.84	-0.000772291	3.89255E-06	0.000786162	0.176886455	3.72131E-05	0.009865433
8.845	-0.000821787	4.14175E-06	0.000836511	0.188214918	3.73838E-05	0.009875937
8.85	-0.000787109	3.97526E-06	0.000802869	0.180645573	3.75404E-05	0.009887539
8.855	-0.000676131	3.42986E-06	0.000692669	0.155850424	3.76559E-05	0.00990012
8.86	-0.000525728	2.68689E-06	0.000542561	0.122076227	3.77258E-05	0.009913847
8.865	-0.000375483	1.94183E-06	0.000392044	0.088209834	3.77614E-05	0.009927403
8.87	-0.000270687	1.41911E-06	0.000286452	0.064451786	3.77799E-05	0.009943251
8.875	-0.000241119	1.26748E-06	0.000255821	0.05755981	3.77946E-05	0.009958026
8.88	-0.000287811	1.49348E-06	0.000301488	0.067834788	3.78155E-05	0.009973332
8.885	-0.000399742	2.0438E-06	0.000412681	0.092853261	3.78559E-05	0.009987178
8.89	-0.000550858	2.79071E-06	0.000563587	0.126807117	3.79326E-05	0.010000126
8.895	-0.00069559	3.50931E-06	0.000708761	0.159471168	3.80549E-05	0.010015102
8.9	-0.000785398	3.95891E-06	0.000799586	0.179906823	3.82108E-05	0.010029484
8.905	-0.000784255	3.9597E-06	0.000799744	0.179942321	3.83663E-05	0.010043475
8.91	-0.000686977	3.48382E-06	0.000703589	0.15830745	3.84855E-05	0.010057164
8.915	-0.000526505	2.69244E-06	0.000543696	0.122331554	3.85556E-05	0.010070333
8.92	-0.00035345	1.83537E-06	0.000370543	0.083372129	3.85872E-05	0.010082667
8.925	-0.000215573	1.1494E-06	0.00023197	0.052193189	3.85989E-05	0.010094037
8.93	-0.000142313	7.81529E-07	0.000157662	0.035474041	3.8604E-05	0.010104986
8.935	-0.000134646	7.37926E-07	0.000148856	0.033492652	3.86086E-05	0.010117217
8.94	-0.000182417	9.68984E-07	0.000195544	0.043997437	3.8617E-05	0.010127705
8.945	-0.000283317	1.46374E-06	0.000295511	0.066489963	3.86373E-05	0.010136837
8.95	-0.000432065	2.19692E-06	0.000443642	0.099819442	3.86845E-05	0.010146487
8.955	-0.000605705	3.05582E-06	0.00061716	0.138860926	3.87772E-05	0.010157275
8.96	-0.000766642	3.85468E-06	0.000778537	0.175170889	3.89258E-05	0.010167788
8.965	-0.000878866	4.41459E-06	0.000891638	0.200618531	3.9121E-05	0.010178213
8.97	-0.000929326	4.66954E-06	0.000943132	0.212204707	3.93393E-05	0.010188795
8.975	-0.000933606	4.69546E-06	0.000948365	0.213382042	3.95596E-05	0.010199741
8.98	-0.000917741	4.62085E-06	0.000933289	0.20999011	3.97724E-05	0.010214208
8.985	-0.000897514	4.52425E-06	0.000913771	0.205598373	3.9976E-05	0.010230789
8.99	-0.000869662	4.39009E-06	0.000886662	0.199498903	4.01672E-05	0.010249994
8.995	-0.000817253	4.13462E-06	0.000835044	0.187884847	4.0336E-05	0.010269468
9	-0.000727983	3.69636E-06	0.000746494	0.16796119	4.04699E-05	0.010289176
9.005	-0.000606322	3.09662E-06	0.000625326	0.140698459	4.05628E-05	0.010309036
9.01	-0.000467044	2.40802E-06	0.000486213	0.109397994	4.0618E-05	0.010331256
9.015	-0.000328153	1.71936E-06	0.000347095	0.078096444	4.06452E-05	0.010352686
9.02	-0.000214172	1.15183E-06	0.000232455	0.05230242	4.06568E-05	0.01037273
9.025	-0.000156507	8.61294E-07	0.000173769	0.039098095	4.0663E-05	0.010392962
9.03	-0.000178779	9.66014E-07	0.00019493	0.043859167	4.06711E-05	0.010414845
9.035	-0.00027322	1.42945E-06	0.00028857	0.064928297	4.06899E-05	0.010435232
9.04	-0.0003973	2.0424E-06	0.000412412	0.092792789	4.07298E-05	0.01045411
9.045	-0.000502572	2.56497E-06	0.000517989	0.116547497	4.07937E-05	0.010471929
9.05	-0.000558997	2.84752E-06	0.00057507	0.129390854	4.08726E-05	0.010488966
9.055	-0.000555545	2.83424E-06	0.000572387	0.128787181	4.09506E-05	0.01050537
9.06	-0.00050008	2.56286E-06	0.000517551	0.11644903	4.10138E-05	0.010521194
9.065	-0.000416573	2.15134E-06	0.000434402	0.097740479	4.10577E-05	0.010536319
9.07	-0.000325544	1.70136E-06	0.000343489	0.077284951	4.10845E-05	0.010550645
9.075	-0.000230512	1.23056E-06	0.000248371	0.055883553	4.10979E-05	0.010564256
9.08	-0.000131439	7.38467E-07	0.00014896	0.03351593	4.11023E-05	0.010576966
9.085	-4.41097E-05	3.0281E-07	6.0964E-05	0.0137169	4.11028E-05	0.010588663
9.09	5.57026E-06	5.21244E-08	1.03311E-05	0.002324491	4.11028E-05	0.010599199
9.095	1.72962E-06	6.59889E-08	1.31351E-05	0.002955396	4.11028E-05	0.010608643
9.1	-5.43691E-05	3.39416E-07	6.83839E-05	0.015386371	4.11035E-05	0.010617411
9.105	-0.000140584	7.63926E-07	0.000154157	0.034685306	4.11085E-05	0.01062565
9.11	-0.00021631	1.13871E-06	0.00022988	0.051722934	4.11203E-05	0.010633603
9.115	-0.000255256	1.3325E-06	0.000269033	0.060532439	4.11368E-05	0.010642982
9.12	-0.000266273	1.3879E-06	0.000280225	0.063050569	4.11547E-05	0.010651859
9.125	-0.000267824	1.39601E-06	0.000281863	0.063419068	4.11729E-05	0.010660247
9.13	-0.000269794	1.40594E-06	0.000283869	0.063870571	4.11913E-05	0.010668146
9.135	-0.000274733	1.43072E-06	0.000288876	0.06499713	4.12103E-05	0.010675555
9.14	-0.00026859	1.40116E-06	0.000282902	0.063653012	4.12286E-05	0.010682477
9.145	-0.000232497	1.22332E-06	0.000246969	0.055567938	4.12422E-05	0.010688899
9.15	-0.000171943	9.23337E-07	0.000186355	0.041929876	4.12497E-05	0.010694773
9.155	-0.000111103	6.20305E-07	0.000125128	0.02815375	4.12528E-05	0.010700025
9.16	-7.60323E-05	4.43179E-07	8.93405E-05	0.020101605	4.12543E-05	0.010704582
9.165	-9.24414E-05	5.19786E-07	0.00010482	0.023584519	4.12564E-05	0.010708402
9.17	-0.000169325	8.95926E-07	0.000180822	0.040685008	4.12637E-05	0.010711507
9.175	-0.000289324	1.48682E-06	0.000300209	0.067547078	4.12848E-05	0.010714041
9.18	-0.000429006	2.17695E-06	0.000439634	0.09891774	4.13314E-05	0.010716331
9.185	-0.000566252	2.85715E-06	0.000577043	0.129834659	4.14124E-05	0.0107193
9.19	-0.000671229	3.37969E-06	0.000682598	0.153584503	4.15263E-05	0.010724537
9.195	-0.000717651	3.61356E-06	0.000729838	0.164213484	4.16564E-05	0.010729857
9.2	-0.000702531	3.54244E-06	0.000715468	0.160980237	4.17812E-05	0.010735303
9.205	-0.000652591	3.29728E-06	0.000665932	0.149834641	4.18888E-05	0.010740861
9.21	-0.000610225	3.08774E-06	0.000623593	0.140308474	4.19829E-05	0.010746485
9.215	-0.000600523	3.0389E-06	0.000613723	0.138087721	4.20741E-05	0.010752138
9.22	-0.000625197	3.15999E-06	0.000638192	0.143593114	4.21729E-05	0.010757808
9.225	-0.000690327	3.48165E-06	0.000703187	0.158217053	4.22933E-05	0.010763517
9.23	-0.000796009	4.00569E-06	0.000809044	0.18203499	4.24535E-05	0.010769325
9.235	-0.000904053	4.54429E-06	0.000917834	0.20651263	4.266E-05	0.010775325
9.24	-0.000960187	4.82858E-06	0.000975252	0.219431637	4.2893E-05	0.010781612
9.245	-0.000928488	4.67943E-06	0.000945113	0.212650315	4.31109E-05	0.010788233
9.25	-0.000791725	4.00966E-06	0.000809784	0.182201383	4.32693E-05	0.010795152
9.255	-0.000565734	2.89521E-06	0.000584627	0.131541056	4.33502E-05	0.010802241
9.26	-0.000315761	1.65733E-06	0.00033456	0.075275975	4.33754E-05	0.010809291
9.265	-0.000120355	6.85365E-07	0.000138231	0.031101906	4.33791E-05	0.010816071
9.27	-1.82078E-05	1.73138E-07	3.4771E-05	0.007823469	4.33792E-05	0.010822399
9.275	4.34609E-06	5.52828E-08	1.09671E-05	0.002467607	4.33792E-05	0.010828178
9.28	-1.57842E-05	1.50083E-07	3.01229E-05	0.006777659	4.33793E-05	0.010833867
9.285	-5.11466E-05	3.21642E-07	6.47881E-05	0.014577312	4.33799E-05	0.010838982
9.29	-8.51113E-05	4.87424E-07	9.82853E-05	0.022114188	4.33817E-05	0.010843119
9.295	-0.000104195	5.80096E-07	0.00011701	0.026327261	4.33845E-05	0.010846734
9.3	-0.000111237	6.12693E-07	0.000123596	0.027809152	4.33876E-05	0.010849981
9.305	-0.000130052	7.0249E-07	0.00014174	0.031891441	4.33919E-05	0.010852918
9.31	-0.000189159	9.90834E-07	0.000199999	0.044999687	4.34009E-05	0.01085556
9.315	-0.000309803	1.58376E-06	0.000319792	0.071953126	4.34252E-05	0.010857945
9.32	-0.000495	2.49771E-06	0.000504431	0.113496892	4.34871E-05	0.010860176
9.325	-0.000717142	3.59768E-06	0.000726629	0.163491548	4.36171E-05	0.010862381
9.33	-0.000918709	4.59988E-06	0.000929059	0.209038194	4.38304E-05	0.010864625
9.335	-0.001028994	5.15367E-06	0.001040889	0.234199946	4.4098E-05	0.01086697
9.34	-0.001005835	5.04773E-06	0.001019476	0.22938213	4.43537E-05	0.010869523
9.345	-0.000874948	4.40627E-06	0.000889868	0.200220227	4.45472E-05	0.010872409
9.35	-0.000702529	3.55571E-06	0.000718022	0.161555062	4.4672E-05	0.010875457
9.355	-0.00053883	2.74508E-06	0.000554257	0.124707739	4.47453E-05	0.01087906

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
10.79711914	0.007065336	1.492314269
10.80322266	0.007511433	1.585446473
10.80932617	0.008009717	1.408716996
10.81542969	0.00390479	0.607591512
10.8215332	0.003008001	0.417149803
10.82763672	0.006754607	1.018114286
10.83374023	0.008197062	1.676915333
10.83984375	0.007800572	1.801265938
10.84594727	0.007066244	1.231177242
10.85205078	0.006487821	0.924893839
10.8581543	0.005330331	0.736381433
10.86425781	0.004450128	0.641553507
10.87036133	0.00552135	0.809802388
10.87646484	0.007905994	1.143242785
10.88256836	0.010697581	1.382669063
10.88867188	0.011280068	1.199757897
10.89477539	0.010072851	0.941961804
10.90087891	0.011416329	1.065747967
10.90698242	0.015328715	1.587226838
10.91308594	0.016684114	2.011198455
10.91918945	0.014538506	1.804236252
10.92529297	0.011477931	1.380521859
10.93139648	0.007096781	0.861956233
10.9375	0.004702785	0.596297207
10.94360352	0.006407696	0.781275483
10.94970703	0.002666718	0.3104915
10.95581055	0.003318967	0.381960147
10.96191406	0.00515957	0.520026494
10.96801758	0.009758254	0.816817706
10.97412109	0.011323466	0.883570599
10.98022461	0.009718077	0.810904853
10.98632813	0.005692815	0.554821526
10.99243164	0.006426021	0.709141637
10.99853516	0.012177484	1.238256622
11.00463867	0.014715941	1.357679759
11.01074219	0.014680459	1.307366069
11.0168457	0.011659555	1.024628499
11.02294922	0.006890603	0.62577674
11.02905273	0.004712456	0.444384131
11.03515625	0.005216385	0.44819816
11.04125977	0.005730335	0.451399841
11.04736328	0.0072259	0.591570159
11.0534668	0.00629626	0.601986695
11.05957031	0.004336303	0.473240443
11.06567383	0.002523427	0.247928132
11.07177734	0.004178647	0.360484573
11.07788086	0.009345198	0.820434795
11.08398438	0.011141054	1.035650459
11.09008789	0.01069575	0.985761219
11.09619141	0.009770851	0.918385967
11.10229492	0.005415129	0.56868286
11.10839844	0.000867608	0.110382784
11.11450195	0.002064898	0.324098057
11.12060547	0.006676004	1.068818187
11.12670898	0.011410293	1.501164405
11.1328125	0.010780259	1.222651957
11.13891602	0.006015191	0.635688466
11.14501953	0.007565787	0.821048008
11.15112305	0.009914934	1.309742499
11.15722656	0.007051909	1.198146284
11.16333008	0.006344253	1.172182877
11.16943359	0.010780045	1.737516015
11.17553711	0.013216365	1.644432197
11.18164063	0.015677792	1.541835558
11.18774414	0.017246927	1.541298213
11.19384766	0.01598416	1.544826322
11.19995117	0.016632387	1.868561852
11.20605469	0.018204356	2.264477416
11.2121582	0.017382866	2.19434995
11.21826172	0.016448259	1.955318816
11.22436523	0.014205329	1.651699351
11.23046875	0.008746687	1.101196814
11.23657227	0.006566546	0.846112233
11.24267578	0.010386139	1.216351846
11.2487793	0.01426711	1.603152052
11.25488281	0.015405492	1.671923296
11.26098633	0.015114946	1.448677686
11.26708984	0.012156562	1.082726939
11.27319336	0.007705998	0.681546199
11.27929688	0.00468941	0.426400607
11.28540039	0.004073747	0.395583276
11.29150391	0.004990594	0.521955913
11.29760742	0.004230521	0.455076343
11.30371094	0.001992626	0.202974127
11.30981445	0.002921382	0.271573467
11.31591797	0.002907901	0.260997103
11.32202148	0.001844074	0.172114065
11.328125	0.000614936	0.06603231
11.33422852	0.002009184	0.25000118
11.34033203	0.001356898	0.16274055
11.34643555	0.000536679	0.056254445
11.35253906	0.00304174	0.303910681
11.35864258	0.005894893	0.582185559
11.36474609	0.008135625	0.796495349
11.37084961	0.009614191	0.990729218
11.37695313	0.009446412	0.991452666
11.38305664	0.008166767	0.79178801
11.38916016	0.0068111	0.628044128
11.39526367	0.005083808	0.467069278
11.40136719	0.003525662	0.308859138
11.4074707	0.004056131	0.345044624
11.41357422	0.005193733	0.480073225
11.41967773	0.003563322	0.361124528
11.42578125	0.0018945	0.196054356

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
9.36	-0.000417901	2.14344E-06	0.000432721	0.097362121	4.47895E-05	0.010884091
9.365	-0.0003682	1.89289E-06	0.00038211	0.08597477	4.48237E-05	0.010888371
9.37	-0.000385699	1.97529E-06	0.000398759	0.089720825	4.48613E-05	0.010891477
9.375	-0.000439388	2.23792E-06	0.000451827	0.101661078	4.49101E-05	0.010895272
9.38	-0.000511137	2.5909E-06	0.000523147	0.117708111	4.49762E-05	0.010899851
9.385	-0.000595841	3.00895E-06	0.000607611	0.1367124	4.50659E-05	0.010903297
9.39	-0.000687876	3.46429E-06	0.000699605	0.157411045	4.51855E-05	0.010906093
9.395	-0.000785477	3.94832E-06	0.000797391	0.179412986	4.53414E-05	0.010908616
9.4	-0.000877491	4.40628E-06	0.000889908	0.200229313	4.5536E-05	0.010911386
9.405	-0.0009375	4.70739E-06	0.000950735	0.213915367	4.57582E-05	0.010914491
9.41	-0.000947378	4.76111E-06	0.000961587	0.216356984	4.5985E-05	0.01091871
9.415	-0.000905212	4.55696E-06	0.000920335	0.207075443	4.61921E-05	0.010922754
9.42	-0.000827463	4.1754E-06	0.000843238	0.189728564	4.63652E-05	0.010927304
9.425	-0.000748635	3.7871E-06	0.000764784	0.172076327	4.65068E-05	0.010931435
9.43	-0.000675914	3.42885E-06	0.000692403	0.155790767	4.66223E-05	0.010935237
9.435	-0.000572165	2.91706E-06	0.000589007	0.132526644	4.6705E-05	0.010938819
9.44	-0.00042415	2.18441E-06	0.000440998	0.099224592	4.67505E-05	0.010943639
9.445	-0.000275233	1.44409E-06	0.000291454	0.065577105	4.67696E-05	0.01094917
9.45	-0.00017944	9.63859E-07	0.000194453	0.043751956	4.67778E-05	0.01095402
9.455	-0.000172985	9.2432E-07	0.000186471	0.041955895	4.67853E-05	0.010958095
9.46	-0.000269546	1.39516E-06	0.000281607	0.063361482	4.68037E-05	0.01096139
9.465	-0.000450613	2.2868E-06	0.000461756	0.103895066	4.6855E-05	0.010964025
9.47	-0.000673068	3.38718E-06	0.000684058	0.153913045	4.69695E-05	0.010966283
9.475	-0.000880425	4.41714E-06	0.000892115	0.200725845	4.71654E-05	0.010968545
9.48	-0.001017294	5.10163E-06	0.001030374	0.23183425	4.7427E-05	0.010970873
9.485	-0.001057868	5.31115E-06	0.001072681	0.241353249	4.77098E-05	0.01097331
9.49	-0.000996048	5.0141E-06	0.001012659	0.227848206	4.79606E-05	0.010976022
9.495	-0.00082238	4.16185E-06	0.000840464	0.189104455	4.81315E-05	0.010981587
9.5	-0.000568402	2.90762E-06	0.000587076	0.132092054	4.82131E-05	0.010987168
9.505	-0.000331152	1.7304E-06	0.000349273	0.078586445	4.82409E-05	0.01099235
9.51	-0.000195607	1.05284E-06	0.000212414	0.047793069	4.82505E-05	0.010996911
9.515	-0.000178115	9.58942E-07	0.00019345	0.043526142	4.82586E-05	0.01100072
9.52	-0.000252215	1.32003E-06	0.000266412	0.059942626	4.82746E-05	0.011003763
9.525	-0.000368222	1.89157E-06	0.00038189	0.085925288	4.83089E-05	0.011006191
9.53	-0.000465099	2.37129E-06	0.000478812	0.107732703	4.83636E-05	0.011008221
9.535	-0.000509917	2.59448E-06	0.000523903	0.117878285	4.84293E-05	0.01101018
9.54	-0.000514645	2.61864E-06	0.000528783	0.118976214	4.84962E-05	0.011012084
9.545	-0.000514921	2.61952E-06	0.000528962	0.119016505	4.85632E-05	0.011013933
9.55	-0.000540378	2.74449E-06	0.000554209	0.124696978	4.8637E-05	0.011018284
9.555	-0.000590082	2.98999E-06	0.000603806	0.135856268	4.8725E-05	0.011024449
9.56	-0.000647117	3.27252E-06	0.000660881	0.148698264	4.88309E-05	0.011030588
9.565	-0.000710884	3.589E-06	0.000724814	0.163083113	4.89586E-05	0.011036737
9.57	-0.000775823	3.9125E-06	0.000790164	0.177786838	4.91107E-05	0.011043709
9.575	-0.000810014	4.08514E-06	0.000825038	0.18563347	4.92766E-05	0.01105068
9.58	-0.000799342	4.03581E-06	0.000815071	0.183390944	4.94381E-05	0.011057471
9.585	-0.000766193	3.87457E-06	0.00078249	0.176060346	4.95864E-05	0.011064073
9.59	-0.000723389	3.66528E-06	0.000740201	0.16654526	4.97187E-05	0.011070628
9.595	-0.000662684	3.36707E-06	0.000679947	0.152988159	4.98297E-05	0.011077228
9.6	-0.000591365	3.01528E-06	0.00060887	0.136995861	4.99181E-05	0.011084375
9.605	-0.000535448	2.73874E-06	0.000552999	0.12442472	4.99905E-05	0.011093672
9.61	-0.000502568	2.57627E-06	0.000520175	0.11703947	5.00544E-05	0.011103102
9.615	-0.000468212	2.40718E-06	0.000486013	0.10935301	5.01098E-05	0.011114027
9.62	-0.000409009	2.11517E-06	0.00042702	0.096079492	5.0152E-05	0.011125389
9.625	-0.000329904	1.72385E-06	0.000347966	0.07829227	5.01796E-05	0.011136209
9.63	-0.000245752	1.30658E-06	0.000263674	0.059326585	5.01948E-05	0.011146359
9.635	-0.000161959	8.90147E-07	0.000179553	0.040399317	5.02014E-05	0.011155704
9.64	-8.94817E-05	5.28398E-07	0.000106488	0.02395971	5.02035E-05	0.011164108
9.645	-5.61504E-05	3.59076E-07	7.22893E-05	0.016265101	5.02043E-05	0.011171461
9.65	-8.50102E-05	4.97281E-07	0.000100216	0.022548488	5.02061E-05	0.011179583
9.655	-0.000170524	9.17013E-07	0.000185025	0.041630597	5.02134E-05	0.011187162
9.66	-0.000286929	1.49162E-06	0.00030112	0.067752086	5.02342E-05	0.011193779
9.665	-0.000401867	2.06135E-06	0.000416226	0.093650837	5.02751E-05	0.011199806
9.67	-0.00047231	2.41296E-06	0.00048726	0.109633485	5.03314E-05	0.011205409
9.675	-0.000471498	2.4122E-06	0.000487104	0.109598297	5.03876E-05	0.01121132
9.68	-0.000429238	2.20466E-06	0.000445168	0.100162892	5.04342E-05	0.011217571
9.685	-0.000396972	2.04506E-06	0.000412921	0.09290718	5.0474E-05	0.011223469
9.69	-0.000390045	2.01067E-06	0.000405972	0.091343782	5.05125E-05	0.011228973
9.695	-0.000394062	2.03105E-06	0.000410089	0.092270078	5.05517E-05	0.011235194
9.7	-0.000386819	1.99628E-06	0.000403063	0.090689156	5.05895E-05	0.011241131
9.705	-0.00035586	1.8438E-06	0.000372256	0.083757596	5.06215E-05	0.011246603
9.71	-0.00031859	1.65892E-06	0.000334901	0.075352709	5.06472E-05	0.011251641
9.715	-0.000297685	1.55414E-06	0.000313729	0.07058912	5.06696E-05	0.011256213
9.72	-0.000299213	1.56007E-06	0.000314928	0.070858805	5.06922E-05	0.011260405
9.725	-0.000328504	1.70391E-06	0.000343993	0.077398506	5.07195E-05	0.011264301
9.73	-0.000363879	1.87978E-06	0.000379529	0.085393959	5.0753E-05	0.011267926
9.735	-0.000346983	1.79852E-06	0.000363109	0.081699527	5.07834E-05	0.011271306
9.74	-0.00026613	1.39957E-06	0.000282501	0.063562697	5.08013E-05	0.011274423
9.745	-0.000184847	9.95809E-07	0.000200926	0.04520839	5.08099E-05	0.011277207
9.75	-0.000159497	8.67416E-07	0.000174987	0.039372015	5.08164E-05	0.011279587
9.755	-0.000190936	1.02058E-06	0.000205936	0.046335565	5.08256E-05	0.011281584
9.76	-0.000250194	1.31293E-06	0.000265007	0.05962662	5.08414E-05	0.01128331
9.765	-0.000309068	1.60508E-06	0.000324037	0.072908247	5.08655E-05	0.011284799
9.77	-0.000339449	1.75792E-06	0.000354917	0.07985636	5.08947E-05	0.011286102
9.775	-0.000304858	1.59008E-06	0.000321003	0.072225616	5.09182E-05	0.011287296
9.78	-0.000195989	1.05334E-06	0.000212552	0.047824278	5.09279E-05	0.011288369
9.785	-5.78439E-05	3.68799E-07	7.42536E-05	0.016707063	5.09287E-05	0.011289292
9.79	6.07588E-05	-2.21679E-07	-4.50036E-05	-0.010125811	5.09296E-05	0.01129002
9.795	0.000136502	-6.02169E-07	-0.000121847	-0.027415535	5.09343E-05	0.011290519
9.8	0.000134289	-5.98527E-07	-0.000121104	-0.027248468	5.09389E-05	0.011290765
9.805	1.93209E-05	-3.6536E-08	-7.5506E-06	-0.001698884	5.0939E-05	0.011290792
9.81	-0.000185687	9.74367E-07	0.000196691	0.044255543	5.09477E-05	0.011290792
9.815	-0.000404594	2.05883E-06	0.000415774	0.093549059	5.09891E-05	0.011290792
9.82	-0.0005622	2.84382E-06	0.000574344	0.129227303	5.1069E-05	0.011290792
9.825	-0.000620924	3.14128E-06	0.000634428	0.142746338	5.11664E-05	0.011290792
9.83	-0.000578553	2.93819E-06	0.00059339	0.133512743	5.1251E-05	0.011290792
9.835	-0.00045364	2.32443E-06	0.000469378	0.105610077	5.1303E-05	0.011290792
9.84	-0.000294877	1.5393E-06	0.000310754	0.069919632	5.1325E-05	0.011290792
9.845	-0.000179368	9.64374E-07	0.000194604	0.043786004	5.13331E-05	0.011290792
9.85	-0.000159199	8.59581E-07	0.000173435	0.039022883	5.13395E-05	0.011290792
9.855	-0.000227664	1.19418E-06	0.000241043	0.054234778	5.13526E-05	0.011290792
9.86	-0.000354898	1.82162E-06	0.000367817	0.082758759	5.13845E-05	0.011290792
9.865	-0.000512269	2.60112E-06	0.000525304	0.118193464	5.14508E-05	0.011290792
9.87	-0.00064724	3.27348E-06	0.000661131	0.14875441	5.15567E-05	0.011290792
9.875	-0.000689014	3.48724E-06	0.000704307	0.158469101	5.16767E-05	0.011290792

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
11.43188477	0.003241726	0.348737706
11.43798828	0.002272854	0.248558107
11.4440918	0.002571699	0.285981003
11.45019531	0.005902314	0.732143768
11.45629883	0.005794697	0.725556953
11.46240234	0.005254646	0.563645157
11.46850586	0.006218922	0.606123887
11.47460938	0.006440043	0.616551915
11.48071289	0.004541292	0.437580799
11.48681641	0.004117386	0.416867589
11.49291992	0.003687523	0.378109959
11.49902344	0.003547273	0.368380695
11.50512695	0.006127636	0.712319015
11.51123047	0.009923695	1.199738548
11.51733398	0.013491	1.431419522
11.5234375	0.016416465	1.52746141
11.52954102	0.014207158	1.227593717
11.53564453	0.009545562	0.853865859
11.54174805	0.007541555	0.811831595
11.54785156	0.007694443	1.016907985
11.55395508	0.010142705	1.352452248
11.56005859	0.014385588	1.710348469
11.56616211	0.01594885	1.706517174
11.57226563	0.012705944	1.322712024
11.57836914	0.009227877	0.962293452
11.58447266	0.008922314	0.937950841
11.59057617	0.010392735	1.10501829
11.59667969	0.009066639	0.961454334
11.6027832	0.006088739	0.619781154
11.60888672	0.006692428	0.620083686
11.61499023	0.006759885	0.607243773
11.62109375	0.005061054	0.495545105
11.62719727	0.003949034	0.428639178
11.63330078	0.003048653	0.354337048
11.6394043	0.004221456	0.515835344
11.64550781	0.006138558	0.681626031
11.65161133	0.006313927	0.572754746
11.65771484	0.00637321	0.51429053
11.66381836	0.006334278	0.521750901
11.66992188	0.003796326	0.363732265
11.67602539	0.001427216	0.165449469
11.68212891	0.002908108	0.335574114
11.68823242	0.005808573	0.575259037
11.69433594	0.007863983	0.712030615
11.70043945	0.00831364	0.760879728
11.70654297	0.007438775	0.756231743
11.71264648	0.007501325	0.85211903
11.71875	0.006556503	0.78024158
11.72485352	0.00473699	0.590808032
11.73095703	0.00325309	0.421981428
11.73706055	0.002411518	0.319140919
11.74316406	0.002011384	0.269918427
11.74926758	0.001924986	0.237625991
11.75537109	0.00112263	0.123310981
11.76147461	0.002183648	0.247639213
11.76757813	0.00462775	0.616660942
11.77368164	0.007748136	1.149827836
11.77978516	0.009483304	1.413981652
11.78588867	0.007336529	1.028824637
11.79199219	0.005800445	0.694340493
11.7980957	0.006413354	0.660790955
11.80419922	0.004359883	0.435290023
11.81030273	0.001282068	0.143783565
11.81640625	0.003149471	0.406309398
11.82250977	0.004896362	0.651613081
11.82861328	0.005114784	0.685030977
11.8347168	0.005592255	0.781165849
11.84082031	0.006082242	0.919013595
11.84692383	0.007106817	1.251795963
11.85302734	0.004994235	0.908985514
11.85913086	0.007041235	1.088872946
11.86523438	0.012163093	1.60470859
11.87133789	0.013430735	1.607408615
11.87744141	0.012654647	1.465630482
11.88354492	0.012784895	1.529678331
11.88964844	0.013740295	1.724263004
11.89575195	0.014672923	2.019550664
11.90185547	0.015765756	2.565102728
11.90795898	0.015995333	2.870765619
11.9140625	0.015271079	2.540886682
11.92016602	0.014747645	2.158499963
11.92626953	0.01414271	1.903491137
11.93237305	0.012654619	1.65716482
11.93847656	0.011315052	1.500312872
11.94458008	0.011225719	1.554705789
11.95068359	0.011113308	1.661517529
11.95678711	0.010492491	1.726453105
11.96289063	0.011300453	1.932665168
11.96899414	0.014014974	2.077693144
11.97509766	0.015526957	1.938792993
11.98120117	0.013706207	1.686893669
11.98730469	0.011387358	1.514904463
11.9934082	0.009725706	1.384233645
11.99951172	0.005866588	0.908100973
12.00561523	0.002603515	0.397515037
12.01171875	0.002125377	0.280231414
12.01782227	0.002336481	0.27438983
12.02392578	0.004248895	0.469421532
12.0300293	0.006262014	0.661121225
12.03613281	0.008792309	0.973742716
12.04223633	0.009476569	1.23690361
12.04833984	0.006458543	0.93075284
12.05444336	0.002652326	0.364900648
12.06054688	0.003953464	0.532791504

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
9.88	-0.000608149	3.09362E-06	0.000624772	0.1405736	5.17701E-05	0.011290792
9.885	-0.000444184	2.2855E-06	0.000461494	0.103836127	5.182E-05	0.011290792
9.89	-0.000265277	1.39936E-06	0.000282469	0.063555548	5.18378E-05	0.011290792
9.895	-0.000128877	7.20054E-07	0.00014524	0.0326789	5.1842E-05	0.011290792
9.9	-8.22428E-05	4.82822E-07	9.73172E-05	0.02189638	5.18437E-05	0.011290792
9.905	-0.000148223	8.03382E-07	0.00016209	0.036470211	5.18492E-05	0.011290792
9.91	-0.000286122	1.48315E-06	0.000299436	0.067373104	5.18699E-05	0.011290792
9.915	-0.000413745	2.1158E-06	0.000427253	0.096131973	5.19132E-05	0.011290792
9.92	-0.000485715	2.47485E-06	0.00049979	0.112452843	5.19728E-05	0.011290792
9.925	-0.000511225	2.60414E-06	0.00052591	0.118329809	5.20389E-05	0.011290792
9.93	-0.000507615	2.58905E-06	0.000522861	0.117643775	5.2104E-05	0.011290792
9.935	-0.00048015	2.45542E-06	0.000495859	0.111568176	5.21623E-05	0.011290792
9.94	-0.000435317	2.23491E-06	0.000451304	0.101543391	5.22102E-05	0.011290792
9.945	-0.000390824	2.01497E-06	0.000406864	0.09154436	5.22488E-05	0.011290792
9.95	-0.000363847	1.88122E-06	0.000379839	0.085463793	5.22822E-05	0.011290792
9.955	-0.00034677	1.79682E-06	0.000362787	0.081627069	5.23126E-05	0.011290792
9.96	-0.000322552	1.67738E-06	0.000338655	0.076197298	5.23389E-05	0.011290792
9.965	-0.00029547	1.54387E-06	0.000311681	0.070128131	5.2361E-05	0.011290792
9.97	-0.000260941	1.37419E-06	0.0002774	0.062414892	5.23782E-05	0.011290792
9.975	-0.00018777	1.01356E-06	0.000204539	0.04602118	5.23871E-05	0.011290792
9.98	-7.60593E-05	4.60613E-07	9.2831E-05	0.020886971	5.23886E-05	0.011290792
9.985	2.9404E-05	-6.38286E-08	-1.31058E-05	-0.0029488	5.23888E-05	0.011290792
9.99	9.71167E-05	-4.0311E-07	-8.16378E-05	-0.018368501	5.23912E-05	0.011290792
9.995	0.000120202	-5.2245E-07	-0.000105743	-0.023792183	5.23948E-05	0.011290792
10	9.11555E-05	-3.84086E-07	-7.77847E-05	-0.017501566	5.23969E-05	0.011290792
10.005	9.64363E-06	1.46696E-08	2.78637E-06	0.000626932	5.23969E-05	0.011290792
10.01	-0.000104811	5.78148E-07	0.000116635	0.026242782	5.23997E-05	0.011290792
10.015	-0.000223463	1.16423E-06	0.000235043	0.052884765	5.24123E-05	0.011290792
10.02	-0.000332374	1.70326E-06	0.00034394	0.077386564	5.24403E-05	0.011290792
10.025	-0.000442269	2.24802E-06	0.000453988	0.102147347	5.24897E-05	0.011290792
10.03	-0.000551638	2.79179E-06	0.00056383	0.126861814	5.25666E-05	0.011290792
10.035	-0.000624359	3.15587E-06	0.000637373	0.143408992	5.26651E-05	0.011290792
10.04	-0.00064195	3.24727E-06	0.000655835	0.147562957	5.27693E-05	0.011290792
10.045	-0.000627849	3.18099E-06	0.000642443	0.144549735	5.28689E-05	0.011290792
10.05	-0.000596399	3.02832E-06	0.000611594	0.137608594	5.29588E-05	0.011290792
10.055	-0.000542924	2.76602E-06	0.000558596	0.125684084	5.30333E-05	0.011290792
10.06	-0.000477421	2.44314E-06	0.000493357	0.111005434	5.30909E-05	0.011290792
10.065	-0.000415167	2.13541E-06	0.000431184	0.097016358	5.31345E-05	0.011290792
10.07	-0.000358674	1.85554E-06	0.000374639	0.084293683	5.3167E-05	0.011290792
10.075	-0.000308556	1.60629E-06	0.000324283	0.072963725	5.31911E-05	0.011290792
10.08	-0.000282787	1.47606E-06	0.000297973	0.067044008	5.32113E-05	0.011290792
10.085	-0.000326923	1.69071E-06	0.000341345	0.076802615	5.32383E-05	0.011290792
10.09	-0.000466341	2.37844E-06	0.000480302	0.108067939	5.32933E-05	0.011290876
10.095	-0.000646619	3.27264E-06	0.00066096	0.148715969	5.33989E-05	0.011290914
10.1	-0.000781729	3.94744E-06	0.000797259	0.17938334	5.35534E-05	0.011290914
10.105	-0.000824321	4.16681E-06	0.000841566	0.189352282	5.37251E-05	0.011290914
10.11	-0.000747885	3.79772E-06	0.000766987	0.172571988	5.38665E-05	0.011290914
10.115	-0.000545415	2.80273E-06	0.000565955	0.127339864	5.39417E-05	0.011290965
10.12	-0.000269842	1.44099E-06	0.000290854	0.065442232	5.39601E-05	0.01129101
10.125	-1.16868E-05	1.59889E-07	3.2075E-05	0.007216879	5.39601E-05	0.01129101
10.13	0.00015893	-6.91974E-07	-0.000139983	-0.03149627	5.39665E-05	0.01129101
10.135	0.000210702	-9.57396E-07	-0.000193586	-0.043556863	5.39777E-05	0.01129101
10.14	0.000137193	-6.02306E-07	-0.000121836	-0.02741319	5.39825E-05	0.01129101
10.145	-4.60677E-05	2.99029E-07	6.02746E-05	0.013561776	5.3983E-05	0.01129101
10.15	-0.000271817	1.41612E-06	0.000285956	0.064340171	5.40017E-05	0.01129101
10.155	-0.000432132	2.21462E-06	0.00044726	0.100633432	5.40489E-05	0.01129101
10.16	-0.000466771	2.39307E-06	0.000483307	0.108743991	5.41039E-05	0.01129101
10.165	-0.000398259	2.05986E-06	0.000415977	0.093594805	5.4144E-05	0.01129101
10.17	-0.000270986	1.43344E-06	0.00028941	0.065117236	5.41626E-05	0.01129101
10.175	-0.000120355	6.88423E-07	0.00013889	0.031250264	5.41662E-05	0.01129101
10.18	5.15355E-06	6.44219E-08	1.28283E-05	0.002886365	5.41663E-05	0.01129101
10.185	5.15756E-05	-1.7032E-07	-3.45929E-05	-0.007783409	5.41669E-05	0.01129101
10.19	1.73265E-06	7.17781E-08	1.4326E-05	0.00322334	5.41669E-05	0.01129101
10.195	-0.000107036	6.08144E-07	0.0001227	0.027607456	5.41698E-05	0.01129101
10.2	-0.000214342	1.14046E-06	0.00023025	0.051806162	5.41814E-05	0.01129101
10.205	-0.0002717	1.42811E-06	0.000288364	0.064881804	5.42001E-05	0.01129101
10.21	-0.000243667	1.29434E-06	0.000261334	0.058800181	5.42151E-05	0.01129101
10.215	-0.000115739	6.65033E-07	0.00013418	0.030190557	5.42185E-05	0.01129101
10.22	7.18289E-05	-2.63275E-07	-5.33708E-05	-0.012008429	5.42198E-05	0.01129101
10.225	0.00022995	-1.05033E-06	-0.000212355	-0.047779809	5.42332E-05	0.01129101
10.23	0.000292074	-1.36459E-06	-0.000275817	-0.06205877	5.42547E-05	0.01129101
10.235	0.000261204	-1.21816E-06	-0.00024623	-0.055401711	5.4272E-05	0.01129101
10.24	0.000171554	-7.79192E-07	-0.000157533	-0.035445017	5.42794E-05	0.01129101
10.245	4.88365E-05	-1.7445E-07	-3.53489E-05	-0.00795351	5.428E-05	0.01129101
10.25	-7.24784E-05	4.25792E-07	8.59191E-05	0.019331803	5.42813E-05	0.01129101
10.255	-0.000155846	8.39717E-07	0.000169541	0.038146761	5.42875E-05	0.01129101
10.26	-0.000207395	1.09601E-06	0.000221316	0.049796012	5.42983E-05	0.01129101
10.265	-0.000263225	1.37312E-06	0.000277295	0.062391452	5.43158E-05	0.01129101
10.27	-0.000331482	1.71254E-06	0.000345861	0.077818706	5.43436E-05	0.01129101
10.275	-0.000384895	1.97977E-06	0.000399841	0.089964168	5.43811E-05	0.01129101
10.28	-0.000405123	2.08317E-06	0.000420728	0.09466372	5.44225E-05	0.01129101
10.285	-0.000405032	2.08567E-06	0.000421232	0.094777281	5.4464E-05	0.01129101
10.29	-0.000398067	2.05414E-06	0.000414861	0.093343684	5.45041E-05	0.01129101
10.295	-0.000370703	1.92196E-06	0.000388152	0.087334298	5.45388E-05	0.01129101
10.3	-0.000309741	1.62309E-06	0.000327764	0.073746893	5.4563E-05	0.01129101
10.305	-0.000229233	1.2264E-06	0.000247613	0.055713005	5.45763E-05	0.01129101
10.31	-0.000140452	7.87986E-07	0.000159036	0.035783083	5.45813E-05	0.01129101
10.315	-3.42233E-05	2.62308E-07	5.2833E-05	0.011887433	5.45816E-05	0.01129101
10.32	7.47418E-05	-2.7884E-07	-5.64899E-05	-0.01271023	5.4583E-05	0.01129101
10.325	0.000139025	-6.00553E-07	-0.00012148	-0.027332989	5.45879E-05	0.01129101
10.33	0.000145184	-6.34408E-07	-0.000128318	-0.028871632	5.45932E-05	0.01129101
10.335	0.000128193	-5.52652E-07	-0.000111798	-0.025154651	5.45974E-05	0.01129101
10.34	0.000104386	-4.36949E-07	-8.84193E-05	-0.019894344	5.46001E-05	0.01129101
10.345	5.53727E-05	-1.96407E-07	-3.98162E-05	-0.008958653	5.46009E-05	0.01129101
10.35	-1.9438E-05	1.73013E-07	3.48248E-05	0.007835582	5.4601E-05	0.01129101
10.355	-8.60194E-05	5.03454E-07	0.000101588	0.022857241	5.46029E-05	0.01129101
10.36	-0.000117674	6.6183E-07	0.000133586	0.030056767	5.46064E-05	0.01129101
10.365	-0.000126926	7.09087E-07	0.000143133	0.032204967	5.46104E-05	0.01129101
10.37	-0.000131086	7.31204E-07	0.000147602	0.033210354	5.46148E-05	0.01129101
10.375	-0.000112667	6.41925E-07	0.000129562	0.029151349	5.4618E-05	0.01129101
10.38	-6.30104E-05	3.97274E-07	8.01275E-05	0.018028697	5.4619E-05	0.01129101
10.385	-1.43938E-05	1.56554E-07	3.14893E-05	0.007085082	5.4619E-05	0.01129101
10.39	2.26956E-05	-2.71048E-08	-5.61886E-06	-0.001264243	5.46192E-05	0.01129101
10.395	7.88338E-05	-3.04791E-07	-6.17237E-05	-0.013887824	5.46207E-05	0.01129101

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
12.06665039	0.005750078	0.813310391
12.07275391	0.004768778	0.732154081
12.07885742	0.002233599	0.389816905
12.08496094	0.00262036	0.489286625
12.09106445	0.003508178	0.592404054
12.09716797	0.003787321	0.575932253
12.10327148	0.003169717	0.482376269
12.109375	0.002814038	0.445583946
12.11547852	0.000887668	0.14887532
12.12158203	0.003863224	0.756173373
12.12768555	0.007320242	1.665632425
12.13378906	0.008873548	1.804869778
12.13989258	0.0076615	1.369145425
12.14599609	0.004909188	0.918741596
12.15209961	0.00315762	0.646130214
12.15820313	0.003503771	0.755668765
12.16430664	0.003481426	0.733733264
12.17041016	0.001814748	0.36840471
12.17651367	0.003361201	0.624786928
12.18261719	0.002733743	0.45914157
12.1887207	0.000410907	0.072729588
12.19482422	0.003848435	0.836139234
12.20092773	0.005562595	1.347739759
12.20703125	0.003980402	0.887884061
12.21313477	0.004893893	1.141035094
12.21923828	0.007522961	2.291098584
12.2253418	0.006285981	2.502386999
12.23144531	0.006056879	2.021175224
12.23754883	0.005465316	1.434419426
12.24365234	0.003303125	0.712643975
12.24975586	0.004877095	1.109372975
12.25585938	0.007950477	2.567768306
12.26196289	0.008115065	3.25758108
12.26806641	0.004230278	1.188764962
12.27416992	0.002294868	0.459219769
12.28027344	0.00590522	1.061858938
12.28637695	0.006929414	1.264479458
12.29248047	0.005278002	0.925583993
12.29858398	0.004022127	0.632518526
12.3046875	0.004701843	0.714046686
12.31079102	0.005878691	0.912005492
12.31689453	0.005723864	0.918955909
12.32299805	0.003836796	0.805401828
12.32910156	0.002251537	0.50657321
12.33520508	0.003044404	0.512703658
12.34130859	0.002795546	0.394758812
12.34741211	0.00445556	0.548861864
12.35351563	0.006193823	0.747282551
12.35961914	0.006290483	0.866931972
12.36572266	0.006023283	0.919634713
12.37182617	0.006602383	0.997545288
12.37792969	0.008185783	1.224676862
12.3840332	0.010015843	1.610948917
12.39013672	0.009778996	1.904427868
12.39624023	0.007060739	1.677167263
12.40234375	0.004422156	0.951349149
12.40844727	0.003763156	0.605080113
12.41455078	0.004702548	0.693653135
12.4206543	0.007364608	1.293896724
12.42675781	0.008536734	1.659760083
12.43286133	0.008380988	1.415065006
12.43896484	0.009725534	1.462041594
12.44506836	0.012224646	1.928144455
12.45117188	0.010864055	2.212020633
12.45727539	0.007117811	2.229641647
12.46337891	0.007223499	1.868906613
12.46948242	0.008077587	1.494961626
12.47558594	0.007417307	1.439579003
12.48168945	0.005728359	1.21828369
12.48779297	0.003876299	0.839782392
12.49389648	0.002497294	0.569131733
12.5	0.004137965	0.859193748
12.50610352	0.005662125	1.148447521
12.51220703	0.004719179	1.230446978
12.51831055	0.004732824	1.490273504
12.52441406	0.00730886	2.229736296
12.53051758	0.007986026	2.610782695
12.53662109	0.005345448	1.843456338
12.54272461	0.003676523	1.072932653
12.54882813	0.003761533	0.775535187
12.55493164	0.001339883	0.233843333
12.56103516	0.003445683	0.720371852
12.56713867	0.003892152	1.467091747
12.57324219	0.002020898	1.548540722
12.5793457	0.004358724	1.71861036
12.58544922	0.005975955	1.460114829
12.59155273	0.006599114	1.422477985
12.59765625	0.008518298	2.062459146
12.60375977	0.010708092	2.778939728
12.60986328	0.008900786	1.936899956
12.6159668	0.003056759	0.611043889
12.62207031	0.00288961	0.474382635
12.62817383	0.006435814	0.885367801
12.63427734	0.007300138	1.105510265
12.64038086	0.004080205	0.850825107
12.64648438	0.003870919	1.041254528
12.65258789	0.007118738	2.005414631
12.65869141	0.004978088	1.304253962
12.66479492	0.006230518	1.381993705
12.67089844	0.01025877	1.958056771
12.67700195	0.012377628	2.258772481
12.68310547	0.011336937	2.015208542
12.68920898	0.009340013	1.56861325
12.6953125	0.011759547	2.128860509

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
10.4	0.000156586	-6.90541E-07	-0.000139658	-0.031423098	5.46269E-05	0.01129101
10.405	0.000219974	-1.00675E-06	-0.000203533	-0.045795016	5.46392E-05	0.01129101
10.41	0.00025255	-1.17113E-06	-0.000236739	-0.053266303	5.46553E-05	0.01129101
10.415	0.000265664	-1.23957E-06	-0.000250565	-0.056377036	5.46731E-05	0.01129101
10.42	0.000251922	-1.17599E-06	-0.000237716	-0.0534862	5.46892E-05	0.01129101
10.425	0.000179084	-8.20182E-07	-0.000165822	-0.037310042	5.46973E-05	0.01129101
10.43	4.75014E-05	-1.71725E-07	-3.48035E-05	-0.007830794	5.46978E-05	0.01129101
10.435	-9.02574E-05	5.10381E-07	0.000103005	0.023176059	5.46999E-05	0.01129101
10.44	-0.000189063	1.00185E-06	0.000202292	0.045515592	5.47089E-05	0.01129101
10.445	-0.000244076	1.27753E-06	0.000257985	0.058046514	5.4724E-05	0.01129101
10.45	-0.000255208	1.33661E-06	0.000269919	0.060731753	5.47405E-05	0.01129101
10.455	-0.000209454	1.11403E-06	0.000224944	0.050612421	5.47515E-05	0.01129101
10.46	-0.000113258	6.40227E-07	0.00012921	0.029072287	5.47548E-05	0.01129101
10.465	-6.37863E-06	1.1125E-07	2.23344E-05	0.005025234	5.47548E-05	0.01129101
10.47	8.17325E-05	-3.26371E-07	-6.60793E-05	-0.014867844	5.47565E-05	0.01129101
10.475	0.000154619	-6.89722E-07	-0.000139485	-0.031384212	5.47625E-05	0.01129101
10.48	0.000198301	-9.10226E-07	-0.000184032	-0.041407096	5.47725E-05	0.01129101
10.485	0.000168059	-7.65834E-07	-0.000154855	-0.034842396	5.47796E-05	0.01129101
10.49	6.06485E-05	-2.3794E-07	-4.81917E-05	-0.010843138	5.47805E-05	0.01129101
10.495	-6.37892E-05	3.77236E-07	7.60996E-05	0.017122407	5.47816E-05	0.01129101
10.5	-0.000151161	8.10982E-07	0.00016373	0.036839243	5.47873E-05	0.01129101
10.505	-0.000194476	1.02714E-06	0.000207399	0.046664728	5.47969E-05	0.01129101
10.51	-0.000205107	1.08121E-06	0.000218322	0.049122533	5.48075E-05	0.01129101
10.515	-0.000195509	1.03411E-06	0.000208806	0.046981279	5.48172E-05	0.01129101
10.52	-0.000204526	1.0775E-06	0.000217574	0.048954047	5.48278E-05	0.01129101
10.525	-0.000281232	1.45564E-06	0.000293964	0.066141993	5.48478E-05	0.01129101
10.53	-0.000413405	2.11093E-06	0.000426335	0.095925414	5.48909E-05	0.01129101
10.535	-0.000523816	2.66227E-06	0.000537701	0.120982625	5.49603E-05	0.01129101
10.54	-0.00054557	2.77696E-06	0.000560865	0.126194706	5.50355E-05	0.01129101
10.545	-0.00046195	2.36961E-06	0.000478557	0.107675367	5.50895E-05	0.01129101
10.55	-0.000299342	1.56843E-06	0.000316681	0.071253209	5.51121E-05	0.01129101
10.555	-0.00011775	6.68862E-07	0.000134944	0.030362328	5.51156E-05	0.01129101
10.56	2.23143E-06	6.99168E-08	1.3948E-05	0.003138299	5.51156E-05	0.01129101
10.565	-8.19035E-06	1.14616E-07	2.29838E-05	0.005171357	5.51156E-05	0.01129101
10.57	-0.000142367	7.74412E-07	0.000156298	0.035167087	5.51208E-05	0.01129101
10.575	-0.000299255	1.55169E-06	0.000313338	0.070500963	5.51434E-05	0.01129101
10.58	-0.000380012	1.95558E-06	0.000394935	0.088860365	5.51799E-05	0.01129101
10.585	-0.000369104	1.90611E-06	0.000384938	0.08661096	5.52143E-05	0.01129101
10.59	-0.000299367	1.56399E-06	0.000315809	0.071057062	5.5237E-05	0.01129101
10.595	-0.000211395	1.12939E-06	0.000227999	0.051299744	5.52483E-05	0.01129101
10.6	-0.000152891	8.38668E-07	0.000169261	0.038083644	5.52542E-05	0.01129101
10.605	-0.000151367	8.29681E-07	0.000167446	0.037675294	5.526E-05	0.01129101
10.61	-0.000181383	9.78373E-07	0.000197491	0.044435446	5.52683E-05	0.01129101
10.615	-0.000187949	1.012515E-06	0.000204389	0.045987444	5.52772E-05	0.01129101
10.62	-0.000151584	8.33695E-07	0.000168257	0.037857764	5.5283E-05	0.01129101
10.625	-0.00011172	6.35825E-07	0.000128279	0.028862781	5.52862E-05	0.01129101
10.63	-0.000107858	6.15352E-07	0.000124143	0.027932221	5.52891E-05	0.01129101
10.635	-0.000133462	7.41313E-07	0.000149595	0.033658929	5.52936E-05	0.01129101
10.64	-0.000170611	9.25259E-07	0.000186763	0.042021688	5.5301E-05	0.01129101
10.645	-0.000215644	1.14922E-06	0.000232015	0.05220328	5.53127E-05	0.01129101
10.65	-0.000249226	1.31796E-06	0.000266109	0.059874457	5.53284E-05	0.01129101
10.655	-0.0002378	1.26471E-06	0.000255348	0.057453347	5.53427E-05	0.01129101
10.66	-0.000182363	9.92691E-07	0.000200385	0.045086623	5.53511E-05	0.01129101
10.665	-0.000118372	6.76854E-07	0.000136569	0.030728077	5.53547E-05	0.01129101
10.67	-5.99001E-05	3.87688E-07	7.81473E-05	0.01758315	5.53556E-05	0.01129101
10.675	9.32544E-06	4.48223E-08	8.87932E-06	0.001997847	5.53556E-05	0.01129101
10.68	8.70883E-05	-3.41708E-07	-6.92024E-05	-0.01557053	5.53575E-05	0.01129101
10.685	0.000137553	-5.94864E-07	-0.00012034	-0.027076463	5.53623E-05	0.01129101
10.69	0.000131043	-5.6663E-07	-0.000114633	-0.025792457	5.53666E-05	0.01129101
10.695	7.42244E-05	-2.88573E-07	-5.84491E-05	-0.013151038	5.5368E-05	0.01129101
10.7	-1.26475E-05	1.39439E-07	2.80314E-05	0.006307057	5.53681E-05	0.01129101
10.705	-0.000127253	7.0608E-07	0.000142516	0.032066105	5.53721E-05	0.01129101
10.71	-0.000258931	1.35953E-06	0.000274532	0.061769777	5.53891E-05	0.01129101
10.715	-0.000364531	1.88647E-06	0.000380982	0.085721058	5.54227E-05	0.01129101
10.72	-0.000415854	2.146E-06	0.00043341	0.097517198	5.54664E-05	0.01129101
10.725	-0.000418856	2.16666E-06	0.000437582	0.09845604	5.55107E-05	0.01129101
10.73	-0.000366927	1.91552E-06	0.000386838	0.087038539	5.55448E-05	0.01129101
10.735	-0.000246982	1.32667E-06	0.000267859	0.060268326	5.55602E-05	0.01129101
10.74	-8.40467E-05	5.22436E-07	0.000105375	0.023709423	5.5562E-05	0.01129101
10.745	7.72542E-05	-2.76426E-07	-5.60117E-05	-0.012602633	5.55635E-05	0.01129101
10.75	0.000216688	-9.68851E-07	-0.000195883	-0.044073669	5.55753E-05	0.01129101
10.755	0.000336721	-1.56664E-06	-0.00031662	-0.071239548	5.5604E-05	0.01129101
10.76	0.000424414	-2.00613E-06	-0.00040537	-0.091208174	5.56495E-05	0.01129101
10.765	0.000438379	-2.08189E-06	-0.000420665	-0.094649714	5.56981E-05	0.01129101
10.77	0.000361415	-1.70637E-06	-0.000344788	-0.077577207	5.57311E-05	0.01129101
10.775	0.000239648	-1.10574E-06	-0.000223432	-0.050272206	5.57456E-05	0.01129101
10.78	0.000136535	-5.9417E-07	-0.000120075	-0.027016986	5.57503E-05	0.01129101
10.785	8.71952E-05	-3.46712E-07	-7.00817E-05	-0.015768389	5.57522E-05	0.01129101
10.79	0.000108737	-4.49496E-07	-9.08508E-05	-0.02044143	5.57552E-05	0.01129101
10.795	0.000197649	-8.87182E-07	-0.000179288	-0.040339832	5.57651E-05	0.01129101
10.8	0.000303912	-1.41399E-06	-0.000285728	-0.064288893	5.57885E-05	0.01129101
10.805	0.000352553	-1.65838E-06	-0.000335104	-0.075398421	5.58199E-05	0.01129101
10.81	0.000313089	-1.46676E-06	-0.000296385	-0.066686531	5.58446E-05	0.01129101
10.815	0.000224976	-1.03218E-06	-0.000208575	-0.046929294	5.58574E-05	0.01129101
10.82	0.000142104	-6.2124E-07	-0.000125547	-0.028248059	5.58625E-05	0.01129101
10.825	8.98303E-05	-3.6009E-07	-7.27847E-05	-0.016376551	5.58646E-05	0.01129101
10.83	9.03517E-05	-3.58941E-07	-7.25539E-05	-0.016324635	5.58666E-05	0.01129101
10.835	0.000172875	-7.63579E-07	-0.000154315	-0.034720773	5.58742E-05	0.01129101
10.84	0.000327713	-1.52845E-06	-0.000308853	-0.069491843	5.59013E-05	0.01129101
10.845	0.000492384	-2.34567E-06	-0.000473932	-0.106634725	5.59626E-05	0.01129101
10.85	0.000607911	-2.9225E-06	-0.000590409	-0.132841979	5.6056E-05	0.01129101
10.855	0.000655192	-3.16304E-06	-0.000638979	-0.143770203	5.61645E-05	0.01129101
10.86	0.000626578	-3.02854E-06	-0.0006118	-0.137654957	5.62637E-05	0.01129101
10.865	0.000515513	-2.48508E-06	-0.000501991	-0.11294799	5.63309E-05	0.01129101
10.87	0.000350047	-1.6697E-06	-0.000337253	-0.075881813	5.63619E-05	0.01129101
10.875	0.000183483	-8.45945E-07	-0.000170834	-0.0384377	5.63704E-05	0.01129101
10.88	4.20677E-05	-1.44871E-07	-2.92101E-05	-0.006572274	5.63708E-05	0.01129101
10.885	-8.26652E-05	4.74641E-07	9.59302E-05	0.021584284	5.63726E-05	0.01129101
10.89	-0.000196128	1.03956E-06	0.000210037	0.04725827	5.63823E-05	0.01129101
10.895	-0.000284834	1.48321E-06	0.000299645	0.067420151	5.64028E-05	0.01129101
10.9	-0.000342531	1.77406E-06	0.000358389	0.080637595	5.64324E-05	0.01129101
10.905	-0.000379469	1.96284E-06	0.000396518	0.089216567	5.64688E-05	0.01129101
10.91	-0.000376706	1.95666E-06	0.000395265	0.088934613	5.65047E-05	0.01129101
10.915	-0.000279608	1.48431E-06	0.000299823	0.067460152	5.65245E-05	0.01129101

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
12.70141602	0.012980741	3.051697716
12.70751953	0.009016653	2.388077856
12.71362305	0.001663765	0.390140632
12.71972656	0.004016281	0.866499551
12.72583008	0.004423698	0.826574386
12.73193359	0.002294332	0.355619372
12.73803711	0.002019115	0.317909482
12.74414063	0.003690857	0.712448826
12.75024414	0.006293927	1.413796314
12.75634766	0.007302156	1.641323919
12.76245117	0.007357772	1.433110383
12.76855469	0.006629193	1.073934711
12.7746582	0.004476196	0.705231202
12.78076172	0.004700554	0.918965821
12.78686523	0.008100894	2.511307351
12.79296875	0.009212843	4.509413383
12.79907227	0.008198476	3.369650743
12.80517578	0.006393882	1.731488065
12.8112793	0.003837318	0.787559899
12.81738281	0.002346311	0.411661791
12.82348633	0.003395647	0.62400376
12.82958984	0.004353498	0.980427616
12.83569336	0.004047151	1.049452317
12.84179688	0.003004806	0.808319831
12.84790039	0.004760673	1.354438438
12.85400391	0.004246336	1.319673691
12.86010742	0.0038864	1.265160734
12.86621094	0.003689446	1.221697376
12.87231445	0.002156399	0.755141055
12.87841797	0.007021532	2.472340453
12.88452148	0.011800938	3.400065621
12.890625	0.012601147	2.785153757
12.89672852	0.011014833	2.20161062
12.90283203	0.007751707	1.722063412
12.90893555	0.005103373	1.479759265
12.91503906	0.007492579	2.85627609
12.92114258	0.008982209	3.246767611
12.92724609	0.007693232	2.021624882
12.93334961	0.004493641	0.989761996
12.93945313	0.003985442	0.915617154
12.94555664	0.003370054	0.919289693
12.95166016	0.004715209	1.368671305
12.95776367	0.006840777	1.662571178
12.96386719	0.007167698	1.527512166
12.9699707	0.005720819	1.298285386
12.97607422	0.003738383	0.991334292
12.98217773	0.00412336	1.11435977
12.98828125	0.006091773	1.539081391
12.99438477	0.004182406	1.005820531
13.00048828	0.002741169	0.630202369
13.0065918	0.005703018	1.379426948
13.01269531	0.006560891	1.545721074
13.01879883	0.003463957	0.717799132
13.02490234	0.002882962	0.551812238
13.03100586	0.005010815	0.974854301
13.03710938	0.003924264	0.835427218
13.04321289	0.006604804	1.588726383
13.04931641	0.007609477	1.972327946
13.05541992	0.007517324	1.959645036
13.06152344	0.004972129	1.273517594
13.06762695	0.002894045	0.675144927
13.07373047	0.006009921	1.355515367
13.07983398	0.008044103	2.167185588
13.0859375	0.008330182	2.856291115
13.09204102	0.008099602	3.170165821
13.09814453	0.008123829	3.149242188
13.10424805	0.008857115	2.812738805
13.11035156	0.00906618	2.332310294
13.11645508	0.007394901	1.765254675
13.12255859	0.00454079	1.040664396
13.12866211	0.00402147	0.822954182
13.13476563	0.005499984	1.018036341
13.14086914	0.007376271	1.401924448
13.14697266	0.007595028	1.519236348
13.15307617	0.007295889	1.462480463
13.15917969	0.00970547	2.062752237
13.1652832	0.01048843	2.397499005
13.17138672	0.009884618	2.299542858
13.17749023	0.008578495	2.066853467
13.18359375	0.005222631	1.305438026
13.18969727	0.004721269	1.220524175
13.19580078	0.006621634	2.0109754
13.2019043	0.007809526	3.063570507
13.20800781	0.007581744	2.617047545
13.21411133	0.006680663	1.971344228
13.22021484	0.004935264	1.475075935
13.22631836	0.001904453	0.561003748
13.23242188	0.003819212	1.204401421
13.23852539	0.00415964	1.306858258
13.24462891	0.000700304	0.176813627
13.25073242	0.005274563	1.195857715
13.25683594	0.007984936	2.066832635
13.26293945	0.006459113	2.018045911
13.26904297	0.002703338	0.919282778
13.27514648	0.000516174	0.165699758
13.28125	0.000765628	0.23180504
13.28735352	0.00188337	0.632049182
13.29345703	0.004439418	1.751262357
13.29956055	0.00555127	2.094045611
13.30566406	0.005810188	1.80153243
13.31176758	0.007331375	1.884304375
13.31787109	0.006879591	1.728241684
13.32397461	0.005045718	1.509717194
13.33007813	0.005343765	2.114004488

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
10.92	-7.78465E-05	4.91663E-07	9.92671E-05	0.022335103	5.6526E-05	0.01129101
10.925	0.000168276	-7.24816E-07	-0.000146486	-0.032959356	5.65331E-05	0.01129101
10.93	0.000396802	-1.85817E-06	-0.000375422	-0.084469937	5.65729E-05	0.01129101
10.935	0.000574293	-2.742E-06	-0.000553939	-0.124636327	5.66563E-05	0.01129101
10.94	0.00067488	-3.24725E-06	-0.000655982	-0.147595902	5.67714E-05	0.01129101
10.945	0.000686298	-3.31165E-06	-0.000668981	-0.150520813	5.68905E-05	0.01129101
10.95	0.000625256	-3.01626E-06	-0.000609295	-0.137091445	5.69893E-05	0.01129101
10.955	0.000526869	-2.53425E-06	-0.000511905	-0.115178539	5.70594E-05	0.01129101
10.96	0.000410474	-1.96183E-06	-0.000396251	-0.089156577	5.7102E-05	0.01129101
10.965	0.000261847	-1.22863E-06	-0.000248125	-0.055828207	5.71193E-05	0.01129101
10.97	8.44575E-05	-3.50279E-07	-7.06883E-05	-0.015904862	5.71211E-05	0.01129101
10.975	-6.16901E-05	3.76999E-07	7.62205E-05	0.017149619	5.71221E-05	0.01129101
10.98	-0.000127919	7.10511E-07	0.000143586	0.0323069	5.71262E-05	0.01129101
10.985	-0.000124385	6.9873E-07	0.000141203	0.031770732	5.71301E-05	0.01129101
10.99	-6.06905E-05	3.88824E-07	7.85838E-05	0.017681352	5.71311E-05	0.01129101
10.995	7.22611E-05	-2.65329E-07	-5.35869E-05	-0.012057063	5.71324E-05	0.01129101
11	0.00023936	-1.09188E-06	-0.000220578	-0.049630157	5.71469E-05	0.01129101
11.005	0.00036525	-1.71773E-06	-0.000347011	-0.078077581	5.71806E-05	0.01129101
11.01	0.000416064	-1.97269E-06	-0.000398517	-0.089666401	5.72243E-05	0.01129101
11.015	0.000428018	-2.03396E-06	-0.000410893	-0.092450881	5.72706E-05	0.01129101
11.02	0.000451177	-2.14951E-06	-0.000434236	-0.097703015	5.73221E-05	0.01129101
11.025	0.000498253	-2.38356E-06	-0.000481515	-0.108340853	5.73848E-05	0.01129101
11.03	0.000555662	-2.6697E-06	-0.000539314	-0.121345646	5.74629E-05	0.01129101
11.035	0.000606008	-2.92231E-06	-0.000590339	-0.13282637	5.75557E-05	0.01129101
11.04	0.000617607	-2.98476E-06	-0.000602954	-0.135664549	5.76521E-05	0.01129101
11.045	0.000555696	-2.68372E-06	-0.000542125	-0.121978208	5.77301E-05	0.01129101
11.05	0.000434162	-2.08562E-06	-0.000421279	-0.094787836	5.77778E-05	0.01129101
11.055	0.000312962	-1.48656E-06	-0.000300248	-0.067555818	5.78025E-05	0.01129101
11.06	0.00022086	-1.03046E-06	-0.000208102	-0.046822985	5.78149E-05	0.01129101
11.065	0.000133149	-5.9589E-07	-0.000120311	-0.027070038	5.78193E-05	0.01129101
11.07	4.24406E-05	-1.45412E-07	-2.93098E-05	-0.006594699	5.78198E-05	0.01129101
11.075	-1.69389E-05	1.51231E-07	3.06133E-05	0.006887993	5.78199E-05	0.01129101
11.08	-2.96658E-05	2.16744E-07	4.38469E-05	0.009865563	5.78201E-05	0.01129101
11.085	-1.84573E-05	1.62582E-07	3.29027E-05	0.007403108	5.78202E-05	0.01129101
11.09	-4.90282E-06	9.56536E-08	1.9379E-05	0.004360281	5.78202E-05	0.01129101
11.095	-3.70719E-06	8.88176E-08	1.79978E-05	0.0040495	5.78202E-05	0.01129101
11.1	-3.82499E-05	2.58179E-07	5.22169E-05	0.011748807	5.78206E-05	0.01129101
11.105	-0.000122574	6.74712E-07	0.000136355	0.030679853	5.78244E-05	0.01129101
11.11	-0.000227457	1.1956E-06	0.000241566	0.054352268	5.78374E-05	0.01129101
11.115	-0.000285314	1.48643E-06	0.000300306	0.067568829	5.7858E-05	0.01129101
11.12	-0.000259395	1.36284E-06	0.000275334	0.061950086	5.7875E-05	0.01129101
11.125	-0.000191188	1.02789E-06	0.000207653	0.04672194	5.78843E-05	0.01129101
11.13	-0.000138125	7.66183E-07	0.000154776	0.034824561	5.78891E-05	0.01129101
11.135	-0.000109378	6.24381E-07	0.000126125	0.028378221	5.78921E-05	0.01129101
11.14	-0.000101745	5.86918E-07	0.000118556	0.026675136	5.78947E-05	0.01129101
11.145	-0.000124917	7.02431E-07	0.000141897	0.031926851	5.78987E-05	0.01129101
11.15	-0.000157549	8.66606E-07	0.00017507	0.039390837	5.79049E-05	0.01129101
11.155	-0.000148602	8.26615E-07	0.000166989	0.037572612	5.79105E-05	0.01129101
11.16	-8.14806E-05	4.98498E-07	0.000100692	0.022655595	5.79122E-05	0.01129101
11.165	1.77845E-05	1.01354E-08	2.02428E-06	0.000455464	5.79123E-05	0.01129101
11.17	0.000138162	-5.83578E-07	-0.000117922	-0.026532345	5.79171E-05	0.01129101
11.175	0.000290932	-1.33901E-06	-0.000270529	-0.06086902	5.79385E-05	0.01129101
11.18	0.000453486	-2.14577E-06	-0.000433495	-0.097536279	5.79905E-05	0.01129101
11.185	0.000562879	-2.69242E-06	-0.000543911	-0.12238002	5.80705E-05	0.01129101
11.19	0.000581638	-2.79133E-06	-0.000563889	-0.126875003	5.8156E-05	0.01129101
11.195	0.000535937	-2.56977E-06	-0.00051912	-0.116801971	5.82286E-05	0.01129101
11.2	0.00047812	-2.28636E-06	-0.000461856	-0.103917578	5.82864E-05	0.01129101
11.205	0.000437363	-2.08629E-06	-0.000421432	-0.094822263	5.83348E-05	0.01129101
11.21	0.000423115	-2.01714E-06	-0.00040746	-0.091678556	5.838E-05	0.01129101
11.215	0.000433328	-2.07007E-06	-0.000418155	-0.094084842	5.84275E-05	0.01129101
11.22	0.000418703	-2.00245E-06	-0.000404493	-0.091010827	5.84718E-05	0.01129101
11.225	0.000301508	-1.42825E-06	-0.00028848	-0.064908042	5.84948E-05	0.01129101
11.23	7.50354E-05	-3.10476E-07	-6.26643E-05	-0.014099474	5.84962E-05	0.01129101
11.235	-0.000181197	9.59461E-07	0.000193865	0.043619694	5.85045E-05	0.01129101
11.24	-0.000391538	2.00636E-06	0.000405315	0.09119595	5.85432E-05	0.01129101
11.245	-0.000522904	2.66496E-06	0.000538326	0.121123243	5.86123E-05	0.01129101
11.25	-0.000558406	2.85037E-06	0.00057577	0.129548267	5.86911E-05	0.01129101
11.255	-0.000491988	2.53099E-06	0.000511237	0.115028321	5.87523E-05	0.01129101
11.26	-0.000343913	1.80542E-06	0.000364635	0.082042859	5.87822E-05	0.01129101
11.265	-0.000157164	8.85586E-07	0.0001788	0.040230054	5.87884E-05	0.01129101
11.27	3.52116E-05	-6.45034E-08	-1.31311E-05	-0.002954494	5.87888E-05	0.01129101
11.275	0.000227686	-1.01713E-06	-0.000205559	-0.04625068	5.88019E-05	0.01129101
11.28	0.000407977	-1.91196E-06	-0.000386299	-0.086917281	5.88439E-05	0.01129101
11.285	0.000538305	-2.56181E-06	-0.000517548	-0.11644841	5.89172E-05	0.01129101
11.29	0.00060014	-2.87334E-06	-0.000580464	-0.130604337	5.90082E-05	0.01129101
11.295	0.000614405	-2.94895E-06	-0.000595734	-0.134040157	5.91036E-05	0.01129101
11.3	0.000594151	-2.8534E-06	-0.000576428	-0.129696214	5.91928E-05	0.01129101
11.305	0.000529668	-2.53826E-06	-0.000512751	-0.115368974	5.92637E-05	0.01129101
11.31	0.00043704	-2.0819E-06	-0.000420544	-0.094622464	5.9312E-05	0.01129101
11.315	0.000363135	-1.71623E-06	-0.000346664	-0.077999468	5.93453E-05	0.01129101
11.32	0.000330267	-1.55314E-06	-0.000313714	-0.070585606	5.93729E-05	0.01129101
11.325	0.000321373	-1.50926E-06	-0.000304848	-0.068590803	5.9399E-05	0.011291251
11.33	0.000312958	-1.46835E-06	-0.000296584	-0.066731394	5.94238E-05	0.011291386
11.335	0.000289667	-1.35419E-06	-0.000273519	-0.06154185	5.9445E-05	0.011291946
11.34	0.000235774	-1.08854E-06	-0.000219851	-0.049466583	5.9459E-05	0.011292065
11.345	0.000139762	-6.13217E-07	-0.000123826	-0.027860804	5.9464E-05	0.011292731
11.35	3.17154E-05	-7.52871E-08	-1.5158E-05	-0.003410554	5.94642E-05	0.011293385
11.355	-8.82202E-06	1.31594E-07	2.66329E-05	0.0059924	5.94642E-05	0.011293489
11.36	6.65996E-05	-2.35309E-07	-4.75036E-05	-0.010688303	5.94653E-05	0.011293489
11.365	0.000224193	-1.01173E-06	-0.000204377	-0.045984777	5.94781E-05	0.011293489
11.37	0.000404928	-1.90635E-06	-0.000385117	-0.086651251	5.95195E-05	0.011293489
11.375	0.0005618	-2.68643E-06	-0.000542705	-0.122108684	5.95993E-05	0.011293489
11.38	0.000645134	-3.10533E-06	-0.000627317	-0.141146277	5.97045E-05	0.011293489
11.385	0.000624426	-3.00985E-06	-0.000608021	-0.136804663	5.9803E-05	0.011293489
11.39	0.000521247	-2.50409E-06	-0.000505831	-0.113811935	5.98717E-05	0.011293489
11.395	0.000398392	-1.89764E-06	-0.000383301	-0.086242633	5.99118E-05	0.011293489
11.4	0.000309579	-1.4572E-06	-0.000294318	-0.066221658	5.9936E-05	0.011293489
11.405	0.000264122	-1.23016E-06	-0.00024845	-0.055901147	5.99536E-05	0.011293489
11.41	0.000265399	-1.23362E-06	-0.000249149	-0.056058603	5.99714E-05	0.011293489
11.415	0.000331708	-1.55932E-06	-0.00031496	-0.070865997	5.99992E-05	0.011293489
11.42	0.00043632	-2.07715E-06	-0.000419589	-0.094407463	6.00474E-05	0.011293489
11.425	0.000510487	-2.44712E-06	-0.000494337	-0.111225777	6.01132E-05	0.011293489
11.43	0.00052242	-2.51003E-06	-0.000507046	-0.114085399	6.01822E-05	0.011293489
11.435	0.000489147	-2.34869E-06	-0.000474446	-0.106750422	6.02427E-05	0.011293489

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
13.33618164	0.006857321	2.701755687
13.34228516	0.007212273	2.299553444
13.34838867	0.007405411	2.175056414
13.35449219	0.008219429	2.539826323
13.3605957	0.008612794	2.990849073
13.36669922	0.008966423	3.22313594
13.37280273	0.010755757	3.870525628
13.37890625	0.012498964	4.147488361
13.38500977	0.011790963	3.366997282
13.39111328	0.008472843	2.404718364
13.3972168	0.005750169	1.877057315
13.40332031	0.005623567	1.810952082
13.40942383	0.007168063	2.384734823
13.41552734	0.010985533	4.286420646
13.42163086	0.014953864	5.01215501
13.42773438	0.014330527	3.870574128
13.43383789	0.009610717	2.444687046
13.43994141	0.005748657	1.825601829
13.44604492	0.004708427	2.267040557
13.45214844	0.005127236	3.108276522
13.45825195	0.006390234	2.990653908
13.46435547	0.007178542	2.452095786
13.47045898	0.006787223	1.999890535
13.4765625	0.005045369	1.467395422
13.48266602	0.003984555	1.218084134
13.48876953	0.005506971	1.746313008
13.49487305	0.004723897	1.728013389
13.50097656	0.00568399	2.105561054
13.50708008	0.004982672	1.438248921
13.51318359	0.002547667	0.679330353
13.51928711	0.006391396	1.630655534
13.52539063	0.008903344	2.293613378
13.53149414	0.007584334	2.209944224
13.53759766	0.004116738	1.21339614
13.54370117	0.001734807	0.486902634
13.54980469	0.001609496	0.499162299
13.5559082	0.004824205	1.428620461
13.56201172	0.005813911	1.464587055
13.56811523	0.006057718	1.547556433
13.57421875	0.005699585	1.609383259
13.58032227	0.00286262	0.893827597
13.58642578	0.001073562	0.341253832
13.5925293	0.00184433	0.544232685
13.59863281	0.002311079	0.620509776
13.60473633	0.00613036	1.398587805
13.61083984	0.007930713	1.64160434
13.61694336	0.008328551	1.947947165
13.62304688	0.009857014	2.848839089
13.62915039	0.010095718	3.146603287
13.63525391	0.00979437	3.373180034
13.64135742	0.011952771	3.95961466
13.64746094	0.013101906	3.320151181
13.65356445	0.013599351	3.333549679
13.65966797	0.012567265	4.064149601
13.66577148	0.009364032	5.414627748
13.671875	0.008599242	11.57810343
13.67797852	0.010991599	8.890335162
13.68408203	0.011079464	4.699475347
13.69018555	0.009612159	3.808330332
13.69628906	0.011826713	5.338351024
13.70239258	0.013374479	7.984851906
13.70849609	0.012752954	12.38345526
13.71459961	0.013365767	8.59284789
13.72070313	0.014977833	5.319522722
13.72680664	0.015746572	4.221071131
13.73291016	0.016170598	4.429831079
13.73901367	0.015736221	4.605940048
13.74511719	0.014243257	4.719585399
13.7512207	0.013149394	5.954408215
13.75732422	0.012256201	6.695033592
13.76342773	0.010997635	4.793352788
13.76953125	0.010236839	3.675872267
13.77563477	0.011069002	4.051146653
13.78173828	0.013090261	5.348020881
13.7878418	0.014167122	6.345957675
13.79394531	0.013755814	6.87996573
13.80004883	0.013304341	6.924286572
13.80615234	0.012730612	6.68082704
13.81225586	0.011592671	7.063801712
13.81835938	0.01153041	6.653050242
13.82446289	0.011722076	5.230299157
13.83056641	0.009600091	3.781506447
13.83666992	0.006516138	2.66106486
13.84277344	0.004380585	1.906970732
13.84887695	0.00244895	1.182988682
13.85498047	0.001899443	0.922264611
13.86108398	0.003800077	1.411123597
13.8671875	0.004453668	1.249460116
13.87329102	0.005423728	1.394300653
13.87939453	0.006302483	1.642154889
13.88549805	0.005409408	1.598620006
13.89160156	0.004112718	1.458719186
13.89770508	0.00350751	1.435554509
13.90380859	0.004059926	1.818932894
13.90991211	0.004787188	2.534163385
13.91601563	0.005113497	2.28083361
13.92211914	0.005210809	1.700122535
13.92822266	0.004968869	1.475855184
13.93432617	0.003490658	1.087018516
13.94042969	0.003636342	1.190785316
13.9465332	0.007439021	2.427180875
13.95263672	0.007153261	2.547081431
13.95874023	0.004215684	1.713399084
13.96484375	0.004345353	1.736686339

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
11.44	0.000435503	-2.08576E-06	-0.000421318	-0.094796641	6.02906E-05	0.011293489
11.445	0.000372343	-1.77507E-06	-0.000358544	-0.080672483	6.03257E-05	0.011293489
11.45	0.000305319	-1.44444E-06	-0.000291742	-0.065641911	6.03492E-05	0.011293489
11.455	0.000250525	-1.1737E-06	-0.000237044	-0.053334836	6.03651E-05	0.011293489
11.46	0.000200068	-9.24874E-07	-0.000186775	-0.042024457	6.03752E-05	0.011293489
11.465	0.000109223	-4.76228E-07	-9.61423E-05	-0.021632017	6.03782E-05	0.011293489
11.47	-1.95831E-05	1.6268E-07	3.292E-05	0.007406997	6.03783E-05	0.011293489
11.475	-0.000113437	6.31826E-07	0.000127685	0.028729156	6.03816E-05	0.011293489
11.48	-0.000121642	6.78225E-07	0.000137055	0.03083737	6.03853E-05	0.011293489
11.485	-5.68533E-05	3.62231E-07	7.32053E-05	0.016471194	6.03861E-05	0.011293489
11.49	4.58312E-05	-1.43345E-07	-2.89464E-05	-0.006512947	6.03866E-05	0.011293489
11.495	0.000162246	-7.19066E-07	-0.000145264	-0.032684504	6.03933E-05	0.011293489
11.5	0.000268955	-1.24927E-06	-0.00025238	-0.056785398	6.04116E-05	0.011293489
11.505	0.00032236	-1.51775E-06	-0.000306618	-0.068989059	6.04378E-05	0.011293489
11.51	0.000302829	-1.42516E-06	-0.00028791	-0.064779775	6.0461E-05	0.011293489
11.515	0.000250656	-1.16954E-06	-0.000236259	-0.053158251	6.04769E-05	0.011293489
11.52	0.000187418	-8.58539E-07	-0.000173421	-0.039019706	6.04858E-05	0.011293489
11.525	8.32135E-05	-3.44053E-07	-6.94724E-05	-0.015631298	6.04875E-05	0.011293489
11.53	-4.88163E-05	3.10916E-07	6.28521E-05	0.014141715	6.04881E-05	0.011293489
11.535	-0.000137728	7.55497E-07	0.000152666	0.034349741	6.04929E-05	0.011293489
11.54	-0.00014536	7.98689E-07	0.000161388	0.036312225	6.04983E-05	0.011293489
11.545	-8.52569E-05	5.05825E-07	0.000102211	0.022997571	6.05001E-05	0.011293489
11.55	2.75107E-05	-4.90662E-08	-9.90447E-06	-0.002228506	6.05003E-05	0.011293489
11.555	0.000187319	-8.38973E-07	-0.000169494	-0.038136194	6.05092E-05	0.011293489
11.56	0.00036223	-1.70718E-06	-0.000344889	-0.077599969	6.05423E-05	0.011293489
11.565	0.000484078	-2.31639E-06	-0.000467955	-0.105289908	6.06016E-05	0.011293489
11.57	0.000503982	-2.42259E-06	-0.000489406	-0.110116285	6.06657E-05	0.011293489
11.575	0.000432872	-2.07754E-06	-0.000419685	-0.09442922	6.07131E-05	0.011293489
11.58	0.000299059	-1.42052E-06	-0.000286935	-0.064560389	6.07357E-05	0.011293489
11.585	0.000114577	-5.10304E-07	-0.000103042	-0.023184527	6.0739E-05	0.011293489
11.59	-8.59619E-05	4.83164E-07	9.76525E-05	0.02197181	6.07409E-05	0.011293489
11.595	-0.00023714	1.23601E-06	0.000249723	0.056187619	6.07551E-05	0.011293489
11.6	-0.000304321	1.57483E-06	0.000318157	0.071585248	6.07785E-05	0.011293489
11.605	-0.000297734	1.54867E-06	0.000312867	0.070394974	6.08009E-05	0.011293489
11.61	-0.000224426	1.19163E-06	0.000240724	0.054162999	6.08136E-05	0.011293489
11.615	-9.12373E-05	5.362E-07	0.000108297	0.024366742	6.08158E-05	0.011293489
11.62	5.68414E-05	-1.96306E-07	-3.96938E-05	-0.008931101	6.08166E-05	0.011293489
11.625	0.00015942	-7.06465E-07	-0.000142756	-0.032120212	6.0823E-05	0.011293489
11.63	0.000195961	-8.90634E-07	-0.000179961	-0.040491322	6.08327E-05	0.011293489
11.635	0.000190295	-8.65439E-07	-0.00017487	-0.039345781	6.08418E-05	0.011293489
11.64	0.000163028	-7.32946E-07	-0.000148098	-0.033322107	6.08486E-05	0.011293489
11.645	0.000108425	-4.64624E-07	-9.3882E-05	-0.021123446	6.08515E-05	0.011293489
11.65	3.64962E-05	-1.08863E-07	-2.20005E-05	-0.004950115	6.08519E-05	0.011293489
11.655	-6.34052E-06	1.04819E-07	2.11727E-05	0.00476386	6.08519E-05	0.011293489
11.66	7.8981E-06	3.62359E-08	7.3145E-06	0.001645763	6.08519E-05	0.011293489
11.665	5.60892E-05	-2.01875E-07	-4.07983E-05	-0.009179614	6.08527E-05	0.011293489
11.67	9.89416E-05	-4.15413E-07	-8.39445E-05	-0.018887504	6.08552E-05	0.011293489
11.675	0.000107638	-4.61413E-07	-9.32387E-05	-0.020978702	6.08581E-05	0.011293489
11.68	5.53371E-05	-2.0638E-07	-4.17063E-05	-0.009383922	6.08589E-05	0.011293489
11.685	-7.77028E-05	4.49114E-07	9.07333E-05	0.020414997	6.08604E-05	0.011293489
11.69	-0.000263609	1.36961E-06	0.000276697	0.062256894	6.0878E-05	0.011293489
11.695	-0.000420159	2.1489E-06	0.000434102	0.097672983	6.09226E-05	0.011293489
11.7	-0.000487422	2.48822E-06	0.000502632	0.113092244	6.09826E-05	0.011293489
11.705	-0.000474806	2.43176E-06	0.000491221	0.110524822	6.10396E-05	0.011293489
11.71	-0.000409122	2.11134E-06	0.000426478	0.095957455	6.10819E-05	0.011293489
11.715	-0.000309285	1.61983E-06	0.000327168	0.073612749	6.11061E-05	0.011293489
11.72	-0.000221121	1.18345E-06	0.000239002	0.053775393	6.11184E-05	0.011293489
11.725	-0.000197005	1.06282E-06	0.00021463	0.048291807	6.11283E-05	0.011293489
11.73	-0.000233231	1.24231E-06	0.000250899	0.056452376	6.1142E-05	0.011293489
11.735	-0.000269364	1.42419E-06	0.00028765	0.06472117	6.11603E-05	0.011293489
11.74	-0.000246623	1.31656E-06	0.000265901	0.059827697	6.11757E-05	0.011293489
11.745	-0.000147245	8.29535E-07	0.0001675	0.037687601	6.11812E-05	0.011293489
11.75	1.59683E-05	2.48411E-08	4.93561E-06	0.001110512	6.11813E-05	0.011293489
11.755	0.000214396	-9.57188E-07	-0.000193439	-0.043523744	6.11929E-05	0.011293489
11.76	0.000394804	-1.85381E-06	-0.000374547	-0.084272986	6.12323E-05	0.011293489
11.765	0.000495415	-2.35815E-06	-0.000476412	-0.107192658	6.12943E-05	0.011293489
11.77	0.000501118	-2.39272E-06	-0.000483391	-0.108762879	6.13578E-05	0.011293489
11.775	0.000455664	-2.17241E-06	-0.000438873	-0.098746509	6.14102E-05	0.011293489
11.78	0.000394998	-1.87569E-06	-0.000378921	-0.085257155	6.14497E-05	0.011293489
11.785	0.000308057	-1.44833E-06	-0.000292574	-0.065829234	6.14737E-05	0.011293489
11.79	0.000192082	-8.75582E-07	-0.000176858	-0.039793061	6.1483E-05	0.011293489
11.795	8.75595E-05	-3.57191E-07	-7.21297E-05	-0.016229182	6.14849E-05	0.011293489
11.8	2.60997E-05	-5.06386E-08	-1.02006E-05	-0.002295125	6.14851E-05	0.011293489
11.805	5.26381E-06	5.52065E-08	1.11816E-05	0.00251587	6.14851E-05	0.011293489
11.81	2.55092E-05	-4.22103E-08	-8.50277E-06	-0.001913124	6.14853E-05	0.011293489
11.815	9.14545E-05	-3.66666E-07	-7.40617E-05	-0.01666388	6.14874E-05	0.011293489
11.82	0.000176421	-7.87375E-07	-0.000159066	-0.035789764	6.14952E-05	0.011293489
11.825	0.000230246	-1.05592E-06	-0.000213322	-0.047997553	6.15086E-05	0.011293489
11.83	0.000231533	-1.06466E-06	-0.000215089	-0.048395039	6.15222E-05	0.011293489
11.835	0.000207928	-9.49216E-07	-0.000191761	-0.043146304	6.15331E-05	0.011293489
11.84	0.000186707	-8.45127E-07	-0.000170729	-0.038414068	6.15419E-05	0.011293489
11.845	0.000154522	-6.87069E-07	-0.000138793	-0.031228315	6.1548E-05	0.011293489
11.85	9.34419E-05	-3.85678E-07	-7.78961E-05	-0.017526628	6.15502E-05	0.011293489
11.855	1.42469E-05	6.41243E-09	1.32334E-06	0.000297752	6.15502E-05	0.011293489
11.86	-7.34798E-05	4.41721E-07	8.92614E-05	0.020083813	6.15516E-05	0.011293489
11.865	-0.000171498	9.29469E-07	0.000187787	0.042252172	6.1559E-05	0.011293489
11.87	-0.000249713	1.32174E-06	0.000267024	0.060080407	6.15748E-05	0.011293489
11.875	-0.00025104	1.33528E-06	0.000269756	0.060695012	6.15907E-05	0.011293489
11.88	-0.000161785	8.99787E-07	0.00018176	0.040896063	6.15973E-05	0.011293489
11.885	-2.34833E-05	2.19227E-07	4.42564E-05	0.009957686	6.15975E-05	0.011293489
11.89	0.000129865	-5.38038E-07	-0.000108734	-0.024465238	6.16017E-05	0.011293489
11.895	0.000287137	-1.317E-06	-0.000266097	-0.059871934	6.16226E-05	0.011293489
11.9	0.000420804	-1.98184E-06	-0.000400398	-0.090089465	6.16673E-05	0.011293489
11.905	0.000489603	-2.32757E-06	-0.000470232	-0.105802263	6.17279E-05	0.011293489
11.91	0.000482989	-2.3E-06	-0.000464661	-0.104548641	6.17869E-05	0.011293489
11.915	0.0004342	-2.06227E-06	-0.000416623	-0.093740264	6.18345E-05	0.011293489
11.92	0.000377066	-1.78212E-06	-0.000360019	-0.08100424	6.18704E-05	0.011293489
11.925	0.000308384	-1.44431E-06	-0.000291765	-0.065647044	6.18945E-05	0.011293489
11.93	0.000218818	-1.00208E-06	-0.000202419	-0.04554419	6.19066E-05	0.011293489
11.935	0.000125354	-5.39063E-07	-0.000108874	-0.024496734	6.19106E-05	0.011293489
11.94	3.75715E-05	-1.03072E-07	-2.07948E-05	-0.00467883	6.19109E-05	0.011293489
11.945	-5.15987E-05	3.4112E-07	6.89379E-05	0.015511025	6.19116E-05	0.011293489
11.95	-0.000115138	6.60677E-07	0.000133491	0.030035369	6.19149E-05	0.011293489
11.955	-9.98418E-05	5.91369E-07	0.000119484	0.026884012	6.19175E-05	0.011293489

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
13.97094727	0.004451354	1.975939635
13.97705078	0.00349484	1.731082217
13.9831543	0.005676372	2.345686215
13.98925781	0.007526527	2.83822164
13.99536133	0.008909334	3.742876089
14.00146484	0.009562752	3.667894149
14.00756836	0.010553802	3.712374511
14.01367188	0.010333158	4.972144496
14.01977539	0.008406564	5.679317239
14.02587891	0.008061014	5.36923572
14.03198242	0.011505855	6.187378708
14.03808594	0.014667486	5.332048974
14.04418945	0.013909419	4.830201512
14.05029297	0.010968416	4.946734977
14.05639648	0.00815086	4.843142847
14.0625	0.007338583	5.8568067
14.06860352	0.009790525	8.265923995
14.07470703	0.01323319	6.522854147
14.08081055	0.013821724	5.630282564
14.08691406	0.010866658	4.687698915
14.09301758	0.007585905	3.402591626
14.09912109	0.007027723	3.728386899
14.10522461	0.008022511	4.704384069
14.11132813	0.010328713	4.580937358
14.11743164	0.013598721	5.192387639
14.12353516	0.014659771	6.113255007
14.12963867	0.012395941	6.014820404
14.13574219	0.008916778	5.336687003
14.1418457	0.005757808	3.473524965
14.14794922	0.005124536	2.523609477
14.15405273	0.006128796	3.434867918
14.16015625	0.006058784	5.642606945
14.16625977	0.004231923	3.878711033
14.17236328	0.001966339	1.050150722
14.1784668	0.002144105	0.843255125
14.18457031	0.002877149	1.197684173
14.19067383	0.00366322	1.51296315
14.19677734	0.005645578	2.01730446
14.20288086	0.006574986	2.396440858
14.20898438	0.006387706	2.639451462
14.21508789	0.005533958	2.749775696
14.22119141	0.005672687	3.036539086
14.22729492	0.005840859	2.335103738
14.23339844	0.005362756	1.880294021
14.23950195	0.005781924	2.085362249
14.24560547	0.0064768	2.103036875
14.25170898	0.006267487	1.982902642
14.2578125	0.006000033	2.065515492
14.26391602	0.005576111	1.845186267
14.27001953	0.003044884	1.169792397
14.27612305	0.002094016	1.239479997
14.28222656	0.00271869	1.351392725
14.28833008	0.002579786	0.896431533
14.29443359	0.003471526	1.254720037
14.30053711	0.005943814	2.543798919
14.30664063	0.006937572	3.085872167
14.31274414	0.006883154	3.14234154
14.31884766	0.007733584	3.304549266
14.32495117	0.008424143	2.937193507
14.33105469	0.007830716	2.3305147
14.3371582	0.006617734	1.890665696
14.34326172	0.005933636	1.973710008
14.34936523	0.005710185	2.353941698
14.35546875	0.005434271	2.447778798
14.36157227	0.004358255	2.455881985
14.36767578	0.002640202	1.970357292
14.3737793	0.001094064	0.715839576
14.37988281	0.002281302	1.441961694
14.38598633	0.005723551	3.857542555
14.39208984	0.00848573	4.523248558
14.39819336	0.007632261	3.89013735
14.40429688	0.007045257	5.256802388
14.41040039	0.007691288	7.000158763
14.41650391	0.008515163	4.978761398
14.42260742	0.009257792	4.141524475
14.42871094	0.009360454	4.25940993
14.43481445	0.008825021	3.874946705
14.44091797	0.008169395	3.311280056
14.44702148	0.008332421	3.568921658
14.453125	0.008017576	4.280463085
14.45922852	0.007044353	6.33593943
14.46533203	0.00786574	16.1757896
14.47143555	0.010125744	9.813051348
14.47753906	0.010333465	4.326703428
14.48364258	0.008038729	2.389492262
14.48974609	0.005702201	1.746056332
14.49584961	0.006271045	2.741588183
14.50195313	0.009793521	5.737595261
14.50805664	0.011923412	6.179977519
14.51416016	0.009556313	4.721000715
14.52026367	0.00624942	2.920989242
14.52636719	0.004218583	1.691641647
14.5324707	0.003338597	1.547753532
14.53857422	0.003523635	2.323265393
14.54467773	0.005197952	3.557289266
14.55078125	0.00711976	5.0928606
14.55688477	0.007308125	4.709364257
14.56298828	0.00569365	2.403014664
14.5690918	0.004088965	1.378951955
14.57519531	0.003687347	1.178678092
14.58129883	0.004712245	1.602658995
14.58740234	0.006739312	3.250277305
14.59350586	0.008314319	6.854752019
14.59960938	0.00803031	6.531789059

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
11.96	-1.60713E-07	1.03141E-07	2.08349E-05	0.004687852	6.19175E-05	0.011293489
11.965	0.000132715	-5.51966E-07	-0.000111525	-0.025093191	6.19219E-05	0.011293489
11.97	0.000260011	-1.18123E-06	-0.000238655	-0.053697356	6.1939E-05	0.011293489
11.975	0.000385146	-1.80074E-06	-0.000363809	-0.081856988	6.19765E-05	0.011293489
11.98	0.000510177	-2.42099E-06	-0.000489102	-0.110047961	6.20423E-05	0.011293489
11.985	0.000613866	-2.93679E-06	-0.000593278	-0.133487438	6.21375E-05	0.011293489
11.99	0.000691224	-3.32239E-06	-0.000671153	-0.151009416	6.22583E-05	0.011293489
11.995	0.000768833	-3.70903E-06	-0.00074922	-0.168574418	6.24077E-05	0.011293489
12	0.000854368	-4.1359E-06	-0.000835406	-0.187966417	6.25922E-05	0.011293489
12.005	0.000909262	-4.41277E-06	-0.000891306	-0.200543819	6.28011E-05	0.011293489
12.01	0.0009013	-4.37893E-06	-0.000884465	-0.199004552	6.30064E-05	0.011293489
12.015	0.000846331	-4.11141E-06	-0.000830409	-0.186842098	6.31875E-05	0.011293489
12.02	0.00077086	-3.74128E-06	-0.000755624	-0.170015474	6.33376E-05	0.011293489
12.025	0.000685822	-3.32267E-06	-0.000671046	-0.150985289	6.34565E-05	0.011293489
12.03	0.000617292	-2.98443E-06	-0.00060271	-0.135609851	6.35528E-05	0.011293489
12.035	0.00059538	-2.87679E-06	-0.000580963	-0.130716667	6.36424E-05	0.011293527
12.04	0.000597462	-2.88968E-06	-0.000583569	-0.131302998	6.37326E-05	0.011293527
12.045	0.00056055	-2.71135E-06	-0.000547539	-0.123196351	6.3812E-05	0.011293831
12.05	0.00045727	-2.20411E-06	-0.000445065	-0.10013962	6.38649E-05	0.011293938
12.055	0.0003191	-1.52208E-06	-0.000307288	-0.069139696	6.38906E-05	0.011293938
12.06	0.000180337	-8.35183E-07	-0.000168535	-0.037920347	6.38988E-05	0.011293938
12.065	4.59741E-05	-1.68354E-07	-3.38435E-05	-0.00761479	6.38994E-05	0.011293938
12.07	-6.47141E-05	3.83574E-07	7.76337E-05	0.017467592	6.39004E-05	0.011293938
12.075	-0.000104095	5.8423E-07	0.00011816	0.026586098	6.39032E-05	0.011293938
12.08	-5.67838E-05	3.55148E-07	7.18718E-05	0.016171151	6.3904E-05	0.011293938
12.085	4.11455E-05	-1.26809E-07	-2.55092E-05	-0.005739579	6.39044E-05	0.011293938
12.09	0.00014814	-6.56168E-07	-0.000132462	-0.029803964	6.391E-05	0.011293938
12.095	0.000234131	-1.08383E-06	-0.000218864	-0.049244369	6.39238E-05	0.011293938
12.1	0.000266743	-1.24896E-06	-0.000252225	-0.056750665	6.39418E-05	0.011293938
12.105	0.000221624	-1.02941E-06	-0.000207861	-0.046768646	6.39542E-05	0.011293938
12.11	0.000115441	-5.05411E-07	-0.000101986	-0.022946863	6.39576E-05	0.011293938
12.115	9.31657E-06	2.14351E-08	4.45872E-06	0.001003212	6.39576E-05	0.011293938
12.12	-5.08716E-05	3.22716E-07	6.53275E-05	0.014698686	6.39583E-05	0.011293938
12.125	-7.20325E-05	4.31288E-07	8.72621E-05	0.01963397	6.39596E-05	0.011293938
12.13	-5.84715E-05	3.68582E-07	7.45914E-05	0.016783072	6.39604E-05	0.011293938
12.135	1.71417E-05	-1.23018E-09	-1.32179E-07	-2.97402E-05	6.39605E-05	0.011293938
12.14	0.000152744	-6.69926E-07	-0.00013524	-0.030428952	6.39664E-05	0.011293938
12.145	0.000303353	-1.41581E-06	-0.000285932	-0.064334713	6.39897E-05	0.011293938
12.15	0.000441297	-2.10136E-06	-0.000424423	-0.095495213	6.40389E-05	0.011293938
12.155	0.000560969	-2.69872E-06	-0.000545093	-0.122645906	6.41184E-05	0.011293938
12.16	0.000633591	-3.06577E-06	-0.000619236	-0.139327996	6.42199E-05	0.011293938
12.165	0.000613382	-2.97484E-06	-0.000600861	-0.135193791	6.4315E-05	0.011293938
12.17	0.000485866	-2.35183E-06	-0.000474978	-0.106870073	6.43746E-05	0.011293938
12.175	0.000285064	-1.36305E-06	-0.000275208	-0.061921888	6.43952E-05	0.011293938
12.18	5.97872E-05	-2.49629E-07	-5.02786E-05	-0.011312679	6.43961E-05	0.011293938
12.185	-0.000161151	8.45534E-07	0.000170935	0.038460487	6.44026E-05	0.011293938
12.19	-0.000350627	1.78822E-06	0.000361319	0.081296798	6.44337E-05	0.011293938
12.195	-0.00046044	2.33908E-06	0.000472562	0.10632643	6.44873E-05	0.011293938
12.2	-0.000468098	2.38426E-06	0.000481682	0.108378561	6.45427E-05	0.011293938
12.205	-0.000412199	2.11282E-06	0.000426836	0.096038004	6.45856E-05	0.011293938
12.21	-0.000334134	1.72978E-06	0.000349442	0.078624395	6.46138E-05	0.011293938
12.215	-0.000240876	1.27E-06	0.000256546	0.057722815	6.46285E-05	0.011293938
12.22	-0.000151897	8.2947E-07	0.000167543	0.037697196	6.46343E-05	0.011293938
12.225	-0.000103467	5.88441E-07	0.000118849	0.026740967	6.4637E-05	0.011293938
12.23	-9.46481E-05	5.4396E-07	0.000109862	0.024719033	6.46393E-05	0.011293938
12.235	-9.39582E-05	5.40753E-07	0.000109215	0.024573277	6.46415E-05	0.011293938
12.24	-8.32879E-05	4.88767E-07	9.87121E-05	0.022210232	6.46433E-05	0.011293938
12.245	-5.23046E-05	3.36627E-07	6.79766E-05	0.015294729	6.4644E-05	0.011293938
12.25	1.63173E-05	-1.95104E-09	-4.22202E-07	-9.49954E-05	6.4644E-05	0.011293938
12.255	0.000123472	-5.32747E-07	-0.000107648	-0.024220796	6.46479E-05	0.011293938
12.26	0.000233198	-1.07893E-06	-0.000217978	-0.049044988	6.46616E-05	0.011293938
12.265	0.000292509	-1.37789E-06	-0.000278364	-0.062631988	6.46833E-05	0.011293938
12.27	0.000276422	-1.30411E-06	-0.000263457	-0.059277773	6.47026E-05	0.011293938
12.275	0.000205082	-9.55836E-07	-0.000193084	-0.043443972	6.47132E-05	0.011293938
12.28	0.0001026	-4.52403E-07	-9.13665E-05	-0.020557472	6.47159E-05	0.011293938
12.285	-3.55136E-05	2.28256E-07	4.6151E-05	0.010383984	6.47162E-05	0.011293938
12.29	-0.000209887	1.0901E-06	0.000220262	0.049559034	6.47273E-05	0.011293938
12.295	-0.000394266	2.00378E-06	0.000404831	0.091086956	6.47666E-05	0.011293938
12.3	-0.000568035	2.86702E-06	0.000579174	0.130314227	6.48482E-05	0.011293938
12.305	-0.000723538	3.64212E-06	0.000735687	0.165529621	6.49805E-05	0.011293938
12.31	-0.00082738	4.16441E-06	0.000841147	0.18925814	6.51535E-05	0.011293938
12.315	-0.000821268	4.14445E-06	0.000837104	0.188348429	6.5324E-05	0.011293938
12.32	-0.00068138	3.46134E-06	0.000699078	0.157292584	6.54413E-05	0.011293938
12.325	-0.000454376	2.34308E-06	0.00047315	0.106458727	6.54935E-05	0.011293938
12.33	-0.00021782	1.17275E-06	0.000236728	0.053263838	6.55055E-05	0.011293938
12.335	-2.89967E-05	2.34536E-07	4.72144E-05	0.010623229	6.55057E-05	0.011293974
12.34	6.63864E-05	-2.44289E-07	-4.95001E-05	-0.011137527	6.55068E-05	0.011294126
12.345	2.97159E-05	-7.02525E-08	-1.43338E-05	-0.003225109	6.5507E-05	0.011294947
12.35	-0.000120545	6.68751E-07	0.000134983	0.030371178	6.55107E-05	0.011295392
12.355	-0.000304525	1.57928E-06	0.000318942	0.071761917	6.55341E-05	0.011295392
12.36	-0.000449365	2.30011E-06	0.000464563	0.104526577	6.55852E-05	0.011295392
12.365	-0.000515333	2.63325E-06	0.000531859	0.11966822	6.56523E-05	0.011295392
12.37	-0.000471727	2.42498E-06	0.000489776	0.110199649	6.57085E-05	0.011295392
12.375	-0.00031606	1.65997E-06	0.000335205	0.075421037	6.57338E-05	0.011295392
12.38	-0.000118569	6.82895E-07	0.000137805	0.031006016	6.57373E-05	0.011295392
12.385	7.04908E-06	5.67506E-08	1.13125E-05	0.002545322	6.57373E-05	0.011295392
12.39	2.29326E-06	7.47249E-08	1.49482E-05	0.003363337	6.57373E-05	0.011295392
12.395	-9.29008E-05	5.42712E-07	0.000109508	0.02463931	6.57395E-05	0.011295392
12.4	-0.000203604	1.09077E-06	0.00022024	0.049553961	6.575E-05	0.011295392
12.405	-0.000281657	1.47989E-06	0.000298856	0.067242689	6.57701E-05	0.011295392
12.41	-0.000294615	1.54868E-06	0.000312754	0.070369593	6.5792E-05	0.011295392
12.415	-0.000214951	1.15922E-06	0.000234059	0.052663337	6.58037E-05	0.011295392
12.42	-5.78042E-05	3.83782E-07	7.73856E-05	0.017411758	6.58045E-05	0.011295392
12.425	0.000104961	-4.23358E-07	-8.5668E-05	-0.019275297	6.58073E-05	0.011295392
12.43	0.000205786	-9.26639E-07	-0.000187317	-0.042146218	6.5818E-05	0.011295392
12.435	0.000230501	-1.05403E-06	-0.000213045	-0.047935077	6.58314E-05	0.011295392
12.44	0.00018051	-8.11544E-07	-0.000164048	-0.036910801	6.58397E-05	0.011295392
12.445	4.83322E-05	-1.60684E-07	-3.25412E-05	-0.007321761	6.58403E-05	0.011295392
12.45	-0.000127639	7.10829E-07	0.000143535	0.032295362	6.58444E-05	0.011295392
12.455	-0.000259606	1.3687E-06	0.000276438	0.062198557	6.58614E-05	0.011295392
12.46	-0.000296634	1.5584E-06	0.000314761	0.070821181	6.58836E-05	0.011295392
12.465	-0.000250272	1.33497E-06	0.000269613	0.06066293	6.58995E-05	0.011295392
12.47	-0.00013814	7.84743E-07	0.000158439	0.035648681	6.59043E-05	0.011295392
12.475	2.81606E-05	-3.59765E-08	-7.37783E-06	-0.001660013	6.59045E-05	0.011295392

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
14.60571289	0.005269882	2.707801265
14.61181641	0.003932212	1.592700344
14.61791992	0.00552726	2.07451677
14.62402344	0.007045581	2.502851547
14.63012695	0.006507995	2.266656515
14.63623047	0.004337352	1.326910695
14.64233398	0.004381784	1.380654229
14.6484375	0.007052629	3.253540836
14.65454102	0.009289967	5.663107579
14.66064453	0.008505843	3.579052543
14.66674805	0.006210328	2.001552962
14.67285156	0.005230927	1.557888162
14.67895508	0.006331858	2.236693487
14.68505859	0.008243465	4.515240416
14.69116211	0.009933579	6.834063368
14.69726563	0.009700937	4.560108779
14.70336914	0.008685428	3.12710338
14.70947266	0.008889751	3.071097002
14.71557617	0.010009915	3.541330609
14.72167969	0.009566494	3.730507122
14.7277832	0.007264654	3.049811692
14.73388672	0.005586376	2.349372644
14.73999023	0.004219785	1.906990153
14.74609375	0.004711735	2.329960381
14.75219727	0.007403898	3.548120545
14.75830078	0.009226992	4.184945022
14.7644043	0.008294523	4.381914666
14.77050781	0.006510002	4.416147074
14.77661133	0.005017101	2.935887102
14.78271484	0.003586619	1.645728763
14.78881836	0.003601245	1.593231124
14.79492188	0.004936232	2.095938255
14.80102539	0.005632051	2.542264038
14.80712891	0.005635059	3.303690331
14.81323242	0.004348108	2.747074075
14.81933594	0.002734779	1.473463099
14.82543945	0.003448724	1.825226423
14.83154297	0.005221393	2.696308802
14.83764648	0.006544822	3.180531708
14.84375	0.007526824	3.773410537
14.84985352	0.007195835	3.68452082
14.85595703	0.004755515	2.112141842
14.86206055	0.002455038	1.078097987
14.86816406	0.003489568	2.110816594
14.87426758	0.004755326	6.047594419
14.88037109	0.006572295	5.928975949
14.88647461	0.007127786	4.602634301
14.89257813	0.005618565	3.4693262
14.89868164	0.003945357	2.2300412
14.90478516	0.003848585	2.373484136
14.91088867	0.003748492	2.272801202
14.91699219	0.004282339	1.977637113
14.9230957	0.005699792	2.216681235
14.92919922	0.006352855	2.544592423
14.93530273	0.005381146	2.382193903
14.94140625	0.003507388	1.64243297
14.94750977	0.00169081	0.80120615
14.95361328	0.001197912	0.613723795
14.9597168	0.00325325	1.777618102
14.96582031	0.004397537	2.512741438
14.97192383	0.0026306	1.516202617
14.97802734	0.003448098	2.005452934
14.98413086	0.003686155	2.171538472
14.99023438	0.001934948	1.126401143
14.99633789	0.002552312	1.316896307
15.00244141	0.005080825	2.094354575
15.00854492	0.006987093	2.887915392
15.01464844	0.006802248	3.664298183
15.02075195	0.005655462	3.618091786
15.02685547	0.005415289	2.743578953
15.03295898	0.006778323	3.070618752
15.0390625	0.00821493	3.798844066
15.04516602	0.007864521	3.435298175
15.05126953	0.007027788	2.680090995
15.05737305	0.006080329	2.19522817
15.06347656	0.00405084	1.527669968
15.06958008	0.001941501	0.750328954
15.07568359	0.003498022	1.217089886
15.08178711	0.006090082	2.012562608
15.08789063	0.00723157	2.67642207
15.09399414	0.008224306	3.722763182
15.10009766	0.010726042	7.501887409
15.10620117	0.014173645	15.04250758
15.11230469	0.015963316	8.713421533
15.1184082	0.014917488	5.68312567
15.12451172	0.012829507	4.463568823
15.13061523	0.010421554	3.814188969
15.13671875	0.008165481	3.397593548
15.14282227	0.007028752	3.456748544
15.14892578	0.006019148	3.234796137
15.1550293	0.004095186	2.453337791
15.16113281	0.001914349	1.283950398
15.16723633	0.003199202	1.942626257
15.17333984	0.006265255	3.583078566
15.17944336	0.008453719	4.899285809
15.18554688	0.008821573	5.109385675
15.19165039	0.007970336	4.632477451
15.19775391	0.007511716	4.489347912
15.20385742	0.007231158	4.214103846
15.20996094	0.006430499	3.880072774
15.21606445	0.005927765	3.520950564
15.22216797	0.006869104	4.221441241
15.22827148	0.00836385	5.883989482
15.234375	0.008776695	5.330797373

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
12.48	0.000204343	-9.09272E-07	-0.000183802	-0.041355534	6.59151E-05	0.011295392
12.485	0.000321425	-1.49315E-06	-0.000301732	-0.067889643	6.59412E-05	0.011295392
12.49	0.000349805	-1.6385E-06	-0.000331086	-0.074494376	6.59721E-05	0.011295392
12.495	0.00032547	-1.52135E-06	-0.000307414	-0.069168058	6.59989E-05	0.011295392
12.5	0.000296494	-1.37967E-06	-0.000278785	-0.062726559	6.60211E-05	0.011295392
12.505	0.000278917	-1.29363E-06	-0.0002614	-0.058814954	6.60407E-05	0.011295392
12.51	0.00028072	-1.30307E-06	-0.000263308	-0.059244394	6.60607E-05	0.011295392
12.515	0.000313863	-1.46807E-06	-0.000296649	-0.066746123	6.60856E-05	0.011295392
12.52	0.0003567	-1.68293E-06	-0.000340058	-0.076513106	6.61177E-05	0.011295392
12.525	0.000354335	-1.67591E-06	-0.000338635	-0.076192819	6.61494E-05	0.011295392
12.53	0.000278653	-1.3059E-06	-0.000263871	-0.059371005	6.61691E-05	0.011295392
12.535	0.000151665	-6.80145E-07	-0.000137439	-0.03092386	6.61749E-05	0.011295392
12.54	1.79027E-07	6.89976E-08	1.39124E-05	0.003130281	6.61749E-05	0.011295392
12.545	-0.000165284	8.89891E-07	0.000179748	0.040443305	6.61818E-05	0.011295392
12.55	-0.000307292	1.59816E-06	0.000322822	0.072634851	6.62057E-05	0.011295392
12.555	-0.00036055	1.8697E-06	0.000377672	0.084976177	6.62385E-05	0.011295392
12.56	-0.000308753	1.6209E-06	0.000327399	0.073664816	6.62626E-05	0.011295392
12.565	-0.000197719	1.0769E-06	0.000217483	0.048933602	6.62725E-05	0.011295392
12.57	-5.65406E-05	3.82121E-07	7.711E-05	0.017349745	6.62733E-05	0.011295392
12.575	0.000120698	-4.92829E-07	-9.96504E-05	-0.022421345	6.6277E-05	0.011295392
12.58	0.0003183	-1.4714E-06	-0.000297328	-0.066898693	6.63026E-05	0.011295392
12.585	0.000489327	-2.32149E-06	-0.000469015	-0.105528463	6.63631E-05	0.011295392
12.59	0.000601387	-2.88149E-06	-0.000582102	-0.130972967	6.64545E-05	0.011295392
12.595	0.00066062	-3.18048E-06	-0.000642478	-0.144557537	6.65648E-05	0.011295392
12.6	0.000679788	-3.28146E-06	-0.000662869	-0.149145578	6.66816E-05	0.011295392
12.605	0.000646015	-3.12051E-06	-0.000630347	-0.141828067	6.67871E-05	0.011295392
12.61	0.0005622	-2.71047E-06	-0.000547497	-0.123186802	6.6867E-05	0.011295392
12.615	0.000478439	-2.29871E-06	-0.000464302	-0.10446805	6.69248E-05	0.011295392
12.62	0.000419774	-2.01079E-06	-0.000406132	-0.091379635	6.69694E-05	0.011295392
12.625	0.000349473	-1.66571E-06	-0.000336414	-0.075693255	6.70002E-05	0.011295392
12.63	0.000247716	-1.16396E-06	-0.000235048	-0.052885775	6.70157E-05	0.011295392
12.635	0.000144066	-6.50932E-07	-0.000131409	-0.029566925	6.7021E-05	0.011295392
12.64	6.15384E-05	-2.41132E-07	-4.86261E-05	-0.010940871	6.70219E-05	0.011295392
12.645	4.35829E-07	6.34769E-08	1.29051E-05	0.002903643	6.70219E-05	0.011295392
12.65	-3.05176E-05	2.19626E-07	4.44466E-05	0.010000487	6.70222E-05	0.011295392
12.655	-1.64919E-05	1.53113E-07	3.10069E-05	0.006976543	6.70222E-05	0.011295392
12.66	2.99792E-05	-7.53259E-08	-1.51517E-05	-0.003409121	6.70225E-05	0.011295392
12.665	7.22194E-05	-2.84337E-07	-5.73834E-05	-0.012911258	6.70238E-05	0.011295392
12.67	9.67521E-05	-4.06157E-07	-8.19971E-05	-0.018449357	6.70261E-05	0.011295392
12.675	0.00011956	-5.19493E-07	-0.000104897	-0.023601731	6.70298E-05	0.011295392
12.68	0.000140109	-6.22225E-07	-0.000125653	-0.028271937	6.70347E-05	0.011295392
12.685	0.000139736	-6.21685E-07	-0.000125544	-0.028247336	6.70397E-05	0.011295392
12.69	0.000126247	-5.55436E-07	-0.000112157	-0.025235356	6.70437E-05	0.011295392
12.695	0.000135388	-6.00411E-07	-0.000121245	-0.027280134	6.70483E-05	0.011295392
12.7	0.000180459	-8.23973E-07	-0.000166415	-0.037443357	6.70565E-05	0.011295392
12.705	0.000226119	-1.05233E-06	-0.000212551	-0.04782395	6.70695E-05	0.011296088
12.71	0.000233027	-1.08996E-06	-0.000220154	-0.049534604	6.70832E-05	0.011298627
12.715	0.000204046	-9.49771E-07	-0.000191827	-0.043161102	6.70937E-05	0.011300681
12.72	0.000153027	-7.00206E-07	-0.0001414	-0.031815088	6.70996E-05	0.011302236
12.725	7.31366E-05	-3.07292E-07	-6.20121E-05	-0.013952733	6.7101E-05	0.011303274
12.73	-2.64702E-05	1.84571E-07	3.73644E-05	0.008406985	6.71012E-05	0.011303771
12.735	-0.000111892	6.07572E-07	0.000122809	0.027631947	6.71043E-05	0.011303807
12.74	-0.000175184	9.21258E-07	0.000186169	0.041888001	6.71121E-05	0.011303807
12.745	-0.000236735	1.22629E-06	0.00024778	0.055750428	6.71262E-05	0.011303807
12.75	-0.000296803	1.52461E-06	0.000308033	0.069307327	6.71485E-05	0.011303807
12.755	-0.00033802	1.73005E-06	0.000349526	0.07864336	6.71774E-05	0.011303807
12.76	-0.00037072	1.89287E-06	0.000382411	0.086042403	6.72121E-05	0.011303807
12.765	-0.000426627	2.17041E-06	0.000438464	0.09865444	6.72581E-05	0.011303807
12.77	-0.000504086	2.55602E-06	0.000516342	0.116177025	6.73224E-05	0.011303807
12.775	-0.000557898	2.82657E-06	0.00057098	0.128470592	6.7401E-05	0.011303807
12.78	-0.000550185	2.7933E-06	0.000564254	0.126957164	6.74775E-05	0.011303807
12.785	-0.000483578	2.46758E-06	0.000498441	0.112149218	6.75366E-05	0.011303807
12.79	-0.000381351	1.96383E-06	0.000396659	0.08924818	6.75734E-05	0.011303807
12.795	-0.000265471	1.39039E-06	0.000280801	0.063180141	6.75912E-05	0.011303807
12.8	-0.000167299	9.02244E-07	0.000182182	0.040991022	6.75983E-05	0.011303807
12.805	-0.000125796	6.93101E-07	0.000139931	0.031484449	6.76023E-05	0.011303807
12.81	-0.000146158	7.90652E-07	0.000159642	0.035919547	6.76077E-05	0.011303807
12.815	-0.000188801	1.00006E-06	0.000201956	0.045440168	6.76167E-05	0.011303807
12.82	-0.000223414	1.1706E-06	0.000236413	0.053193001	6.76293E-05	0.011303807
12.825	-0.000259395	1.34809E-06	0.000272276	0.061262031	6.76463E-05	0.011303807
12.83	-0.000302797	1.5631E-06	0.000315719	0.071036687	6.76695E-05	0.011303807
12.835	-0.000327667	1.68747E-06	0.000340846	0.076690269	6.76966E-05	0.011303807
12.84	-0.000319884	1.65017E-06	0.000333308	0.074994342	6.77225E-05	0.011303807
12.845	-0.000302278	1.5635E-06	0.000315796	0.071054168	6.77456E-05	0.011303807
12.85	-0.000284777	1.47719E-06	0.000298356	0.067130175	6.77661E-05	0.011303807
12.855	-0.000250412	1.30704E-06	0.000263977	0.059394868	6.77819E-05	0.011303807
12.86	-0.000212702	1.11882E-06	0.000225945	0.050837616	6.77933E-05	0.011303807
12.865	-0.000212061	1.11282E-06	0.000224735	0.050565275	6.78047E-05	0.011303807
12.87	-0.000254015	1.31787E-06	0.000266166	0.059887328	6.7821E-05	0.011303807
12.875	-0.000319168	1.63837E-06	0.000330925	0.074458112	6.78468E-05	0.011303807
12.88	-0.000410411	2.08843E-06	0.000421856	0.094917579	6.78893E-05	0.011303807
12.885	-0.000539614	2.7276E-06	0.000550985	0.123971525	6.79629E-05	0.011303807
12.89	-0.000685357	3.45131E-06	0.000697145	0.156857689	6.80816E-05	0.011303807
12.895	-0.000786853	3.95907E-06	0.000799681	0.179928318	6.82381E-05	0.011303807
12.9	-0.000794119	4.00155E-06	0.000808254	0.181857216	6.83975E-05	0.011303807
12.905	-0.00072181	3.64873E-06	0.000736963	0.165816759	6.85292E-05	0.011303807
12.91	-0.000617094	3.13337E-06	0.000632836	0.142387992	6.86254E-05	0.011303807
12.915	-0.00049957	2.55267E-06	0.000515512	0.115990166	6.86885E-05	0.011303807
12.92	-0.000392387	2.020555E-06	0.00040801	0.091802206	6.87274E-05	0.011303807
12.925	-0.000354286	1.8282E-06	0.000369153	0.083059327	6.87591E-05	0.011304553
12.93	-0.000408663	2.09421E-06	0.000422902	0.095152949	6.88014E-05	0.011306467
12.935	-0.000505299	2.57205E-06	0.00051945	0.116876249	6.88659E-05	0.011307956
12.94	-0.000590924	2.99774E-06	0.000605459	0.136228321	6.89541E-05	0.011309047
12.945	-0.000643868	3.263262E-06	0.000659103	0.148298196	6.90589E-05	0.011309765
12.95	-0.000642782	3.26215E-06	0.000658877	0.148247299	6.91633E-05	0.011310124
12.955	-0.000583782	2.97335E-06	0.000600522	0.135117469	6.92495E-05	0.01131017
12.96	-0.000513646	2.62697E-06	0.000530534	0.119370216	6.93162E-05	0.011316009
12.965	-0.00048884	2.50333E-06	0.000505555	0.113749867	6.93766E-05	0.01132294
12.97	-0.000512648	2.62095E-06	0.000529321	0.119097175	6.9443E-05	0.011329388
12.975	-0.000537049	2.74316E-06	0.000554014	0.124653131	6.95159E-05	0.011335344
12.98	-0.000526849	2.69464E-06	0.00054421	0.122447151	6.9586E-05	0.011340797
12.985	-0.000496956	2.54803E-06	0.000514587	0.11578199	6.96484E-05	0.011345731
12.99	-0.000463438	2.38326E-06	0.000481295	0.108291449	6.97027E-05	0.011350126
12.995	-0.000410988	2.12461E-06	0.000429037	0.096533325	6.97454E-05	0.011353959

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
15.24047852	0.007567865	3.16030515
15.24658203	0.005710582	1.982789816
15.25268555	0.004470215	1.630774474
15.25878906	0.005151492	2.17982264
15.26489258	0.00626862	3.465572932
15.27099609	0.006191117	4.989968379
15.27709961	0.006420282	4.257013125
15.28320313	0.006524614	2.944087989
15.28930664	0.007103335	2.449359976
15.29541016	0.007878059	2.351828606
15.30151367	0.006941229	2.167861734
15.30761719	0.004475878	2.021635075
15.3137207	0.003195291	2.301312755
15.31982422	0.004884759	3.178244482
15.32592773	0.007142897	3.001245552
15.33203125	0.007586966	2.418491918
15.33813477	0.006768883	2.226350327
15.34423828	0.005967962	2.255517429
15.3503418	0.005750565	2.405100604
15.35644531	0.007140074	3.621379879
15.36254883	0.009846897	6.489514217
15.36865234	0.0112073	5.831480808
15.37475586	0.009589642	3.395028748
15.38085938	0.007733826	2.485279043
15.38696289	0.009007862	3.28172665
15.39306641	0.011882916	5.199326763
15.39916992	0.012829252	5.814152552
15.40527344	0.010796922	4.457629609
15.41137695	0.008677007	3.391670309
15.41748047	0.009574831	3.825608281
15.42358398	0.010097483	3.665686175
15.4296875	0.008160097	2.943371912
15.43579102	0.006650807	2.871031869
15.44189453	0.005940665	2.64383087
15.44799805	0.004243647	1.778717614
15.45410156	0.003498934	1.505971565
15.46020508	0.005150372	2.089805448
15.46630859	0.006783722	2.37918154
15.47241211	0.006381468	2.157841702
15.47851563	0.004947537	1.786969492
15.48461914	0.003856775	1.567047977
15.49072266	0.003484379	1.551978828
15.49682617	0.003073751	1.373753321
15.50292969	0.001838238	0.833884665
15.5090332	0.000992267	0.433072414
15.51513672	0.003303109	1.219564657
15.52124023	0.003650254	1.232903522
15.52734375	0.003164959	1.2414764
15.53344727	0.00331982	1.575829943
15.53955078	0.00357392	1.836483782
15.5456543	0.004173355	2.139490077
15.55175781	0.006207837	2.419038392
15.55786133	0.007316888	2.289076418
15.56396484	0.00622928	2.174337156
15.57006836	0.00483792	1.929941166
15.57617188	0.00409975	1.643240927
15.58227539	0.004060021	1.679935816
15.58837891	0.005543515	2.079076345
15.59448242	0.006851618	2.123911979
15.60058594	0.004945803	1.476764368
15.60668945	0.002794491	0.907999524
15.61279297	0.002398625	0.777643537
15.61889648	0.001578064	0.482733595
15.625	0.002368122	0.661539649
15.63110352	0.001346923	0.337202232
15.63720703	0.002136615	0.544051936
15.64331055	0.001422141	0.423165445
15.64941406	0.000957829	0.305602197
15.65551758	0.001373973	0.404438757
15.66162109	0.00121687	0.371820518
15.66772461	0.001372248	0.422450638
15.67382813	0.003614477	0.9765326
15.67993164	0.003466474	0.865803421
15.68603516	0.003187859	0.826418548
15.69213867	0.004599967	1.263555212
15.69824219	0.004739876	1.236073402
15.7043457	0.004167351	1.041203442
15.71044922	0.003118351	0.830923275
15.71655273	0.001119601	0.319494603
15.72265625	0.004332833	1.166811921
15.72875977	0.005362488	1.327421967
15.73486328	0.003694086	0.871536552
15.7409668	0.002451428	0.529361697
15.74707031	0.0035167	0.72464198
15.75317383	0.00517306	1.172163831
15.75927734	0.004859034	1.284244611
15.76538086	0.004525746	1.245475696
15.77148438	0.00513857	1.259189994
15.77758789	0.004790716	1.045020682
15.78369141	0.005344655	1.178700671
15.78979492	0.006457328	1.488454748
15.79589844	0.006044333	1.442035711
15.80200195	0.005644173	1.529059931
15.80810547	0.007951794	2.280865466
15.81420898	0.010201008	2.577215783
15.8203125	0.011263551	2.718073749
15.82641602	0.011148209	2.752688493
15.83251953	0.009540634	2.312319124
15.83862305	0.008196363	2.213627334
15.84472656	0.007662324	2.330005627
15.85083008	0.006924959	1.890182548
15.85693359	0.005598185	1.31474475
15.86303711	0.0059838	1.344804522
15.86914063	0.005737542	1.283735653

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
13	-0.000347	1.80752E-06	0.000364974	0.082119218	6.97759E-05	0.011357206
13.005	-0.000313726	1.64122E-06	0.000331378	0.074559996	6.98007E-05	0.011359842
13.01	-0.000321467	1.67837E-06	0.000338885	0.07624912	6.98268E-05	0.011361851
13.015	-0.000336807	1.75444E-06	0.000354255	0.07970748	6.98555E-05	0.011363233
13.02	-0.000335012	1.74634E-06	0.00035262	0.079339421	6.98839E-05	0.011363991
13.025	-0.00032018	1.67367E-06	0.000337935	0.076035384	6.99098E-05	0.011364137
13.03	-0.000299346	1.57126E-06	0.000317246	0.07138039	6.99324E-05	0.011368035
13.035	-0.000263447	1.39414E-06	0.000281465	0.063329513	6.995E-05	0.011372327
13.04	-0.000218927	1.17322E-06	0.000236837	0.053288336	6.99621E-05	0.011376107
13.045	-0.000208642	1.12071E-06	0.000226231	0.050901947	6.99731E-05	0.011379355
13.05	-0.000242566	1.28828E-06	0.00026009	0.058520278	6.9988E-05	0.011382062
13.055	-0.000258325	1.36841E-06	0.000276282	0.062163406	7.00048E-05	0.011384231
13.06	-0.000210047	1.13231E-06	0.000228575	0.051429476	7.0016E-05	0.011385864
13.065	-0.000118116	6.79186E-07	0.000137042	0.030834445	7.00195E-05	0.011386944
13.07	-2.24085E-06	1.06494E-07	2.13623E-05	0.004806509	7.00195E-05	0.011389423
13.075	0.000137282	-5.84883E-07	-0.000118284	-0.026613813	7.00243E-05	0.011395074
13.08	0.000269385	-1.24223E-06	-0.000251049	-0.056486107	7.00426E-05	0.011402155
13.085	0.000345932	-1.62674E-06	-0.000328705	-0.073958731	7.00729E-05	0.011408156
13.09	0.000354771	-1.67654E-06	-0.000338761	-0.076221205	7.01047E-05	0.011413021
13.095	0.000316172	-1.49094E-06	-0.000301259	-0.067783167	7.01299E-05	0.011416738
13.1	0.000244553	-1.14127E-06	-0.000230606	-0.051886293	7.01451E-05	0.011419327
13.105	0.000135841	-6.07173E-07	-0.000122694	-0.027606183	7.01497E-05	0.011420834
13.11	-5.33832E-06	8.94312E-08	1.8043E-05	0.004059665	7.01497E-05	0.011421513
13.115	-0.000142654	7.69314E-07	0.000155393	0.034963386	7.01549E-05	0.011421755
13.12	-0.000246	1.28244E-06	0.00025905	0.058286234	7.01702E-05	0.011421755
13.125	-0.000328843	1.69448E-06	0.000342282	0.077013524	7.01975E-05	0.011421755
13.13	-0.000400186	2.05054E-06	0.000414204	0.093195876	7.0238E-05	0.011421755
13.135	-0.000431409	2.20901E-06	0.000446212	0.100397763	7.0285E-05	0.011422423
13.14	-0.000416976	2.14096E-06	0.000432463	0.097304184	7.0329E-05	0.011425194
13.145	-0.000392646	2.02288E-06	0.000408602	0.091935501	7.03679E-05	0.01142772
13.15	-0.000368805	1.90709E-06	0.000385207	0.086671465	7.04023E-05	0.011429989
13.155	-0.000325643	1.69552E-06	0.000342458	0.077053076	7.04291E-05	0.01143199
13.16	-0.00026989	1.42051E-06	0.000286892	0.064550666	7.04475E-05	0.011433774
13.165	-0.000228982	1.21789E-06	0.000245954	0.055339747	7.04608E-05	0.011435346
13.17	-0.000208524	1.11625E-06	0.000225418	0.050719153	7.04717E-05	0.011436492
13.175	-0.000197658	1.06208E-06	0.000214474	0.048256729	7.04816E-05	0.011437265
13.18	-0.000197424	1.06031E-06	0.000214117	0.048176227	7.04915E-05	0.011437711
13.185	-0.000220716	1.17508E-06	0.000237307	0.053394082	7.05038E-05	0.011437831
13.19	-0.000264278	1.39138E-06	0.000281014	0.063228049	7.05214E-05	0.011437831
13.195	-0.000291234	1.52735E-06	0.000308486	0.06940931	7.05429E-05	0.011437831
13.2	-0.000264988	1.40078E-06	0.000282912	0.063655149	7.05606E-05	0.011437898
13.205	-0.000191593	1.0401E-06	0.000210034	0.047257721	7.05699E-05	0.011439341
13.21	-9.34159E-05	5.55604E-07	0.000112149	0.025233567	7.05721E-05	0.011440658
13.215	2.36694E-05	-2.39571E-08	-4.93555E-06	-0.001110499	7.05722E-05	0.011441816
13.22	0.000132337	-5.64235E-07	-0.000114079	-0.025667717	7.05767E-05	0.01144278
13.225	0.000179494	-8.01733E-07	-0.000162055	-0.03646231	7.05848E-05	0.011443516
13.23	0.000160527	-7.1119E-07	-0.000143759	-0.032345794	7.05913E-05	0.011444011
13.235	0.000125534	-5.39584E-07	-0.000109084	-0.024543984	7.05953E-05	0.01144427
13.24	0.000103072	-4.29279E-07	-8.67965E-05	-0.019529217	7.0598E-05	0.011444313
13.245	8.25313E-05	-3.28466E-07	-6.64268E-05	-0.014946027	7.05997E-05	0.011444313
13.25	5.76831E-05	-2.06033E-07	-4.16891E-05	-0.009380046	7.06006E-05	0.011444313
13.255	4.01483E-05	-1.1946E-07	-2.41971E-05	-0.005444356	7.0601E-05	0.011444313
13.26	3.1966E-05	-7.94824E-08	-1.61197E-05	-0.003626929	7.06012E-05	0.011444313
13.265	1.17266E-05	1.97552E-08	3.9309E-06	0.000884453	7.06013E-05	0.011444313
13.27	-2.70093E-05	2.11309E-07	4.26331E-05	0.009592452	7.06014E-05	0.011444313
13.275	-4.80153E-05	3.16555E-07	6.3897E-05	0.014376827	7.0602E-05	0.011444313
13.28	-2.38376E-05	1.98402E-07	4.00226E-05	0.00900509	7.06022E-05	0.011444313
13.285	2.51362E-05	-4.34093E-08	-8.83749E-06	-0.001988434	7.06023E-05	0.011444313
13.29	7.69548E-05	-2.99974E-07	-6.06771E-05	-0.013652339	7.06038E-05	0.011444313
13.295	0.000135946	-5.92656E-07	-0.000119812	-0.02695779	7.06085E-05	0.011444313
13.3	0.000191514	-8.69815E-07	-0.000175807	-0.039556656	7.06178E-05	0.011444313
13.305	0.000207297	-9.51365E-07	-0.000192281	-0.043263153	7.06286E-05	0.011444313
13.31	0.000172588	-7.82775E-07	-0.000158215	-0.035598377	7.06362E-05	0.011444313
13.315	0.000118801	-5.1867E-07	-0.000104851	-0.023591391	7.06397E-05	0.011444313
13.32	6.50171E-05	-2.54165E-07	-5.14071E-05	-0.011566589	7.06408E-05	0.011444313
13.325	-5.99456E-06	9.57694E-08	1.92951E-05	0.004341398	7.06408E-05	0.011444313
13.33	-9.74157E-05	5.47921E-07	0.000110646	0.024895375	7.06432E-05	0.011444313
13.335	-0.000178362	9.49874E-07	0.000191852	0.043166624	7.06512E-05	0.011444313
13.34	-0.000230642	1.21072E-06	0.000244549	0.055023455	7.06647E-05	0.011444313
13.345	-0.000262904	1.37275E-06	0.000277281	0.062388158	7.06822E-05	0.011444313
13.35	-0.000271768	1.41943E-06	0.000286712	0.064510202	7.07008E-05	0.011444313
13.355	-0.000238252	1.25631E-06	0.00025375	0.05709372	7.07152E-05	0.011444313
13.36	-0.000168622	9.13077E-07	0.000184398	0.041489622	7.07224E-05	0.011444313
13.365	-9.59005E-05	5.52793E-07	0.000111604	0.025110817	7.07247E-05	0.011444313
13.37	-3.74688E-05	2.6216E-07	5.28837E-05	0.011898827	7.0725E-05	0.011444313
13.375	7.15566E-06	3.90414E-08	7.80564E-06	0.00175627	7.0725E-05	0.011444313
13.38	2.2862E-05	-4.18698E-08	-8.54111E-06	-0.001921749	7.07252E-05	0.011444313
13.385	-1.15195E-05	1.25065E-07	2.51901E-05	0.005667778	7.07252E-05	0.011444313
13.39	-8.63961E-05	4.93793E-07	9.96939E-05	0.022431121	7.07271E-05	0.011444313
13.395	-0.000166049	8.87891E-07	0.00017932	0.040347091	7.07341E-05	0.011444313
13.4	-0.000231641	1.21318E-06	0.000245041	0.055134309	7.07476E-05	0.011444313
13.405	-0.000300887	1.55678E-06	0.000314458	0.07075309	7.07705E-05	0.011444313
13.41	-0.000385113	1.97577E-06	0.000399097	0.089796935	7.0808E-05	0.011444313
13.415	-0.00044919	2.29716E-06	0.000464019	0.104404246	7.0859E-05	0.011444313
13.42	-0.000453547	2.32413E-06	0.000469464	0.105629435	7.0911E-05	0.011444313
13.425	-0.000398464	2.05669E-06	0.000415424	0.093470362	7.09511E-05	0.011444313
13.43	-0.000289114	1.51996E-06	0.000306977	0.069069821	7.09722E-05	0.011444313
13.435	-0.000118013	6.75843E-07	0.000136435	0.030697875	7.09758E-05	0.011444313
13.44	8.47874E-05	-3.28782E-07	-6.65182E-05	-0.014966595	7.09776E-05	0.011444313
13.445	0.000246057	-1.13171E-06	-0.000228713	-0.051460327	7.09929E-05	0.011444313
13.45	0.000318586	-1.49726E-06	-0.00030255	-0.068073796	7.10185E-05	0.011444313
13.455	0.000309504	-1.45883E-06	-0.000294783	-0.066326207	7.10427E-05	0.011444313
13.46	0.000232233	-1.08219E-06	-0.00021868	-0.049203093	7.10564E-05	0.011444313
13.465	8.97074E-05	-3.80832E-07	-7.69729E-05	-0.01731891	7.10584E-05	0.011444313
13.47	-7.82096E-05	4.49499E-07	9.07793E-05	0.020425341	7.10599E-05	0.011444313
13.475	-0.000199839	1.05365E-06	0.000212828	0.047886328	7.107E-05	0.011444313
13.48	-0.000249966	1.30438E-06	0.000263477	0.059282302	7.10858E-05	0.011444313
13.485	-0.000265836	1.38449E-06	0.000279661	0.062923679	7.11037E-05	0.011444313
13.49	-0.000280428	1.45763E-06	0.000294436	0.066248092	7.11236E-05	0.011444313
13.495	-0.000295524	1.5331E-06	0.00030968	0.069677918	7.11456E-05	0.011444313
13.5	-0.000316953	1.63949E-06	0.000331171	0.074513403	7.1171E-05	0.011444313
13.505	-0.000365205	1.87855E-06	0.000379462	0.085379039	7.12047E-05	0.011444313
13.51	-0.000440327	2.25183E-06	0.000454861	0.102343741	7.12537E-05	0.011444313
13.515	-0.000506946	2.58494E-06	0.000522146	0.11748288	7.13187E-05	0.011444313

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
15.87524414	0.00390966	0.866553022
15.88134766	0.002566218	0.624464354
15.88745117	0.00279474	0.838924693
15.89355469	0.003505933	1.079364002
15.8996582	0.001431461	0.365116143
15.90576172	0.001673023	0.389088864
15.91186523	0.001712796	0.409795203
15.91796875	0.0015039	0.368276848
15.92407227	0.003116318	0.765396159
15.93017578	0.003339626	0.887528174
15.9362793	0.003124053	0.94454865
15.94238281	0.002590784	0.746387161
15.94848633	0.002036075	0.509172819
15.95458984	0.00344159	0.82947334
15.96069336	0.005194837	1.22400871
15.96679688	0.005691149	1.360265308
15.97290039	0.006035845	1.635428696
15.97900391	0.006783003	1.794951736
15.98510742	0.006583883	1.492415498
15.99121094	0.005902165	1.324200113
15.99731445	0.005701533	1.346497308
16.00341797	0.005359372	1.256315859
16.00952148	0.005709044	1.32885299
16.015625	0.00554168	1.273146481
16.02172852	0.004961033	1.126662147
16.02783203	0.004619898	1.049091516
16.03393555	0.004261515	0.996463438
16.04003906	0.004487953	1.021856479
16.04614258	0.008217363	1.712244883
16.05224609	0.009381005	1.965374411
16.05834961	0.007341141	1.653190184
16.06445313	0.005996081	1.339616749
16.07055664	0.006541356	1.433316612
16.07666016	0.007936641	1.742041539
16.08276367	0.008234125	1.817634719
16.08886719	0.006851076	1.55897393
16.0949707	0.005428623	1.231364392
16.10107422	0.004532892	0.994768444
16.10717773	0.003870708	0.882695586
16.11328125	0.004063895	0.935957361
16.11938477	0.004198894	0.881681133
16.12548828	0.004211209	0.837080456
16.1315918	0.004850318	0.951547052
16.13769531	0.005814686	1.142577319
16.14379883	0.006935601	1.461014706
16.14990234	0.008603719	1.855214793
16.15600586	0.009521972	1.886053941
16.16210938	0.008791781	1.78173287
16.16821289	0.007841831	1.703206374
16.17431641	0.006963259	1.372398187
16.18041992	0.006583183	1.183516201
16.18652344	0.005762827	1.048913077
16.19262695	0.003306167	0.623115689
16.19873047	0.0018801	0.389729024
16.20483398	0.002294729	0.524311482
16.2109375	0.004026452	0.859783156
16.21704102	0.003479793	0.695790522
16.22314453	0.00263816	0.554088312
16.22924805	0.003332931	0.722638201
16.23535156	0.003141645	0.682454546
16.24145508	0.002874099	0.662390185
16.24755859	0.004977202	1.201024045
16.25366211	0.007637628	1.740861276
16.25976563	0.008208845	1.702489749
16.26586914	0.006848178	1.321621511
16.27197266	0.004590002	0.835042375
16.27807617	0.004235637	0.766605942
16.28417969	0.004902353	0.972267699
16.2902832	0.00399263	0.881195449
16.29638672	0.002348645	0.536632192
16.30249023	0.002065088	0.455022372
16.30859375	0.003270553	0.67512533
16.31469727	0.00324562	0.632060361
16.32080078	0.003087237	0.579556279
16.3269043	0.003585795	0.669617145
16.33300781	0.004529349	0.871552901
16.33911133	0.006029824	1.195817882
16.34521484	0.006454688	1.328434876
16.35131836	0.006017221	1.300800607
16.35742188	0.006557508	1.372203381
16.36352539	0.006942248	1.307636056
16.36962891	0.006735566	1.194784812
16.37573242	0.00753185	1.330713715
16.38183594	0.009841148	1.83355549
16.38793945	0.010238243	2.095059545
16.39404297	0.008763747	1.829002102
16.40014648	0.009016914	1.757065404
16.40625	0.007800585	1.453004471
16.41235352	0.005614502	1.067376876
16.41845703	0.006780563	1.329702846
16.42456055	0.010537561	2.007364575
16.43066406	0.011214763	2.098132306
16.43676758	0.009004731	1.793636622
16.44287109	0.008535177	1.782029189
16.44897461	0.008678703	1.764212391
16.45507813	0.008976006	1.743169336
16.46118164	0.009262686	1.690849524
16.46728516	0.008114559	1.469769872
16.47338867	0.008196304	1.638136788
16.47949219	0.009381762	2.034658759
16.4855957	0.008794916	1.794849237
16.49169922	0.007564288	1.391419463
16.49780273	0.006894442	1.272335892
16.50390625	0.006121531	1.239821832

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
13.52	-0.000531742	2.71223E-06	0.000547856	0.123267677	7.13902E-05	0.011444313
13.525	-0.000512431	2.62136E-06	0.000529494	0.119136185	7.14565E-05	0.011444313
13.53	-0.000451278	2.32321E-06	0.000469249	0.105581075	7.1508E-05	0.011444313
13.535	-0.000339034	1.77118E-06	0.000357713	0.080485485	7.1537E-05	0.011444313
13.54	-0.00019612	1.06473E-06	0.000214985	0.048371516	7.15468E-05	0.011444313
13.545	-8.2029E-05	4.98015E-07	0.000100495	0.022611447	7.15485E-05	0.011444313
13.55	-3.10858E-05	2.42702E-07	4.8918E-05	0.011006552	7.15487E-05	0.011444313
13.555	-2.75039E-05	2.22156E-07	4.4768E-05	0.010072806	7.15489E-05	0.011444313
13.56	-5.34973E-05	3.48686E-07	7.03351E-05	0.015825396	7.15496E-05	0.011444313
13.565	-0.000100485	5.80375E-07	0.00011715	0.026358674	7.15522E-05	0.011444313
13.57	-0.00013856	7.69722E-07	0.000155408	0.034966791	7.1557E-05	0.011444313
13.575	-0.000136689	7.6222E-07	0.000153892	0.034625634	7.15618E-05	0.011444313
13.58	-0.000104749	6.05312E-07	0.000122186	0.027491949	7.15645E-05	0.011444313
13.585	-7.343E-05	4.50787E-07	9.09636E-05	0.020466805	7.15659E-05	0.011444313
13.59	-4.26598E-05	2.99176E-07	6.03299E-05	0.013574229	7.15664E-05	0.011444313
13.595	1.6823E-05	5.47139E-09	9.94725E-07	0.000223813	7.15664E-05	0.011444313
13.6	0.000107457	-4.44066E-07	-8.98143E-05	-0.020208207	7.15693E-05	0.011444313
13.605	0.000180032	-8.06885E-07	-0.000163103	-0.036698169	7.15775E-05	0.011444313
13.61	0.000182207	-8.22763E-07	-0.000166307	-0.037419097	7.15859E-05	0.011444313
13.615	0.000106452	-4.52336E-07	-9.1459E-05	-0.020578277	7.15888E-05	0.011444313
13.62	-2.47868E-05	1.94702E-07	3.92732E-05	0.008836476	7.15889E-05	0.011444313
13.625	-0.000182244	9.74545E-07	0.000196827	0.044286058	7.15973E-05	0.011444313
13.63	-0.000310809	1.6152E-06	0.000326252	0.073406739	7.16218E-05	0.011444313
13.635	-0.000335193	1.74275E-06	0.000352016	0.079203655	7.16501E-05	0.011444313
13.64	-0.00023595	1.25728E-06	0.000253925	0.057133036	7.16642E-05	0.011444313
13.645	-8.1859E-05	4.96684E-07	0.00010025	0.022556248	7.16659E-05	0.011444313
13.65	5.47083E-05	-1.80177E-07	-3.64959E-05	-0.008211586	7.16667E-05	0.011444313
13.655	0.000158859	-6.98193E-07	-0.000141145	-0.031757581	7.1673E-05	0.011444313
13.66	0.000225529	-1.032E-06	-0.000208574	-0.046929221	7.16859E-05	0.011444313
13.665	0.000234324	-1.07985E-06	-0.000218239	-0.04910387	7.16998E-05	0.011444313
13.67	0.000196979	-8.98206E-07	-0.000181535	-0.040845449	7.17096E-05	0.011444313
13.675	0.000157887	-7.06458E-07	-0.000142791	-0.032128045	7.17159E-05	0.011444313
13.68	0.000133475	-5.87106E-07	-0.000118676	-0.02670205	7.17204E-05	0.011444313
13.685	0.000102178	-4.33887E-07	-8.77178E-05	-0.019736515	7.1723E-05	0.011444313
13.69	5.56911E-05	-2.04914E-07	-4.14548E-05	-0.009327322	7.17238E-05	0.011444313
13.695	1.24582E-05	8.80026E-09	1.72451E-06	0.000388014	7.17239E-05	0.011444313
13.7	-2.51276E-05	1.94753E-07	3.92939E-05	0.008841126	7.1724E-05	0.011444313
13.705	-7.73898E-05	4.53705E-07	9.16108E-05	0.020612432	7.17255E-05	0.011444313
13.71	-0.000137239	7.51795E-07	0.000151833	0.034162501	7.17303E-05	0.011444313
13.715	-0.000159778	8.66902E-07	0.000175088	0.039394724	7.17367E-05	0.011444313
13.72	-0.000119882	6.72858E-07	0.000135879	0.030572719	7.17404E-05	0.011444313
13.725	-4.33464E-05	2.95626E-07	5.9657E-05	0.013422829	7.17408E-05	0.011444313
13.73	3.24535E-05	-8.00258E-08	-1.62422E-05	-0.003654496	7.17411E-05	0.011444313
13.735	8.79333E-05	-3.56939E-07	-7.21896E-05	-0.016242664	7.17431E-05	0.011444313
13.74	9.46191E-05	-3.94047E-07	-7.96861E-05	-0.017929367	7.17453E-05	0.011444313
13.745	1.64172E-05	-1.11157E-08	-2.31132E-06	-0.000520047	7.17454E-05	0.011444313
13.75	-0.000128064	7.02631E-07	0.000141899	0.031927207	7.17495E-05	0.011444313
13.755	-0.000258727	1.35179E-06	0.000273043	0.061434755	7.17665E-05	0.011444313
13.76	-0.000318027	1.64964E-06	0.000333212	0.074972741	7.1792E-05	0.011444313
13.765	-0.000315172	1.63952E-06	0.000331167	0.07451253	7.18171E-05	0.011444313
13.77	-0.000280533	1.47108E-06	0.000297131	0.066854436	7.1837E-05	0.011444313
13.775	-0.000228952	1.21764E-06	0.000245922	0.055332464	7.18503E-05	0.011444313
13.78	-0.000178073	9.66245E-07	0.000195128	0.043903775	7.18583E-05	0.011444313
13.785	-0.000155773	8.5535E-07	0.000172722	0.038862417	7.18644E-05	0.011444313
13.79	-0.000164174	8.96925E-07	0.000181123	0.040752601	7.18712E-05	0.011444313
13.795	-0.000168216	9.18129E-07	0.000185407	0.04171664	7.18784E-05	0.011444313
13.8	-0.000143852	7.99004E-07	0.000161337	0.036300902	7.18836E-05	0.011444313
13.805	-0.000105008	6.07592E-07	0.000122664	0.027599441	7.18864E-05	0.011444313
13.81	-6.66559E-05	4.18193E-07	8.43982E-05	0.018989591	7.18875E-05	0.011444313
13.815	-2.61912E-05	2.17916E-07	4.39354E-05	0.009885454	7.18877E-05	0.011444313
13.82	3.62866E-06	6.94399E-08	1.39386E-05	0.003136194	7.18877E-05	0.011444313
13.825	-4.43003E-06	1.0818E-07	2.17669E-05	0.004897561	7.18877E-05	0.011444313
13.83	-4.19335E-05	2.94005E-07	5.93149E-05	0.013345861	7.18881E-05	0.011444313
13.835	-6.4976E-05	4.09992E-07	8.2751E-05	0.018618972	7.18892E-05	0.011444313
13.84	-5.15074E-05	3.45881E-07	6.97964E-05	0.0157042	7.18899E-05	0.011444313
13.845	-1.0737E-05	1.46551E-07	2.95198E-05	0.006641946	7.18899E-05	0.011444313
13.85	5.71144E-05	-1.86892E-07	-3.78475E-05	-0.008515679	7.18907E-05	0.011444313
13.855	0.000162271	-7.05664E-07	-0.00014265	-0.032096155	7.18974E-05	0.011444313
13.86	0.000294188	-1.35876E-06	-0.000274577	-0.061779855	7.19193E-05	0.011444313
13.865	0.000419495	-1.98161E-06	-0.000400373	-0.090083897	7.19637E-05	0.011444313
13.87	0.000505234	-2.41071E-06	-0.00048703	-0.109581698	7.20283E-05	0.011444313
13.875	0.00052916	-2.53522E-06	-0.000512175	-0.115239359	7.2099E-05	0.011444313
13.88	0.000473424	-2.26572E-06	-0.00045772	-0.10298697	7.21557E-05	0.011444313
13.885	0.000336778	-1.59412E-06	-0.000322021	-0.072454823	7.21843E-05	0.011444313
13.89	0.000165191	-7.45973E-07	-0.000150667	-0.033900182	7.21912E-05	0.011444313
13.895	3.37437E-05	-9.30913E-08	-1.87724E-05	-0.004223792	7.21915E-05	0.011444313
13.9	-2.3369E-05	1.92924E-07	3.90059E-05	0.008776334	7.21917E-05	0.011444313
13.905	-3.50503E-05	2.53197E-07	5.11816E-05	0.011515858	7.2192E-05	0.011444313
13.91	-3.77289E-05	2.68051E-07	5.41822E-05	0.012190995	7.21923E-05	0.011444313
13.915	-3.39975E-05	2.50848E-07	5.07061E-05	0.01140887	7.21926E-05	0.011444313
13.92	-2.2534E-05	1.94706E-07	3.93618E-05	0.008856396	7.21928E-05	0.011444313
13.925	-2.63401E-05	2.13523E-07	4.31641E-05	0.009711926	7.21929E-05	0.011444313
13.93	-4.92497E-05	3.27656E-07	6.62228E-05	0.014900133	7.21935E-05	0.011444313
13.935	-4.92942E-05	3.29855E-07	6.66656E-05	0.014999749	7.21942E-05	0.011444313
13.94	-5.70155E-06	1.15654E-07	2.33836E-05	0.005261319	7.21942E-05	0.011444313
13.945	4.31163E-05	-1.2596E-07	-2.54357E-05	-0.005723026	7.21946E-05	0.011444313
13.95	6.40193E-05	-2.29993E-07	-4.64559E-05	-0.010452569	7.21957E-05	0.011444313
13.955	6.86397E-05	-2.52932E-07	-5.10907E-05	-0.011495415	7.21969E-05	0.011444313
13.96	7.44642E-05	-2.81403E-07	-5.68432E-05	-0.012789724	7.21983E-05	0.011444313
13.965	8.00796E-05	-3.0862E-07	-6.23424E-05	-0.014027041	7.21999E-05	0.011444313
13.97	8.72633E-05	-3.43053E-07	-6.92995E-05	-0.015592395	7.22018E-05	0.011444313
13.975	0.000113923	-4.73386E-07	-9.56329E-05	-0.021517393	7.22051E-05	0.011444313
13.98	0.000165234	-7.26166E-07	-0.000146705	-0.033008634	7.2212E-05	0.011444313
13.985	0.000219185	-9.92847E-07	-0.000200585	-0.045131552	7.22241E-05	0.011444313
13.99	0.000271119	-1.24963E-06	-0.000252462	-0.056803968	7.22427E-05	0.011444313
13.995	0.000345009	-1.6153E-06	-0.000326338	-0.073426025	7.22728E-05	0.011444313
14	0.000435293	-2.06361E-06	-0.000416904	-0.093803371	7.23207E-05	0.011444313
14.005	0.000506753	-2.42031E-06	-0.000488962	-0.11001644	7.23856E-05	0.011444313
14.01	0.000550526	-2.6406E-06	-0.000533456	-0.120027563	7.24622E-05	0.011444313
14.015	0.000572862	-2.75531E-06	-0.00055662	-0.125239448	7.25451E-05	0.011444313
14.02	0.000559872	-2.69575E-06	-0.000544586	-0.122531873	7.26244E-05	0.011444313
14.025	0.000497856	-2.39329E-06	-0.00048347	-0.108780724	7.2687E-05	0.011444313
14.03	0.000397382	-1.89906E-06	-0.000383612	-0.086312713	7.27269E-05	0.011444313
14.035	0.000286501	-1.35143E-06	-0.00027297	-0.061418154	7.27477E-05	0.011444313

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
16.51000977	0.005088689	1.053691212
16.51611328	0.004502368	0.888773639
16.5222168	0.003630161	0.72651538
16.52832031	0.003916986	0.802795137
16.53442383	0.00479348	0.980941918
16.54052734	0.006096552	1.292132972
16.54663086	0.006272557	1.405316968
16.55273438	0.005462372	1.225568655
16.55883789	0.005206081	1.063904349
16.56494141	0.005379736	1.002033087
16.57104492	0.005161722	0.995020107
16.57714844	0.00389248	0.793663936
16.58325195	0.002691428	0.526849721
16.58935547	0.00354672	0.721320905
16.59545898	0.004812322	1.107446016
16.6015625	0.003818477	0.83729449
16.60766602	0.002314596	0.440290524
16.61376953	0.002060874	0.383480726
16.61987305	0.002542555	0.509095319
16.62597656	0.002771755	0.585981141
16.63208008	0.003399209	0.722515086
16.63818359	0.002840586	0.618234149
16.64428711	0.002046718	0.478695854
16.65039063	0.002103774	0.519663619
16.65649414	0.003330082	0.789685639
16.66259766	0.004354665	0.915270278
16.66870117	0.003017889	0.586064475
16.67480469	0.003700557	0.758723972
16.6809082	0.005256393	1.235987414
16.68701172	0.004540802	1.098382031
16.69311523	0.003772254	0.846782165
16.69921875	0.004655458	1.028792114
16.70532227	0.004817357	1.085327375
16.71142578	0.005776536	1.236414534
16.7175293	0.007198485	1.463149975
16.72363281	0.007599525	1.612675826
16.72973633	0.007205525	1.59373883
16.73583984	0.00588309	1.289431946
16.74194336	0.004758031	1.005466287
16.74804688	0.005146685	1.065667406
16.75415039	0.005673278	1.221089466
16.76025391	0.005562771	1.252954258
16.76635742	0.007383086	1.615854048
16.77246094	0.008891	1.879312147
16.77856445	0.007835064	1.675083927
16.78466797	0.006165264	1.360228112
16.79077148	0.005974178	1.352801357
16.796875	0.006804733	1.57068939
16.80297852	0.007741096	1.761862161
16.80908203	0.009147476	1.9612064
16.81518555	0.009384743	1.93504457
16.82128906	0.007475564	1.645874016
16.82739258	0.005491682	1.322810173
16.83349609	0.004744226	1.157026432
16.83959961	0.004415978	1.058657881
16.84570313	0.004738665	1.087369085
16.85180664	0.00571911	1.229950571
16.85791016	0.006005035	1.231974396
16.86401367	0.004306253	0.876029834
16.87011719	0.002252389	0.512943262
16.8762207	0.002688861	0.693332003
16.88232422	0.002015003	0.487411739
16.88842773	0.002557556	0.591382858
16.89453125	0.003778104	0.912989397
16.90063477	0.003494559	0.83216539
16.90673828	0.002878108	0.722436502
16.9128418	0.001917304	0.539562655
16.91894531	0.000850045	0.226408108
16.92504883	0.000619487	0.151307479
16.93115234	0.000357916	0.088006501
16.93725586	0.000316603	0.076533804
16.94335938	0.000310061	0.076608105
16.94946289	0.001635157	0.4376884
16.95556641	0.001750328	0.467981476
16.96166992	0.001598463	0.430832376
16.96777344	0.002106464	0.603010489
16.97387695	0.003298041	0.923513184
16.97998047	0.00374075	0.978406516
16.98608398	0.004050776	1.009531581
16.9921875	0.00506019	1.238064212
16.99829102	0.00595511	1.499716262
17.00439453	0.005995015	1.534291415
17.01049805	0.00562814	1.436019541
17.01660156	0.005742656	1.502992109
17.02270508	0.005984145	1.546249609
17.02880859	0.005301484	1.290217928
17.03491211	0.004836564	1.133985012
17.04101563	0.005374658	1.224397426
17.04711914	0.007087283	1.768358126
17.05322266	0.00811075	2.406171078
17.05932617	0.0066855	1.960617924
17.06542969	0.003644682	0.971883881
17.0715332	0.001377624	0.345481626
17.07763672	0.000993772	0.227174536
17.08374023	0.001860404	0.444749573
17.08984375	0.002785751	0.79591901
17.09594727	0.003318724	0.979246747
17.10205078	0.002672377	0.767994885
17.1081543	0.002610741	0.712490905
17.11425781	0.00387301	0.97565834
17.12036133	0.005957903	1.548420096
17.12646484	0.007732375	2.097179542
17.13256836	0.008340404	2.235043881
17.13867188	0.008442089	2.351298241

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
14.04	0.000190501	-8.75905E-07	-0.000176899	-0.039802304	7.27568E-05	0.011444313
14.045	0.000117038	-5.10934E-07	-0.000103167	-0.023212633	7.27603E-05	0.011444313
14.05	7.28025E-05	-2.89831E-07	-5.85011E-05	-0.013162748	7.27616E-05	0.011444313
14.055	7.1973E-05	-2.83609E-07	-5.72454E-05	-0.012880212	7.27629E-05	0.011444313
14.06	9.40887E-05	-3.92598E-07	-7.92681E-05	-0.017835324	7.27652E-05	0.011444313
14.065	7.98887E-05	-3.23434E-07	-6.52925E-05	-0.014690816	7.27668E-05	0.011444313
14.07	9.97822E-06	2.22435E-08	4.54137E-06	0.001021809	7.27668E-05	0.011444313
14.075	-6.41842E-05	3.91267E-07	7.90859E-05	0.017794323	7.27679E-05	0.011444313
14.08	-9.42404E-05	5.43259E-07	0.000109788	0.024702367	7.27701E-05	0.011444313
14.085	-8.30267E-05	4.90858E-07	9.91998E-05	0.022319954	7.27718E-05	0.011444313
14.09	-4.48053E-05	3.04396E-07	6.15232E-05	0.013842721	7.27723E-05	0.011444313
14.095	2.03534E-05	-1.60602E-08	-3.22655E-06	-0.000725975	7.27725E-05	0.011444313
14.1	9.897E-05	-4.04497E-07	-8.1709E-05	-0.018384531	7.27749E-05	0.011444313
14.105	0.000162965	-7.21821E-07	-0.000145821	-0.03280973	7.27816E-05	0.011444313
14.11	0.000204999	-9.3079E-07	-0.00018804	-0.042308964	7.27923E-05	0.011444313
14.115	0.000241337	-1.1116E-06	-0.000224568	-0.050527876	7.2807E-05	0.011444313
14.12	0.000276016	-1.28486E-06	-0.000259572	-0.058403768	7.28262E-05	0.011444313
14.125	0.000286471	-1.3391E-06	-0.000270531	-0.060869452	7.2847E-05	0.011444313
14.13	0.000259485	-1.20792E-06	-0.000244022	-0.054905011	7.2864E-05	0.011444313
14.135	0.000216249	-9.95419E-07	-0.000201086	-0.045244252	7.28758E-05	0.011444313
14.14	0.000171622	-7.75705E-07	-0.000156692	-0.035255624	7.28833E-05	0.011444313
14.145	0.000110033	-4.71819E-07	-9.52921E-05	-0.021440726	7.28863E-05	0.011444313
14.15	3.45939E-05	-9.81603E-08	-1.9798E-05	-0.004454543	7.28866E-05	0.011444313
14.155	-2.33552E-05	1.90173E-07	3.8455E-05	0.008652384	7.28868E-05	0.011444313
14.16	-6.16246E-05	3.81226E-07	7.70535E-05	0.017337037	7.28877E-05	0.011444313
14.165	-0.000104625	5.95761E-07	0.000120394	0.027088574	7.28905E-05	0.011444313
14.17	-0.000149861	8.223E-07	0.000166153	0.037384525	7.28962E-05	0.011444313
14.175	-0.000172865	9.39732E-07	0.000189874	0.042721661	7.29037E-05	0.011444313
14.18	-0.000165869	9.08858E-07	0.000183635	0.04131794	7.29107E-05	0.011444313
14.185	-0.000135376	7.6159E-07	0.000153878	0.034622582	7.29153E-05	0.011444313
14.19	-7.48357E-05	4.65614E-07	9.40743E-05	0.021166711	7.29167E-05	0.011444313
14.195	3.16494E-05	-5.84659E-08	-1.18147E-05	-0.002658302	7.2917E-05	0.011444313
14.2	0.000171176	-7.48312E-07	-0.000151188	-0.0340172	7.29244E-05	0.011444313
14.205	0.00029424	-1.35945E-06	-0.000274651	-0.061796536	7.29463E-05	0.011444313
14.21	0.000362979	-1.70327E-06	-0.000344108	-0.077424248	7.29796E-05	0.011444313
14.215	0.000379536	-1.78899E-06	-0.000361424	-0.081320321	7.3016E-05	0.011444313
14.22	0.00035344	-1.66328E-06	-0.000336023	-0.075605152	7.30475E-05	0.011444313
14.225	0.000282821	-1.31615E-06	-0.000265881	-0.059823277	7.30677E-05	0.011444313
14.23	0.000193518	-8.74023E-07	-0.000176551	-0.039723973	7.30772E-05	0.011444313
14.235	0.000148624	-6.49312E-07	-0.00013115	-0.029508824	7.30828E-05	0.011444313
14.24	0.000176462	-7.8464E-07	-0.000158495	-0.035661376	7.30907E-05	0.011444313
14.245	0.000235481	-1.07613E-06	-0.000217393	-0.048913499	7.31047E-05	0.011444313
14.25	0.000283983	-1.31683E-06	-0.000266027	-0.059856083	7.31251E-05	0.011444313
14.255	0.00032392	-1.51561E-06	-0.000306189	-0.068892441	7.31516E-05	0.011444313
14.26	0.000356865	-1.6805E-06	-0.000339505	-0.076388524	7.31838E-05	0.011444313
14.265	0.000362333	-1.71001E-06	-0.000345466	-0.077729943	7.3217E-05	0.011444313
14.27	0.000334782	-1.57564E-06	-0.000318316	-0.071621077	7.32453E-05	0.011444313
14.275	0.000299073	-1.39987E-06	-0.0002828	-0.063629965	7.32679E-05	0.011444313
14.28	0.00027085	-1.26089E-06	-0.000254717	-0.057311421	7.32864E-05	0.011444313
14.285	0.000229383	-1.05646E-06	-0.000213412	-0.048017592	7.32997E-05	0.011444313
14.29	0.000166367	-7.44225E-07	-0.000150327	-0.033823483	7.33067E-05	0.011444313
14.295	0.000123114	-5.27993E-07	-0.000106639	-0.023993838	7.33106E-05	0.011444313
14.3	0.000127424	-5.46795E-07	-0.000110439	-0.024848773	7.33147E-05	0.011444313
14.305	0.000157521	-6.93941E-07	-0.000140171	-0.031538583	7.33209E-05	0.011444313
14.31	0.000202883	-9.17107E-07	-0.000185264	-0.041684362	7.33313E-05	0.011444313
14.315	0.000272367	-1.26066E-06	-0.000254679	-0.057302705	7.33501E-05	0.011444313
14.32	0.000339161	-1.59288E-06	-0.000321802	-0.072405392	7.33792E-05	0.011444313
14.325	0.000361152	-1.70451E-06	-0.000344355	-0.077479967	7.34121E-05	0.011444313
14.33	0.000342729	-1.6153E-06	-0.000326328	-0.073423876	7.34418E-05	0.011444313
14.335	0.000328954	-1.54759E-06	-0.000312648	-0.070345755	7.34692E-05	0.011444313
14.34	0.000348013	-1.64208E-06	-0.000331741	-0.07464174	7.34998E-05	0.011444313
14.345	0.000381536	-1.80907E-06	-0.000365479	-0.082232795	7.35366E-05	0.011444313
14.35	0.000401082	-1.9076E-06	-0.000385384	-0.086711344	7.35772E-05	0.011444313
14.355	0.000404743	-1.92776E-06	-0.000389455	-0.087627396	7.36186E-05	0.011444313
14.36	0.00038929	-1.85374E-06	-0.0003745	-0.084262448	7.36569E-05	0.011444313
14.365	0.000336188	-1.59334E-06	-0.000321884	-0.072423852	7.36855E-05	0.011444313
14.37	0.000257272	-1.20373E-06	-0.000243162	-0.054711349	7.37022E-05	0.011444313
14.375	0.000196325	-9.01516E-07	-0.000182101	-0.040972747	7.3712E-05	0.011444313
14.38	0.00016749	-7.58139E-07	-0.000153133	-0.034454979	7.3719E-05	0.011444313
14.385	0.000143972	-6.41665E-07	-0.000129601	-0.029160233	7.37243E-05	0.011444313
14.39	0.00010925	-4.69634E-07	-9.48449E-05	-0.021340107	7.37273E-05	0.011444313
14.395	7.38946E-05	-2.93887E-07	-5.93387E-05	-0.013351216	7.37287E-05	0.011444313
14.4	4.37798E-05	-1.43747E-07	-2.90064E-05	-0.006526431	7.37292E-05	0.011444313
14.405	1.333E-05	8.48741E-09	1.74883E-06	0.000393486	7.37292E-05	0.011444313
14.41	-5.80867E-06	1.05681E-07	2.13841E-05	0.004811426	7.37292E-05	0.011444313
14.415	1.32584E-05	1.42599E-08	2.91119E-06	0.000655018	7.37293E-05	0.011444313
14.42	6.93335E-05	-2.61391E-07	-5.27865E-05	-0.011876952	7.37305E-05	0.011444313
14.425	0.000121682	-5.20357E-07	-0.000105111	-0.02365004	7.37342E-05	0.011444313
14.43	0.000141084	-6.16921E-07	-0.000124622	-0.028039915	7.37392E-05	0.011444313
14.435	0.00014586	-6.40624E-07	-0.000129411	-0.029117468	7.37446E-05	0.011444313
14.44	0.000163771	-7.29278E-07	-0.000147323	-0.033147707	7.37514E-05	0.011444313
14.445	0.00019093	-8.64417E-07	-0.000174627	-0.039291096	7.37606E-05	0.011444313
14.45	0.000215311	-9.86418E-07	-0.000199276	-0.044837199	7.37723E-05	0.011444313
14.455	0.000236681	-1.09413E-06	-0.000221038	-0.049733641	7.37865E-05	0.011444313
14.46	0.000233536	-1.08153E-06	-0.000218492	-0.049160749	7.38003E-05	0.011444313
14.465	0.000164363	-7.42121E-07	-0.000149911	-0.033729941	7.38071E-05	0.011444313
14.47	3.69563E-05	-1.11874E-07	-2.25705E-05	-0.005078372	7.38075E-05	0.011444313
14.475	-7.55937E-05	4.48493E-07	9.06383E-05	0.020393628	7.38089E-05	0.011444313
14.48	-0.00011742	6.60633E-07	0.000133493	0.030036033	7.38124E-05	0.011444313
14.485	-9.4832E-05	5.53721E-07	0.000111891	0.025175374	7.38147E-05	0.011444313
14.49	-2.53902E-05	2.13976E-07	4.32424E-05	0.009729551	7.38148E-05	0.011444313
14.495	8.59222E-05	-3.34846E-07	-6.76458E-05	-0.015220312	7.38167E-05	0.011444313
14.5	0.000202326	-9.12061E-07	-0.000184264	-0.041459363	7.3827E-05	0.011444313
14.505	0.000256493	-1.18397E-06	-0.000239198	-0.053819482	7.38437E-05	0.011444313
14.51	0.000219359	-1.00415E-06	-0.000202862	-0.045644025	7.38558E-05	0.011444313
14.515	0.000125243	-5.40228E-07	-0.000109125	-0.024553044	7.38598E-05	0.011444313
14.52	2.26756E-05	-3.1999E-08	-6.4401E-06	-0.001449022	7.38599E-05	0.011444313
14.525	-5.84342E-05	3.7221E-07	7.5224E-05	0.016925407	7.38608E-05	0.011444313
14.53	-8.91698E-05	5.28857E-07	0.000106871	0.024046047	7.38628E-05	0.011444313
14.535	-4.51777E-05	3.1593E-07	6.38469E-05	0.014365541	7.38633E-05	0.011444313
14.54	5.50337E-05	-1.77035E-07	-3.57586E-05	-0.008045674	7.38641E-05	0.011444313
14.545	0.000158796	-6.89933E-07	-0.000139386	-0.03136177	7.38704E-05	0.011444313
14.55	0.000238443	-1.0847E-06	-0.000219141	-0.049306688	7.38848E-05	0.011444313
14.555	0.000307124	-1.42564E-06	-0.000288021	-0.064804663	7.39086E-05	0.011444313

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
17.14477539	0.007618185	2.136388252
17.15087891	0.005654455	1.499059001
17.15698242	0.003667479	0.972347408
17.16308594	0.002580834	0.718775169
17.16918945	0.002206645	0.65635035
17.17529297	0.002334393	0.687462774
17.18139648	0.001416604	0.382433733
17.1875	0.002258244	0.59134556
17.19360352	0.004143653	1.083524296
17.19970703	0.004649242	1.233094332
17.20581055	0.002775529	0.802296856
17.21191406	0.001206149	0.356719044
17.21801758	0.002252426	0.623580372
17.22412109	0.002077886	0.581053288
17.23022461	0.001658712	0.517012973
17.23632813	0.002005797	0.690244622
17.24243164	0.002517737	0.836298188
17.24853516	0.002995205	0.880487145
17.25463867	0.004177501	1.185241575
17.26074219	0.005013569	1.551632128
17.2668457	0.004982325	1.744086844
17.27294922	0.005108472	1.802515241
17.27905273	0.006171984	2.026758895
17.28515625	0.007007838	2.312054569
17.29125977	0.006244627	1.982202214
17.29736328	0.005692835	1.634936124
17.3034668	0.007084595	2.158303949
17.30957031	0.008588614	2.983996091
17.31567383	0.009066538	3.132956854
17.32177734	0.009248961	3.052403957
17.32788086	0.008723498	2.672611183
17.33398438	0.007633698	2.214728334
17.34008789	0.007189584	2.189736875
17.34619141	0.007745789	2.467830619
17.35229492	0.00894669	2.970909536
17.35839844	0.009684863	3.58992084
17.36450195	0.008319176	3.019968404
17.37060547	0.006099899	1.853765596
17.37670898	0.00485528	1.379343218
17.3828125	0.004444452	1.38121132
17.38891602	0.004076718	1.381795456
17.39501953	0.003419265	1.163217388
17.40112305	0.00327447	1.104709809
17.40722656	0.003561329	1.145189956
17.41333008	0.003816848	1.124880539
17.41943359	0.004618557	1.387251911
17.42553711	0.004919675	1.649100048
17.43164063	0.004720854	1.642843997
17.43774414	0.005646602	1.879598669
17.44384766	0.00554888	1.731756494
17.44995117	0.003937425	1.213313645
17.45605469	0.00359337	1.207925055
17.4621582	0.004867608	1.708823675
17.46826172	0.004205343	1.438671446
17.47436523	0.001023393	0.357619242
17.48046875	0.001937689	0.644952075
17.48657227	0.002072177	0.609190628
17.49267578	0.000563004	0.155813048
17.4987793	0.001318698	0.362317766
17.50488281	0.002876751	0.847858581
17.51098633	0.00332092	1.169237355
17.51708984	0.002709279	1.018520931
17.52319336	0.001853279	0.561624122
17.52929688	0.001158082	0.303086852
17.53540039	0.004156675	1.098704595
17.54150391	0.00590091	1.618780016
17.54760742	0.007106705	2.152137389
17.55371094	0.0071283	2.587218649
17.55981445	0.005720982	2.122149057
17.56591797	0.004761271	1.51617838
17.57202148	0.004774928	1.370309487
17.578125	0.005586026	1.497108465
17.58422852	0.00746623	1.987120619
17.59033203	0.009552414	2.82277903
17.59643555	0.010039826	3.188369793
17.60253906	0.008744274	2.68460485
17.60864258	0.006524195	2.050834794
17.61474609	0.00508329	1.675098777
17.62084961	0.006255795	2.049957048
17.62695313	0.007969164	2.520755189
17.63305664	0.008496292	2.56112
17.63916016	0.008451357	2.686910164
17.64526367	0.007400323	2.716988257
17.65136719	0.005920259	2.148119371
17.6574707	0.007076867	2.32883435
17.66357422	0.009912391	3.217626823
17.66967773	0.010629265	3.343010115
17.67578125	0.008711799	2.698925255
17.68188477	0.006272917	2.151608722
17.68798828	0.004497888	1.662876349
17.6940918	0.003235972	1.161250808
17.70019531	0.002495476	0.869564289
17.70629883	0.002398892	0.806442827
17.71240234	0.003675884	1.222317983
17.71850586	0.004100919	1.448085935
17.72460938	0.002910306	1.081572025
17.73071289	0.001936908	0.753385908
17.73681641	0.0033828	1.373640666
17.74291992	0.004920117	1.792791021
17.74902344	0.00548688	1.733325121
17.75512695	0.00580951	1.767710839
17.76123047	0.005782711	1.755325115
17.76733398	0.004939304	1.525373959
17.7734375	0.003598763	1.207352258

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
14.56	0.000372594	-1.75164E-06	-0.000353877	-0.079622319	7.39437E-05	0.011444313
14.565	0.00041424	-1.96083E-06	-0.000396137	-0.089130779	7.39871E-05	0.011447022
14.57	0.000419554	-1.99044E-06	-0.000402118	-0.090476469	7.40316E-05	0.011449862
14.575	0.00040136	-1.90346E-06	-0.000384542	-0.086521935	7.40723E-05	0.01145268
14.58	0.000354929	-1.67698E-06	-0.00033878	-0.076225438	7.41041E-05	0.011455474
14.585	0.000247031	-1.14595E-06	-0.000231485	-0.05208403	7.41196E-05	0.011458236
14.59	7.61977E-05	-3.0084E-07	-6.0742E-05	-0.013666944	7.4121E-05	0.011460948
14.595	-9.83928E-05	5.6711E-07	0.000114601	0.025785248	7.41235E-05	0.011463587
14.6	-0.000203461	1.09463E-06	0.000221162	0.049761448	7.41339E-05	0.011466125
14.605	-0.000196915	1.07138E-06	0.000216459	0.048703385	7.41437E-05	0.011468547
14.61	-6.89795E-05	4.46661E-07	9.02317E-05	0.020302127	7.41449E-05	0.011470854
14.615	0.000160871	-6.85686E-07	-0.000138543	-0.031172231	7.41515E-05	0.011473066
14.62	0.000425323	-1.99459E-06	-0.00040296	-0.09066596	7.41972E-05	0.011475215
14.625	0.000627385	-2.99961E-06	-0.000605953	-0.136339508	7.42967E-05	0.01147734
14.63	0.00072029	-3.46621E-06	-0.000700177	-0.157539833	7.44278E-05	0.011479471
14.635	0.000733908	-3.53988E-06	-0.000715051	-0.160886549	7.45639E-05	0.011481623
14.64	0.000702439	-3.38964E-06	-0.000684694	-0.154056204	7.46887E-05	0.011483797
14.645	0.000627249	-3.02221E-06	-0.000610453	-0.137351919	7.47881E-05	0.011485988
14.65	0.000516142	-2.47537E-06	-0.000499966	-0.112492259	7.48554E-05	0.011488184
14.655	0.000393843	-1.87111E-06	-0.000377883	-0.085023676	7.48946E-05	0.01149037
14.66	0.000274124	-1.27776E-06	-0.000258014	-0.058053201	7.49136E-05	0.011492526
14.665	0.000166831	-7.4383E-07	-0.000150154	-0.033784638	7.49207E-05	0.011494633
14.67	0.0001056	-4.35687E-07	-8.79076E-05	-0.019779204	7.49235E-05	0.011496676
14.675	0.000127878	-5.4017E-07	-0.00010902	-0.024529525	7.49276E-05	0.011498645
14.68	0.000223209	-1.00803E-06	-0.000203554	-0.045799646	7.49402E-05	0.011500545
14.685	0.000335777	-1.56413E-06	-0.000315911	-0.071080052	7.49687E-05	0.011502387
14.69	0.000420118	-1.98266E-06	-0.000400469	-0.090105438	7.50133E-05	0.011504189
14.695	0.000463808	-2.20093E-06	-0.000444565	-0.100027169	7.50677E-05	0.011505962
14.7	0.000466069	-2.21425E-06	-0.000447255	-0.100632478	7.51226E-05	0.011507713
14.705	0.000429438	-2.03425E-06	-0.000410884	-0.092448966	7.51692E-05	0.011509443
14.71	0.00037689	-1.77362E-06	-0.000358222	-0.080599906	7.52051E-05	0.011511319
14.715	0.000352212	-1.64914E-06	-0.00033307	-0.074940862	7.52364E-05	0.011513407
14.72	0.000377097	-1.76982E-06	-0.000357456	-0.080427514	7.52724E-05	0.011515199
14.725	0.000426333	-2.01217E-06	-0.000406426	-0.091445833	7.53183E-05	0.011516794
14.73	0.000473677	-2.24603E-06	-0.000453676	-0.102077197	7.5375E-05	0.011518359
14.735	0.0005221	-2.48579E-06	-0.000502113	-0.112975449	7.54439E-05	0.011519904
14.74	0.000566534	-2.70679E-06	-0.00054676	-0.123021042	7.5525E-05	0.011522935
14.745	0.000584385	-2.7969E-06	-0.000564964	-0.127116997	7.56114E-05	0.011526401
14.75	0.000575948	-2.75642E-06	-0.000556785	-0.125276593	7.56952E-05	0.011529879
14.755	0.000567722	-2.71613E-06	-0.000548643	-0.123444703	7.57766E-05	0.011533366
14.76	0.000572373	-2.73946E-06	-0.000553356	-0.124505169	7.58595E-05	0.011536859
14.765	0.000574536	-2.75078E-06	-0.000555644	-0.125019955	7.59429E-05	0.011540357
14.77	0.000566549	-2.71153E-06	-0.000547714	-0.123235604	7.6024E-05	0.011543861
14.775	0.000571263	-2.73455E-06	-0.000552365	-0.124282134	7.61065E-05	0.011547367
14.78	0.000597688	-2.86557E-06	-0.000578835	-0.130237948	7.61968E-05	0.011550879
14.785	0.000610854	-2.93209E-06	-0.000592274	-0.133261674	7.62911E-05	0.011554405
14.79	0.000586081	-2.81073E-06	-0.000567751	-0.127744001	7.63779E-05	0.011557951
14.795	0.000543352	-2.59928E-06	-0.000525026	-0.11813091	7.64525E-05	0.011561504
14.8	0.000503618	-2.40158E-06	-0.000485079	-0.109142855	7.65166E-05	0.011565046
14.805	0.000474096	-2.25324E-06	-0.000455108	-0.102399333	7.65734E-05	0.011568557
14.81	0.000483305	-2.29524E-06	-0.000463594	-0.104308727	7.66325E-05	0.011572025
14.815	0.00056443	-2.69321E-06	-0.000544009	-0.122402076	7.6713E-05	0.011575455
14.82	0.000698127	-3.35379E-06	-0.000677462	-0.152428852	7.68362E-05	0.011578884
14.825	0.000817968	-3.94897E-06	-0.000797656	-0.179472682	7.70053E-05	0.01158237
14.83	0.000874273	-4.2314E-06	-0.000854686	-0.192304274	7.71984E-05	0.011585965
14.835	0.000866452	-4.19627E-06	-0.000847583	-0.190706198	7.73882E-05	0.011589696
14.84	0.000820638	-3.97186E-06	-0.00080224	-0.180503958	7.75584E-05	0.011593559
14.845	0.000764509	-3.69485E-06	-0.000746268	-0.167910206	7.77061E-05	0.011597533
14.85	0.000728723	-3.51701E-06	-0.000710337	-0.15982573	7.78403E-05	0.011601593
14.855	0.000740967	-3.57647E-06	-0.000722351	-0.162528936	7.79791E-05	0.011605723
14.86	0.000791869	-3.82864E-06	-0.000773305	-0.173993516	7.81376E-05	0.011609927
14.865	0.000834396	-4.04132E-06	-0.000816278	-0.183662571	7.83135E-05	0.011614226
14.87	0.000839116	-4.06777E-06	-0.000821621	-0.184864687	7.84915E-05	0.011618637
14.875	0.000810117	-3.92732E-06	-0.000793241	-0.178479146	7.86574E-05	0.011623162
14.88	0.000746411	-3.61475E-06	-0.000730084	-0.164268987	7.87982E-05	0.011627786
14.885	0.000647752	-3.12786E-06	-0.00063171	-0.142134776	7.89042E-05	0.011632479
14.89	0.000548155	-2.63394E-06	-0.000531923	-0.119682707	7.89802E-05	0.011637195
14.895	0.000495113	-2.36858E-06	-0.000478312	-0.107620291	7.90421E-05	0.01164189
14.9	0.000506225	-2.4206E-06	-0.000488824	-0.109985368	7.91069E-05	0.011646539
14.905	0.000559321	-2.6818E-06	-0.000541602	-0.121860432	7.9186E-05	0.011651199
14.91	0.000616151	-2.96324E-06	-0.000598469	-0.134655517	7.92819E-05	0.011659504
14.915	0.000649892	-3.13181E-06	-0.000632528	-0.142318741	7.93887E-05	0.011672496
14.92	0.000639607	-3.08333E-06	-0.000622732	-0.14011466	7.94921E-05	0.011685337
14.925	0.000568263	-2.73206E-06	-0.000551754	-0.124144757	7.95737E-05	0.011697912
14.93	0.000464495	-2.21759E-06	-0.000447809	-0.100757017	7.96282E-05	0.011712369
14.935	0.00040156	-1.90219E-06	-0.000384093	-0.086420959	7.9669E-05	0.011729671
14.94	0.000421282	-1.99506E-06	-0.000402858	-0.090642949	7.97138E-05	0.011746401
14.945	0.000501967	-2.39086E-06	-0.000482832	-0.108637185	7.97775E-05	0.01176257
14.95	0.000605665	-2.90216E-06	-0.00058614	-0.131881425	7.98702E-05	0.011782594
14.955	0.000715741	-3.44636E-06	-0.000696087	-0.156619487	7.99997E-05	0.011803642
14.96	0.000825882	-3.99223E-06	-0.000806366	-0.181432308	8.01721E-05	0.011824397
14.965	0.000923483	-4.47731E-06	-0.000904337	-0.203475929	8.03876E-05	0.011845026
14.97	0.001006466	-4.89083E-06	-0.000987823	-0.22226026	8.06436E-05	0.011865676
14.975	0.001087679	-5.29663E-06	-0.001069749	-0.240693517	8.09426E-05	0.011889317
14.98	0.001144546	-5.58416E-06	-0.001127795	-0.253753952	8.12737E-05	0.011914581
14.985	0.001113076	-5.43608E-06	-0.001097875	-0.247021839	8.15869E-05	0.011940305
14.99	0.000974759	-4.75773E-06	-0.000960812	-0.216182733	8.1827E-05	0.011978204
14.995	0.000789407	-3.84299E-06	-0.000776001	-0.174600286	8.19845E-05	0.012016949
15	0.000620089	-3.00455E-06	-0.00060662	-0.136489527	8.20817E-05	0.012055486
15.005	0.000487546	-2.34632E-06	-0.000473654	-0.106572201	8.21418E-05	0.012097196
15.01	0.000398642	-1.90301E-06	-0.000384108	-0.086424286	8.21819E-05	0.012138241
15.015	0.000358833	-1.70263E-06	-0.000343634	-0.077317582	8.22145E-05	0.012177835
15.02	0.000347432	-1.64397E-06	-0.000331785	-0.074651521	8.2245E-05	0.012219677
15.025	0.000324332	-1.52837E-06	-0.000308435	-0.069397834	8.22716E-05	0.012266479
15.03	0.000280272	-1.30854E-06	-0.000264033	-0.059407503	8.22914E-05	0.012311565
15.035	0.000246954	-1.14074E-06	-0.000230141	-0.051781701	8.23068E-05	0.012356921
15.04	0.000244209	-1.12396E-06	-0.000226751	-0.051018964	8.23219E-05	0.012401215
15.045	0.000260381	-1.20107E-06	-0.000242332	-0.054524686	8.2339E-05	0.012444842
15.05	0.000292986	-1.35946E-06	-0.000274336	-0.061725666	8.23607E-05	0.012488266
15.055	0.000358546	-1.68123E-06	-0.000339351	-0.076354017	8.23932E-05	0.012531339
15.06	0.000450012	-2.13282E-06	-0.000430595	-0.096883763	8.24444E-05	0.012577346
15.065	0.000523276	-2.49647E-06	-0.000504065	-0.113414679	8.25136E-05	0.012621687
15.07	0.000541956	-2.59088E-06	-0.000523139	-0.117706334	8.25878E-05	0.012664628
15.075	0.000511824	-2.44296E-06	-0.00049325	-0.110981146	8.26541E-05	0.012706226

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
17.77954102	0.001780996	0.614031702
17.78564453	0.000196765	0.063295156
17.79174805	0.001660398	0.514759707
17.79785156	0.003336949	1.063633097
17.80395508	0.004057703	1.383108209
17.81005859	0.003355159	1.230002788
17.81616211	0.004226635	1.492248639
17.82226563	0.004940176	1.541886337
17.82836914	0.003597363	1.12905593
17.83447266	0.002574087	0.970835026
17.84057617	0.003538988	1.498285511
17.84667969	0.005054561	1.920869881
17.8527832	0.005650321	1.972288886
17.85888672	0.005761514	2.033887157
17.86499023	0.006174944	2.197351618
17.87109375	0.006907743	2.357059185
17.87719727	0.006088523	2.072846455
17.88330078	0.003655059	1.325349064
17.8894043	0.002305507	0.829574484
17.89550781	0.002611866	0.867974883
17.90161133	0.003100481	0.998998433
17.90771484	0.003040864	0.968091958
17.91381836	0.002145825	0.678534787
17.91992188	0.001989669	0.678468971
17.92602539	0.002807656	1.048388882
17.93212891	0.004095862	1.559689996
17.93823242	0.004692386	1.738830775
17.94433594	0.004265771	1.513759077
17.95043945	0.004220539	1.562096576
17.95654297	0.00570755	2.190127583
17.96264648	0.006440222	2.169545376
17.96875	0.00617616	2.063193964
17.97485352	0.00519389	2.178310957
17.98095703	0.003434058	1.541599645
17.98706055	0.00248598	0.975912149
17.99316406	0.003741039	1.368169287
17.99926758	0.005563017	1.834556176
18.00537109	0.006485135	2.028340875
18.01147461	0.007215151	2.587300267
18.01757813	0.007992573	3.249415134
18.02368164	0.008259911	3.098234051
18.02978516	0.008304137	2.938488008
18.03588867	0.008052738	2.900116149
18.04199219	0.007650886	2.57312063
18.0480957	0.008669175	2.635879491
18.05419922	0.009798111	3.086346431
18.06030273	0.010159904	3.467289799
18.06640625	0.00983991	3.323028229
18.07250977	0.008399096	2.845450272
18.07861328	0.006549887	2.2906765
18.0847168	0.006144573	2.13843177
18.09082031	0.006828466	2.553364473
18.09692383	0.008315024	3.476763737
18.10302734	0.009493778	3.676665132
18.10913086	0.009337953	3.076997901
18.11523438	0.007261163	2.344178356
18.12133789	0.003655513	1.289857632
18.12744141	0.001623264	0.598170064
18.13354492	0.003067597	1.076323807
18.13964844	0.00555119	1.89416322
18.14575195	0.007343434	2.588029937
18.15185547	0.007478156	2.590918037
18.15795898	0.006064874	1.957899268
18.1640625	0.003455293	1.135829004
18.17016602	0.002984	1.113918157
18.17626953	0.004919434	1.831918401
18.18237305	0.005901594	1.901201225
18.18847656	0.005205881	1.667396052
18.19458008	0.004422907	1.542941015
18.20068359	0.004401131	1.54271013
18.20678711	0.005749332	2.090562607
18.21289063	0.007206277	2.711391761
18.21899414	0.0065526	2.290865697
18.22509766	0.005364181	1.780961939
18.23120117	0.005219075	1.776821634
18.23730469	0.004452085	1.575905027
18.2434082	0.003603905	1.367383571
18.24951172	0.004586276	1.791423748
18.25561523	0.005910415	2.14719753
18.26171875	0.006317453	2.19346884
18.26782227	0.005659019	2.051389177
18.27392578	0.004197501	1.63418187
18.2800293	0.002894753	1.165860761
18.28613281	0.002506926	1.018825079
18.29223633	0.003366051	1.33994302
18.29833984	0.004757067	1.794795759
18.30444336	0.005023174	1.831348226
18.31054688	0.00339823	1.217441151
18.31665039	0.001091882	0.381347439
18.32275391	0.000338449	0.122244059
18.32885742	0.001449658	0.549798305
18.33496094	0.003042837	1.123883804
18.34106445	0.004519371	1.737135257
18.34716797	0.005693167	2.560356821
18.35327148	0.005869109	2.587930103
18.359375	0.004904154	1.855628838
18.36547852	0.003921742	1.409705588
18.37158203	0.00383977	1.368567467
18.37768555	0.00422182	1.509011838
18.38378906	0.004470918	1.7006273
18.38989258	0.004880158	1.830539936
18.39599609	0.005756213	2.041709034
18.40209961	0.006159536	2.296616858
18.40820313	0.004437727	1.796219115

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
15.08	0.00046145	-2.19334E-06	-0.000442812	-0.099632754	8.27079E-05	0.012746363
15.085	0.000419669	-1.98458E-06	-0.000400631	-0.090142006	8.27524E-05	0.012785047
15.09	0.000420809	-1.98691E-06	-0.000401104	-0.090248383	8.27971E-05	0.012822162
15.095	0.000488853	-2.32065E-06	-0.000468538	-0.105421162	8.28575E-05	0.012857704
15.1	0.000600492	-2.87241E-06	-0.000580016	-0.13050357	8.29487E-05	0.012891911
15.105	0.000699336	-3.3634E-06	-0.000679206	-0.152821382	8.30723E-05	0.012925179
15.11	0.000754401	-3.63885E-06	-0.000734852	-0.1653416	8.32161E-05	0.012957866
15.115	0.000772951	-3.73356E-06	-0.000753984	-0.169646351	8.33671E-05	0.012990174
15.12	0.000760671	-3.67537E-06	-0.000742227	-0.167001103	8.35134E-05	0.013022159
15.125	0.000715352	-3.4527E-06	-0.000697234	-0.156877714	8.36427E-05	0.013053755
15.13	0.000661197	-3.18442E-06	-0.000643027	-0.144681074	8.37532E-05	0.013084778
15.135	0.00064078	-3.0817E-06	-0.000622272	-0.14001111	8.3857E-05	0.013115018
15.14	0.000663972	-3.19518E-06	-0.000645202	-0.145170369	8.39684E-05	0.013144385
15.145	0.000697302	-3.36025E-06	-0.000678555	-0.152674956	8.40913E-05	0.013172943
15.15	0.000709492	-3.42149E-06	-0.00069093	-0.155459303	8.42185E-05	0.013200796
15.155	0.00070226	-3.38654E-06	-0.000683869	-0.153870461	8.43431E-05	0.013228375
15.16	0.000682549	-3.28979E-06	-0.000664317	-0.149471406	8.44609E-05	0.013255614
15.165	0.000638012	-3.06989E-06	-0.000619886	-0.13947427	8.45638E-05	0.013282249
15.17	0.000574579	-2.75504E-06	-0.000556271	-0.125161084	8.46472E-05	0.013308447
15.175	0.000534374	-2.55342E-06	-0.000515536	-0.115995616	8.47194E-05	0.013333468
15.18	0.000540578	-2.58108E-06	-0.000521126	-0.117253454	8.47932E-05	0.013357244
15.185	0.000577549	-2.76155E-06	-0.000557591	-0.125458007	8.48775E-05	0.013380006
15.19	0.000637973	-3.05848E-06	-0.000617588	-0.138957196	8.49804E-05	0.013402067
15.195	0.000732161	-3.52332E-06	-0.000711509	-0.160089428	8.51159E-05	0.013423589
15.2	0.000848083	-4.09778E-06	-0.000827559	-0.186200879	8.52977E-05	0.013445811
15.205	0.000941853	-4.565E-06	-0.000921939	-0.207436333	8.55219E-05	0.013473886
15.21	0.000981067	-4.76338E-06	-0.000962009	-0.216452129	8.57651E-05	0.013502224
15.215	0.000975023	-4.73765E-06	-0.00095681	-0.215282222	8.60054E-05	0.013530935
15.22	0.000935114	-4.54415E-06	-0.000917712	-0.206485212	8.62264E-05	0.013559991
15.225	0.000848459	-4.11871E-06	-0.00083175	-0.187143644	8.64084E-05	0.013589761
15.23	0.000728362	-3.52576E-06	-0.000711948	-0.160188265	8.65425E-05	0.013619821
15.235	0.000620087	-2.98925E-06	-0.000603557	-0.135800337	8.66396E-05	0.013649329
15.24	0.000534945	-2.56655E-06	-0.000518162	-0.116586366	8.6712E-05	0.013677915
15.245	0.000449122	-2.14015E-06	-0.000432022	-0.097205037	8.67629E-05	0.013706133
15.25	0.000356328	-1.67802E-06	-0.000338669	-0.076200519	8.6795E-05	0.013737729
15.255	0.000281104	-1.30091E-06	-0.000262494	-0.059061215	8.6815E-05	0.013769008
15.26	0.000259219	-1.18625E-06	-0.000239333	-0.053849985	8.6832E-05	0.013798528
15.265	0.000307795	-1.42017E-06	-0.0002866	-0.064484889	8.68559E-05	0.013826217
15.27	0.000418934	-1.96486E-06	-0.000396656	-0.089247604	8.69003E-05	0.013852207
15.275	0.00057849	-2.75146E-06	-0.000555578	-0.125004997	8.69849E-05	0.01387701
15.28	0.000746812	-3.58492E-06	-0.000723956	-0.162890111	8.71258E-05	0.013901134
15.285	0.000857394	-4.13542E-06	-0.000835162	-0.187911539	8.73116E-05	0.013925
15.29	0.000892823	-4.31394E-06	-0.000871225	-0.19602562	8.75131E-05	0.013949306
15.295	0.000902743	-4.36458E-06	-0.000881453	-0.198327004	8.77191E-05	0.013978522
15.3	0.000928288	-4.49154E-06	-0.0009071	-0.204097489	8.79369E-05	0.01400794
15.305	0.000975965	-4.72801E-06	-0.000954866	-0.214844899	8.81776E-05	0.014037627
15.31	0.001042418	-5.05813E-06	-0.001021546	-0.22984787	8.84522E-05	0.014067871
15.315	0.00110947	-5.3927E-06	-0.001089125	-0.245053186	8.87633E-05	0.014099219
15.32	0.001139067	-5.54341E-06	-0.001119566	-0.251902312	8.90913E-05	0.014131457
15.325	0.001102918	-5.36879E-06	-0.001084282	-0.243963411	8.93987E-05	0.014169374
15.33	0.001018423	-4.95294E-06	-0.001000257	-0.225057793	8.96608E-05	0.01421054
15.335	0.000942687	-4.57793E-06	-0.000924486	-0.208009378	8.98854E-05	0.014251892
15.34	0.000914535	-4.43744E-06	-0.000896102	-0.201622929	9.00968E-05	0.014294176
15.345	0.000920314	-4.46555E-06	-0.000901782	-0.202900957	9.03109E-05	0.014337412
15.35	0.000930113	-4.51444E-06	-0.000911661	-0.205123687	9.05295E-05	0.014380117
15.355	0.000933289	-4.53102E-06	-0.000915011	-0.205877537	9.07497E-05	0.014423574
15.36	0.000925948	-4.49586E-06	-0.000907907	-0.204278996	9.09664E-05	0.014467021
15.365	0.000901255	-4.37468E-06	-0.000883423	-0.198770132	9.11717E-05	0.014510162
15.37	0.000870381	-4.22199E-06	-0.000852574	-0.191829166	9.13631E-05	0.014553135
15.375	0.000862967	-4.18456E-06	-0.000845011	-0.190127376	9.15514E-05	0.014595823
15.38	0.0008871	-4.30355E-06	-0.000869055	-0.19553737	9.17503E-05	0.014638345
15.385	0.000919641	-4.46502E-06	-0.000901681	-0.202878302	9.1964E-05	0.014680959
15.39	0.000948473	-4.60851E-06	-0.000930675	-0.209401973	9.21914E-05	0.014723775
15.395	0.000981344	-4.77235E-06	-0.000963778	-0.216850087	9.24348E-05	0.014766879
15.4	0.001009452	-4.91346E-06	-0.000992291	-0.223265416	9.26923E-05	0.01481036
15.405	0.001010737	-4.92237E-06	-0.00099409	-0.223670269	9.29505E-05	0.014854343
15.41	0.00098669	-4.80552E-06	-0.000970478	-0.218357513	9.31966E-05	0.014899413
15.415	0.000956136	-4.65598E-06	-0.000940264	-0.211559293	9.34276E-05	0.014944947
15.42	0.000917248	-4.46539E-06	-0.000901754	-0.202894569	9.36403E-05	0.014990611
15.425	0.000846149	-4.1154E-06	-0.00083104	-0.186983894	9.38212E-05	0.015036595
15.43	0.000737822	-3.57985E-06	-0.000722842	-0.162639404	9.39588E-05	0.015082128
15.435	0.000627706	-3.0331E-06	-0.00061239	-0.137787741	9.40584E-05	0.015126783
15.44	0.000559914	-2.69404E-06	-0.000543897	-0.122376813	9.41376E-05	0.015170769
15.445	0.000549803	-2.64005E-06	-0.000532991	-0.119922972	9.4214E-05	0.015213479
15.45	0.000588318	-2.82742E-06	-0.000570851	-0.128441412	9.43015E-05	0.015254815
15.455	0.000656436	-3.16284E-06	-0.000638625	-0.143690523	9.44104E-05	0.015294922
15.46	0.000719177	-3.47363E-06	-0.000701419	-0.157819319	9.45411E-05	0.015334153
15.465	0.000740625	-3.5811E-06	-0.000723132	-0.162704709	9.46798E-05	0.01537271
15.47	0.000729268	-3.5255E-06	-0.000711898	-0.160177077	9.48142E-05	0.015410657
15.475	0.000733765	-3.54741E-06	-0.000716325	-0.161173198	9.49503E-05	0.015447963
15.48	0.000772368	-3.73892E-06	-0.000755019	-0.169879179	9.5101E-05	0.015484646
15.485	0.000804358	-3.8997E-06	-0.000787501	-0.177187772	9.52646E-05	0.0155209
15.49	0.000786331	-3.81398E-06	-0.00077018	-0.17329053	9.54208E-05	0.015556853
15.495	0.000715449	-3.46611E-06	-0.000699891	-0.157475526	9.55502E-05	0.015592452
15.5	0.000608443	-2.93804E-06	-0.000593196	-0.133469131	9.56438E-05	0.015630869
15.505	0.000481984	-2.31168E-06	-0.000466658	-0.104998038	9.57025E-05	0.0156747
15.51	0.000363223	-1.72101E-06	-0.000347345	-0.07815269	9.57358E-05	0.015716961
15.515	0.000282981	-1.31907E-06	-0.000266159	-0.059885788	9.57561E-05	0.015757257
15.52	0.000250541	-1.15291E-06	-0.000232598	-0.052334478	9.57719E-05	0.015795314
15.525	0.00025922	-1.19003E-06	-0.000240099	-0.054022174	9.57889E-05	0.015831012
15.53	0.000312952	-1.45012E-06	-0.000292652	-0.065846793	9.58137E-05	0.015864374
15.535	0.000421264	-1.9812E-06	-0.000399958	-0.089990605	9.58585E-05	0.015895571
15.54	0.000569257	-2.71088E-06	-0.000547381	-0.123160778	9.59404E-05	0.01592495
15.545	0.000717667	-3.44526E-06	-0.000695743	-0.156542192	9.60706E-05	0.015952978
15.55	0.000840645	-4.05553E-06	-0.000819024	-0.184280367	9.62492E-05	0.015980191
15.555	0.000944198	-4.57057E-06	-0.000923063	-0.207689089	9.64745E-05	0.01600705
15.56	0.001036378	-5.03038E-06	-0.00101594	-0.22858659	9.6746E-05	0.016033931
15.565	0.001102252	-5.36124E-06	-0.001082771	-0.24362344	9.70531E-05	0.016061176
15.57	0.001123431	-5.47157E-06	-0.001105056	-0.248637533	9.7372E-05	0.016088949
15.575	0.001095796	-5.34019E-06	-0.001078508	-0.242664308	9.76755E-05	0.016117296
15.58	0.00101707	-4.95517E-06	-0.001000712	-0.225160155	9.7937E-05	0.016146134
15.585	0.000892108	-4.33939E-06	-0.000876297	-0.197166927	9.81381E-05	0.016175245
15.59	0.000757348	-3.67218E-06	-0.000741499	-0.16683726	9.82831E-05	0.016204299
15.595	0.000662962	-3.20235E-06	-0.000646583	-0.14548119	9.83942E-05	0.016232943

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
18.41430664	0.002274274	0.95769865
18.42041016	0.002911242	1.266807791
18.42651367	0.004708557	1.933487056
18.43261719	0.007162106	2.827281406
18.4387207	0.007905814	3.253435462
18.44482422	0.006017101	2.482278648
18.45092773	0.003720584	1.455261297
18.45703125	0.002271468	0.823846016
18.46313477	0.001304051	0.481961972
18.46923828	0.000951564	0.396721089
18.4753418	0.002021622	0.833655574
18.48144531	0.002131133	0.79876049
18.48754883	0.001664159	0.638827401
18.49365234	0.002256704	0.886025108
18.49975586	0.00332207	1.28551852
18.50585938	0.0042504	1.717683749
18.51196289	0.005329756	2.083597044
18.51806641	0.004795422	1.777957404
18.52416992	0.002793398	1.156161323
18.53027344	0.002786653	1.181361754
18.53637695	0.001329884	0.510732507
18.54248047	0.000828318	0.324643656
18.54858398	0.000755975	0.302504907
18.5546875	0.000817965	0.315549991
18.56079102	0.002187856	0.909828399
18.56689453	0.001631551	0.699876995
18.57299805	0.001825568	0.718632984
18.57910156	0.002633255	1.047614108
18.58520508	0.000977692	0.401806286
18.59130859	0.003298144	1.269963822
18.59741211	0.004969657	1.84975211
18.60351563	0.005070426	1.941766976
18.60961914	0.004134011	1.653536897
18.61572266	0.002766056	1.19996112
18.62182617	0.002236162	1.02015705
18.62792969	0.003106536	1.31094018
18.6340332	0.0042495	1.568391896
18.64013672	0.004148132	1.433334093
18.64624023	0.003047467	1.146772074
18.65234375	0.002765226	1.259583265
18.65844727	0.003406715	1.817133436
18.66455078	0.004152875	2.181681284
18.6706543	0.004726963	2.098469047
18.67675781	0.005197911	2.119694099
18.68286133	0.00634218	2.916667026
18.68896484	0.008416731	4.130691379
18.69506836	0.01025454	4.707424387
18.70117188	0.010286689	4.488724471
18.70727539	0.008732598	3.916992218
18.71337891	0.007664227	3.679087187
18.71948242	0.008769977	4.060710896
18.72558594	0.011156077	4.7511213
18.73168945	0.012194772	5.194572383
18.73779297	0.010244613	4.269338864
18.74389648	0.007422672	2.971359666
18.75	0.006403083	2.481387396
18.75610352	0.00613604	2.349723998
18.76220703	0.006121789	2.534439514
18.76831055	0.006582121	2.924709102
18.77441406	0.00614559	2.53325147
18.78051758	0.004988733	2.002284364
18.78662109	0.005457687	2.274303118
18.79272461	0.007120573	2.917947024
18.79882813	0.007894186	3.338825379
18.80493164	0.007578704	3.306876071
18.81103516	0.006711916	2.688991775
18.81713867	0.004982559	1.891245967
18.82324219	0.002619767	1.043063126
18.8293457	0.002407805	1.044305638
18.83544922	0.003848999	1.86703804
18.84155273	0.003647128	1.890264275
18.84765625	0.001904109	0.896364745
18.85375977	0.000746111	0.294031191
18.85986328	0.002116473	0.807395494
18.8659668	0.003091736	1.326634703
18.87207031	0.003462137	1.557793607
18.87817383	0.004340926	1.882636576
18.88427734	0.00503664	2.136850675
18.89038086	0.004861382	1.938305978
18.89648438	0.003346044	1.366168121
18.90258789	0.001962104	0.914663879
18.90869141	0.002620556	1.177959734
18.91479492	0.004932909	1.952902094
18.92089844	0.007256383	3.122165851
18.92700195	0.007641418	3.600583777
18.93310547	0.005468194	2.296834441
18.93920898	0.003036585	1.132773149
18.9453125	0.002493594	0.898502228
18.95141602	0.002776016	1.062315959
18.95751953	0.003195556	1.434894407
18.96362305	0.003387187	1.660241327
18.96972656	0.003307619	1.602937287
18.97583008	0.00438968	2.147929491
18.98193359	0.006722786	3.285590758
18.98803711	0.008060164	3.746092607
18.99414063	0.007293605	3.25042569
19.00024414	0.00572888	2.702548501
19.00634766	0.005167902	2.814412709
19.01245117	0.006839894	3.807884695
19.01855469	0.009949856	4.941702531
19.0246582	0.010276831	4.79534888
19.03076172	0.007067117	3.04472439
19.03686523	0.004561779	1.832971311
19.04296875	0.004374482	2.006699052

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
15.6	0.000629832	-3.03496E-06	-0.000612767	-0.137872571	9.84944E-05	0.016260924
15.605	0.000646472	-3.11467E-06	-0.000628875	-0.141496897	9.86001E-05	0.016288143
15.61	0.000686216	-3.31051E-06	-0.000668445	-0.150400173	9.87191E-05	0.016314632
15.615	0.000708387	-3.42143E-06	-0.000690857	-0.155442891	9.88459E-05	0.01634048
15.62	0.000671075	-3.239E-06	-0.000653995	-0.147148949	9.89597E-05	0.016365727
15.625	0.000565201	-2.71607E-06	-0.000548348	-0.123378191	9.90405E-05	0.016390265
15.63	0.000436505	-2.07696E-06	-0.000419246	-0.094330444	9.90886E-05	0.016413819
15.635	0.000362195	-1.70392E-06	-0.000343894	-0.077376041	9.91218E-05	0.016436065
15.64	0.000381513	-1.79361E-06	-0.000362019	-0.081454296	9.91586E-05	0.016456812
15.645	0.000463634	-2.19561E-06	-0.000443245	-0.099730178	9.92129E-05	0.016476099
15.65	0.000567472	-2.70655E-06	-0.000546478	-0.122957556	9.92943E-05	0.01649413
15.655	0.000687293	-3.29765E-06	-0.000665901	-0.149827755	9.94137E-05	0.016511178
15.66	0.000820006	-3.9541E-06	-0.000798519	-0.179666878	9.95836E-05	0.01652756
15.665	0.000945105	-4.57478E-06	-0.000923905	-0.207878709	9.98094E-05	0.016543655
15.67	0.001044015	-5.0676E-06	-0.001023456	-0.230277605	0.000100085	0.01655981
15.675	0.001104622	-5.37235E-06	-0.001085013	-0.244127999	0.000100393	0.016576249
15.68	0.001112009	-5.4149E-06	-0.001093607	-0.24606151	0.000100706	0.016593108
15.685	0.00104403	-5.08487E-06	-0.001026921	-0.2310573	0.000100981	0.016610393
15.69	0.000891087	-4.33295E-06	-0.000874998	-0.1968746	0.000101182	0.016627936
15.695	0.000687722	-3.32827E-06	-0.000672022	-0.151204996	0.000101301	0.016645382
15.7	0.000485066	-2.32371E-06	-0.000469091	-0.105545387	0.000101361	0.016662261
15.705	0.000306897	-1.43741E-06	-0.000290063	-0.065264151	0.000101385	0.0166781
15.71	0.000183511	-8.19194E-07	-0.000165195	-0.03716893	0.000101393	0.016692668
15.715	0.000165275	-7.19537E-07	-0.000145069	-0.032640635	0.0001014	0.016705401
15.72	0.000255164	-1.15587E-06	-0.000233234	-0.052477587	0.000101417	0.01671662
15.725	0.000407738	-1.90464E-06	-0.000384519	-0.086516836	0.000101459	0.016726523
15.73	0.000598254	-2.84333E-06	-0.000574162	-0.129186366	0.000101549	0.016735418
15.735	0.000816775	-3.92335E-06	-0.000792336	-0.178275712	0.000101718	0.016743761
15.74	0.001029491	-4.97802E-06	-0.00100537	-0.226208338	0.000101986	0.016751953
15.745	0.001197085	-5.81233E-06	-0.001173857	-0.264117846	0.000102348	0.016760351
15.75	0.001294141	-6.29943E-06	-0.001272183	-0.286241282	0.000102771	0.016769236
15.755	0.001308197	-6.37626E-06	-0.00128769	-0.289730206	0.000103204	0.016778772
15.76	0.001246937	-6.07941E-06	-0.001227707	-0.276234157	0.000103597	0.016789025
15.765	0.001128688	-5.4986E-06	-0.001110355	-0.249829871	0.000103919	0.016800116
15.77	0.000975777	-4.74346E-06	-0.000957789	-0.215502604	0.000104159	0.016811629
15.775	0.000831398	-4.02728E-06	-0.000813105	-0.182948724	0.000104334	0.016823259
15.78	0.00073707	-3.55655E-06	-0.000718013	-0.161552877	0.000104471	0.016834718
15.785	0.000698028	-3.35848E-06	-0.000678002	-0.152550465	0.000104594	0.016846069
15.79	0.000714233	-3.43328E-06	-0.000693116	-0.155951003	0.000104723	0.016857013
15.795	0.000800648	-3.8558E-06	-0.00077849	-0.175160213	0.000104885	0.016867283
15.8	0.00095111	-4.5971E-06	-0.000928264	-0.208859483	0.000105114	0.016877279
15.805	0.001137361	-5.51833E-06	-0.001114379	-0.250735288	0.000105441	0.016887335
15.81	0.001330267	-6.47598E-06	-0.00130782	-0.294259537	0.000105888	0.016897821
15.815	0.001481044	-7.22907E-06	-0.001459823	-0.328460087	0.000106442	0.016909117
15.82	0.001527293	-7.46757E-06	-0.001507959	-0.339290784	0.000107032	0.016921512
15.825	0.001446333	-7.07631E-06	-0.001428901	-0.321502677	0.000107561	0.01693509
15.83	0.001274294	-6.2314E-06	-0.001258191	-0.283093058	0.000107971	0.01694969
15.835	0.001074256	-5.244E-06	-0.00105871	-0.238209671	0.000108263	0.016966853
15.84	0.000898741	-4.37466E-06	-0.000883095	-0.19869628	0.000108467	0.016984661
15.845	0.000768125	-3.72563E-06	-0.000751993	-0.169198359	0.000108616	0.017002186
15.85	0.000673017	-3.25152E-06	-0.000656228	-0.147651308	0.000108731	0.017019872
15.855	0.000601121	-2.89159E-06	-0.000583529	-0.131294052	0.000108822	0.017038631
15.86	0.000559735	-2.68183E-06	-0.000541163	-0.121761649	0.000108901	0.017055926
15.865	0.00056642	-2.70956E-06	-0.000546768	-0.123022798	0.000108982	0.017071282
15.87	0.000631343	-3.02599E-06	-0.000610707	-0.137409021	0.000109083	0.017084783
15.875	0.000750417	-3.61212E-06	-0.000729132	-0.164054743	0.000109225	0.017096979
15.88	0.000891115	-4.30805E-06	-0.000869735	-0.195690471	0.000109426	0.017108666
15.885	0.001002076	-4.85926E-06	-0.000981094	-0.220746044	0.00010968	0.017120392
15.89	0.001060675	-5.15213E-06	-0.001040258	-0.234057964	0.000109964	0.017132102
15.895	0.001080404	-5.25221E-06	-0.001060474	-0.238606599	0.000110259	0.017143915
15.9	0.001079104	-5.2474E-06	-0.001059503	-0.238388095	0.000110553	0.017155867
15.905	0.001075582	-5.2308E-06	-0.001056148	-0.23763335	0.000110846	0.017167957
15.91	0.001084907	-5.27761E-06	-0.001065605	-0.239761064	0.000111143	0.017180242
15.915	0.001101188	-5.35933E-06	-0.001082113	-0.24347538	0.00011145	0.017192786
15.92	0.001111192	-5.41043E-06	-0.001092436	-0.245798066	0.000111762	0.017205612
15.925	0.001112505	-5.41849E-06	-0.001094065	-0.246164608	0.000112075	0.017218732
15.93	0.001114816	-5.43109E-06	-0.001096609	-0.246736941	0.000112389	0.017232149
15.935	0.001134012	-5.52706E-06	-0.001115996	-0.251099127	0.000112714	0.017245865
15.94	0.001169774	-5.70573E-06	-0.001152088	-0.25921976	0.00011306	0.01725991
15.945	0.001199915	-5.8578E-06	-0.001182807	-0.266131655	0.000113423	0.017274338
15.95	0.001202555	-5.87484E-06	-0.001186247	-0.266905573	0.000113789	0.017290047
15.955	0.001158337	-5.66061E-06	-0.00114296	-0.257166077	0.000114128	0.017310554
15.96	0.001048427	-5.1209E-06	-0.001033911	-0.232629966	0.000114406	0.017333577
15.965	0.00087407	-4.26021E-06	-0.00086002	-0.193504463	0.000114599	0.017357961
15.97	0.000669317	-3.24546E-06	-0.000655021	-0.147379723	0.000114712	0.01738141
15.975	0.000497326	-2.38871E-06	-0.000481962	-0.10844151	0.000114775	0.017403404
15.98	0.000420682	-2.00109E-06	-0.000403675	-0.090826978	0.000114819	0.017427392
15.985	0.000459103	-2.18272E-06	-0.000440376	-0.099084637	0.000114873	0.017451978
15.99	0.000593559	-2.8415E-06	-0.000573484	-0.129033799	0.000114962	0.017474523
15.995	0.000793969	-3.83002E-06	-0.0007732	-0.173969891	0.000115121	0.017495752
16	0.001011912	-4.9098E-06	-0.000991332	-0.223049685	0.00011538	0.017516311
16.005	0.001178112	-5.73787E-06	-0.001158601	-0.26068514	0.000115731	0.017536817
16.01	0.00123969	-6.05053E-06	-0.001221754	-0.27489475	0.000116119	0.017557735
16.015	0.001190703	-5.81568E-06	-0.001174299	-0.264217366	0.000116477	0.017579234
16.02	0.001063982	-5.19375E-06	-0.001048637	-0.235943304	0.000116764	0.017601165
16.025	0.000909697	-4.43208E-06	-0.000894753	-0.201319511	0.000116973	0.017623152
16.03	0.000781448	-3.79627E-06	-0.000766304	-0.172418439	0.000117127	0.017644742
16.035	0.000713911	-3.45949E-06	-0.000698269	-0.157110533	0.000117256	0.017665552
16.04	0.000703393	-3.40531E-06	-0.000687324	-0.154647938	0.000117381	0.017685369
16.045	0.000721549	-3.49456E-06	-0.000705359	-0.158705678	0.000117513	0.017704147
16.05	0.000732913	-3.55204E-06	-0.000716974	-0.161319216	0.000117648	0.01772192
16.055	0.000698288	-3.38319E-06	-0.000682857	-0.153642789	0.000117772	0.017738844
16.06	0.00059488	-2.87345E-06	-0.000579887	-0.130474532	0.000117861	0.017756767
16.065	0.000440024	-2.10649E-06	-0.000424965	-0.095617036	0.00011791	0.017775154
16.07	0.000290495	-1.36203E-06	-0.000274613	-0.06178784	0.000117931	0.017791883
16.075	0.000216146	-9.86439E-07	-0.000198763	-0.044721572	0.000117943	0.017806603
16.08	0.000255207	-1.17134E-06	-0.000236125	-0.053128061	0.000117959	0.017819124
16.085	0.000394334	-1.85338E-06	-0.000373932	-0.084134606	0.000117999	0.017829738
16.09	0.000583949	-2.78898E-06	-0.000562955	-0.126664848	0.000118085	0.017838863
16.095	0.000753398	-3.62877E-06	-0.000732608	-0.164836781	0.000118228	0.017846957
16.1	0.000848245	-4.10159E-06	-0.000828121	-0.186327145	0.00011841	0.017854485
16.105	0.00087268	-4.22586E-06	-0.000853222	-0.191974857	0.000118603	0.01786164
16.11	0.000863472	-4.18262E-06	-0.000844486	-0.190009336	0.000118791	0.017868486
16.115	0.000845321	-4.09426E-06	-0.000826632	-0.185992169	0.000118972	0.017875084

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
19.04907227	0.004944794	2.584185429
19.05517578	0.005275971	2.445621171
19.0612793	0.006512603	2.921558392
19.06738281	0.007036997	3.498678673
19.07348633	0.006795283	3.288806192
19.07958984	0.006800532	3.078207605
19.08569336	0.006807033	3.031570992
19.09179688	0.006688031	2.841698761
19.09790039	0.006059926	2.720970682
19.10400391	0.00522857	2.743136689
19.11010742	0.004399865	2.215270087
19.11621094	0.003667801	1.537185919
19.12231445	0.003520878	1.433862854
19.12841797	0.003617316	1.561632138
19.13452148	0.003350136	1.54827099
19.140625	0.002699696	1.266919237
19.14672852	0.002541211	1.18413186
19.15283203	0.002921669	1.451981069
19.15893555	0.003122276	1.52320114
19.16503906	0.003595214	1.494383841
19.17114258	0.004302734	1.696024607
19.17724609	0.004418462	1.919468214
19.18334961	0.003595751	1.75786224
19.18945313	0.003017739	1.531948009
19.19555664	0.001629238	0.799285347
19.20166016	0.000790064	0.369008158
19.20776367	0.001759712	0.753004749
19.21386719	0.001135789	0.433879794
19.2199707	0.002006609	0.812365717
19.22607422	0.002927138	1.385413974
19.23217773	0.0032055	1.409478301
19.23828125	0.003223683	1.275884951
19.24438477	0.003745918	1.506784839
19.25048828	0.004469274	1.831817663
19.2565918	0.004555181	1.869444461
19.26269531	0.004768185	1.964752497
19.26879883	0.005818623	2.435391141
19.27490234	0.00590275	2.665124512
19.28100586	0.004652961	2.159272152
19.28710938	0.004404884	2.01215693
19.29321289	0.005753599	2.744274469
19.29931641	0.007589159	3.47339453
19.30541992	0.009007006	3.797411663
19.31152344	0.009831666	4.222882991
19.31762695	0.009148056	4.090620208
19.32373047	0.006878933	3.191541346
19.32983398	0.004887544	2.298176213
19.3359375	0.005692353	2.646368908
19.34204102	0.008197881	4.269052066
19.34814453	0.010163753	5.603695758
19.35424805	0.009894587	4.69634894
19.36035156	0.008491238	3.751936828
19.36645508	0.007266814	3.350146833
19.37255859	0.006405855	3.095228164
19.37866211	0.006699038	3.400690332
19.38476563	0.007919117	4.106463537
19.39086914	0.008158996	4.413858045
19.39697266	0.007808454	4.224587252
19.40307617	0.007416372	3.479285807
19.40917969	0.006001894	2.614326734
19.4152832	0.004639784	2.136554001
19.42138672	0.004433171	2.257176703
19.42749023	0.005242359	3.116833459
19.43359375	0.006374449	3.732427369
19.43969727	0.007552022	3.699848003
19.44580078	0.007277431	3.494844149
19.4519043	0.005458278	2.637508956
19.45800781	0.004259751	1.893576471
19.46411133	0.004166665	2.055277388
19.47021484	0.004803733	2.87737759
19.47631836	0.006298597	3.703405913
19.48242188	0.006598225	3.632224157
19.48852539	0.005970636	3.087843597
19.49462891	0.006661856	3.257107878
19.50073242	0.006971763	3.673186423
19.50683594	0.006007308	3.212996047
19.51293945	0.004400827	2.138557291
19.51904297	0.002701921	1.364328697
19.52514648	0.001845852	0.957252439
19.53125	0.002105531	1.030143748
19.53735352	0.002113094	1.176488038
19.54345703	0.001720255	1.075347818
19.54956055	0.001838951	0.995056822
19.55566406	0.002813062	1.431811809
19.56176758	0.003847898	1.854719841
19.56787109	0.003732113	1.697613515
19.57397461	0.003113819	1.658639446
19.58007813	0.003094698	1.858831742
19.58618164	0.004179593	2.305709779
19.59228516	0.005435738	3.269004981
19.59838867	0.00589432	3.775175073
19.60449219	0.004942338	2.501628788
19.6105957	0.004442662	2.0018047
19.61669922	0.004446448	2.211972638
19.62280273	0.004581262	2.570921375
19.62890625	0.005214674	2.938642333
19.63500977	0.005660954	3.053844191
19.64111328	0.005923821	3.180158161
19.6472168	0.005918506	3.088599314
19.65332031	0.005021542	2.565127732
19.65942383	0.004785883	2.487308193
19.66552734	0.006049797	3.074432974
19.67163086	0.007623141	4.090260233
19.67773438	0.008306889	4.876499861

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
16.12	0.000832777	-4.03303E-06	-0.00081426	-0.183208434	0.000119147	0.017881422
16.125	0.000834012	-4.03978E-06	-0.000815622	-0.183515016	0.000119323	0.017888322
16.13	0.000846747	-4.10358E-06	-0.000828514	-0.186415684	0.000119504	0.017895425
16.135	0.000865363	-4.19684E-06	-0.000847358	-0.190655635	0.000119693	0.017902234
16.14	0.000880183	-4.27184E-06	-0.00086251	-0.194064657	0.000119889	0.017908779
16.145	0.000877597	-4.26115E-06	-0.000860349	-0.193578597	0.000120084	0.017915087
16.15	0.000847448	-4.11413E-06	-0.000830643	-0.186894581	0.000120265	0.017921145
16.155	0.000785896	-3.81111E-06	-0.000769414	-0.173118249	0.000120421	0.01792689
16.16	0.00070526	-3.41219E-06	-0.000688815	-0.154983405	0.000120547	0.017932224
16.165	0.000637234	-3.07401E-06	-0.000620489	-0.139609974	0.00012065	0.017937053
16.17	0.000610652	-2.94012E-06	-0.000593439	-0.133523688	0.000120744	0.017941264
16.175	0.000628147	-3.02508E-06	-0.000610604	-0.137385959	0.000120844	0.017944813
16.18	0.000659289	-3.17945E-06	-0.000641797	-0.144404239	0.000120954	0.017947722
16.185	0.000656708	-3.16859E-06	-0.000639602	-0.143910389	0.000121063	0.017950038
16.19	0.000593509	-2.8577E-06	-0.000576785	-0.129776687	0.000121152	0.017951924
16.195	0.000487062	-2.33077E-06	-0.000470332	-0.105824667	0.000121212	0.017953415
16.2	0.000387472	-1.83488E-06	-0.000370153	-0.083284382	0.00012125	0.017954401
16.205	0.0003443	-1.61603E-06	-0.000325943	-0.073337118	0.000121279	0.017954902
16.21	0.000377426	-1.77435E-06	-0.000357933	-0.080534839	0.000121315	0.017955093
16.215	0.000475491	-2.25522E-06	-0.000455095	-0.102396385	0.000121373	0.017955207
16.22	0.000610404	-2.92061E-06	-0.000589533	-0.132644865	0.000121467	0.017955259
16.225	0.00074936	-3.6084E-06	-0.000728486	-0.163909327	0.000121609	0.017955269
16.23	0.00086911	-4.20313E-06	-0.000848631	-0.190941972	0.0001218	0.017955269
16.235	0.000957631	-4.64483E-06	-0.000937853	-0.211016917	0.000122031	0.017955269
16.24	0.001002007	-4.86913E-06	-0.000983159	-0.221210706	0.000122285	0.017955269
16.245	0.000993351	-4.8313E-06	-0.000975513	-0.219490447	0.000122535	0.017955537
16.25	0.000932129	-4.53296E-06	-0.000915231	-0.205927074	0.000122754	0.017956285
16.255	0.000817862	-3.97106E-06	-0.0008017	-0.180382513	0.000122923	0.01795702
16.26	0.000660504	-3.1937E-06	-0.000644646	-0.145045367	0.000123033	0.017957674
16.265	0.000499082	-2.39311E-06	-0.000482911	-0.108654971	0.000123096	0.017958187
16.27	0.000381658	-1.8075E-06	-0.000364613	-0.082038021	0.000123133	0.017958532
16.275	0.000338714	-1.58894E-06	-0.000320464	-0.072104325	0.000123162	0.017958674
16.28	0.000383686	-1.80544E-06	-0.000364211	-0.081947435	0.000123199	0.017958674
16.285	0.000509232	-2.42255E-06	-0.000488899	-0.110002275	0.000123265	0.017958674
16.29	0.000672484	-3.22978E-06	-0.000651987	-0.146697141	0.000123379	0.017958674
16.295	0.000806982	-3.89834E-06	-0.000787052	-0.177086608	0.000123544	0.017958674
16.3	0.000864257	-4.18667E-06	-0.000845298	-0.190192014	0.000123733	0.017958674
16.305	0.000844005	-4.09098E-06	-0.000825963	-0.185841632	0.000123913	0.017958674
16.31	0.000782491	-3.78945E-06	-0.000765037	-0.172133255	0.000124067	0.017958674
16.315	0.000715955	-3.46141E-06	-0.000698755	-0.157219945	0.000124197	0.017958674
16.32	0.000663347	-3.20113E-06	-0.000646169	-0.14538793	0.000124308	0.017958674
16.325	0.000631925	-3.04515E-06	-0.000614654	-0.138297111	0.000124409	0.017958674
16.33	0.000613904	-2.95553E-06	-0.000596547	-0.134223104	0.000124504	0.017958674
16.335	0.000591208	-2.84262E-06	-0.000573735	-0.129090289	0.000124593	0.017958674
16.34	0.000568818	-2.73018E-06	-0.000551019	-0.12397927	0.000124675	0.017958674
16.345	0.000578553	-2.77571E-06	-0.000560219	-0.126049183	0.000124759	0.017958674
16.35	0.00063302	-3.04291E-06	-0.000614209	-0.138196998	0.00012486	0.017958674
16.355	0.000709832	-3.4219E-06	-0.000690784	-0.155426491	0.000124988	0.017958674
16.36	0.000788309	-3.81013E-06	-0.000769224	-0.173075316	0.000125145	0.017958674
16.365	0.000869203	-4.21107E-06	-0.000850228	-0.191301312	0.000125336	0.017958674
16.37	0.000952396	-4.62459E-06	-0.000933762	-0.210096378	0.000125565	0.017958674
16.375	0.001017428	-4.94981E-06	-0.000999456	-0.224877664	0.000125827	0.017958674
16.38	0.001041546	-5.07358E-06	-0.001024455	-0.230502453	0.000126101	0.017958674
16.385	0.001025742	-4.99989E-06	-0.001009566	-0.227152264	0.000126367	0.017958674
16.39	0.000981428	-4.78497E-06	-0.000966139	-0.217381201	0.00012661	0.017958674
16.395	0.000906374	-4.41767E-06	-0.000891925	-0.200683179	0.000126818	0.017958674
16.4	0.000797301	-3.8811E-06	-0.000783514	-0.176290713	0.000126978	0.017958674
16.405	0.000667095	-3.23832E-06	-0.000653653	-0.147071961	0.000127091	0.017958674
16.41	0.000535508	-2.5869E-06	-0.000522053	-0.117461898	0.000127163	0.017958674
16.415	0.000420185	-2.01428E-06	-0.000406381	-0.091435729	0.000127208	0.017958674
16.42	0.000339546	-1.61203E-06	-0.000325125	-0.07315321	0.000127237	0.017958674
16.425	0.00030884	-1.45653E-06	-0.000293716	-0.066086186	0.000127261	0.017958674
16.43	0.000320552	-1.51201E-06	-0.000304926	-0.068608302	0.000127287	0.017958674
16.435	0.00033637	-1.58946E-06	-0.000320576	-0.072129499	0.000127316	0.017958674
16.44	0.000324853	-1.5323E-06	-0.000309026	-0.069530892	0.000127343	0.017958674
16.445	0.000294162	-1.37979E-06	-0.000278214	-0.06259817	0.000127364	0.017958674
16.45	0.000259436	-1.20682E-06	-0.000243278	-0.054737442	0.000127381	0.017958674
16.455	0.000217144	-9.95918E-07	-0.000200677	-0.045152357	0.000127393	0.017958674
16.46	0.000175591	-7.87599E-07	-0.000158608	-0.035686763	0.000127401	0.017958674
16.465	0.00015881	-7.00949E-07	-0.00014111	-0.031749656	0.000127407	0.017958674
16.47	0.000175254	-7.78601E-07	-0.0001568	-0.035280016	0.000127415	0.017958674
16.475	0.000220464	-9.98968E-07	-0.000201327	-0.045298674	0.000127428	0.017958674
16.48	0.000291306	-1.34681E-06	-0.00027161	-0.061112224	0.000127449	0.017958674
16.485	0.000382314	-1.79534E-06	-0.000362233	-0.08150244	0.000127486	0.017958674
16.49	0.000487158	-2.31337E-06	-0.000466892	-0.105050712	0.000127546	0.017958674
16.495	0.000599739	-2.87079E-06	-0.000579506	-0.130388756	0.000127637	0.017958674
16.5	0.000715642	-3.44574E-06	-0.000695653	-0.156521926	0.000127766	0.017958674
16.505	0.000835993	-4.04405E-06	-0.000816513	-0.183715526	0.000127943	0.017958674
16.51	0.000946426	-4.59538E-06	-0.000927878	-0.20877251	0.000128169	0.017958674
16.515	0.001006632	-4.90022E-06	-0.000989451	-0.222626496	0.000128425	0.017958674
16.52	0.000988139	-4.81628E-06	-0.000972489	-0.218810098	0.000128672	0.017958674
16.525	0.00089238	-4.34923E-06	-0.000878119	-0.197576755	0.000128873	0.017958674
16.53	0.000725594	-3.52894E-06	-0.000712385	-0.160286563	0.000129006	0.017958674
16.535	0.000502184	-2.42527E-06	-0.000489419	-0.110119348	0.00012907	0.017958674
16.54	0.000272032	-1.28389E-06	-0.000258856	-0.05824258	0.000129089	0.017958674
16.545	0.000105675	-4.54319E-07	-9.1305E-05	-0.020543616	0.000129092	0.017958674
16.55	4.6726E-05	-1.54615E-07	-3.07841E-05	-0.006926422	0.000129092	0.017958674
16.555	8.92444E-05	-3.57805E-07	-7.18412E-05	-0.016164268	0.000129094	0.017958994
16.56	0.000197122	-8.86589E-07	-0.000178684	-0.040203806	0.000129104	0.017958994
16.565	0.000334267	-1.56281E-06	-0.000315307	-0.070944182	0.000129132	0.017958994
16.57	0.000468958	-2.22964E-06	-0.000450025	-0.101255694	0.000129188	0.017958994
16.575	0.000562632	-2.69582E-06	-0.0005442	-0.122444988	0.000129268	0.017958994
16.58	0.000591622	-2.84254E-06	-0.000573839	-0.12911369	0.000129356	0.017958994
16.585	0.000580301	-2.78878E-06	-0.000562976	-0.126669504	0.000129442	0.017958994
16.59	0.000566412	-2.72147E-06	-0.000549375	-0.123609386	0.000129523	0.017958994
16.595	0.000549414	-2.63866E-06	-0.000532642	-0.11984453	0.000129599	0.017958994
16.6	0.000522816	-2.50786E-06	-0.000506214	-0.113898249	0.000129668	0.017958994
16.605	0.000504913	-2.41963E-06	-0.000488386	-0.109886782	0.000129732	0.017958994
16.61	0.000493798	-2.3655E-06	-0.000477449	-0.107426117	0.000129794	0.017958994
16.615	0.000461247	-2.20585E-06	-0.000445192	-0.100168259	0.000129848	0.017958994
16.62	0.000402586	-1.9166E-06	-0.000386751	-0.087018958	0.000129889	0.017958994
16.625	0.000334463	-1.5798E-06	-0.000318703	-0.071708143	0.000129917	0.017958994
16.63	0.000262632	-1.22408E-06	-0.000246837	-0.055538364	0.000129935	0.017958994
16.635	0.000184758	-8.37677E-07	-0.000168773	-0.037973978	0.000129943	0.017958994

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
19.68383789	0.00756124	4.225347812
19.68994141	0.005920032	3.520539633
19.69604492	0.005450933	3.691856408
19.70214844	0.00680553	3.850258615
19.70825195	0.007765167	3.694643182
19.71435547	0.007905293	4.220585334
19.72045898	0.007713601	4.536542196
19.7265625	0.007958566	4.521078161
19.73266602	0.008988538	5.413883971
19.73876953	0.010035948	6.230401339
19.74487305	0.009951044	5.321613829
19.75097656	0.008861216	4.172086855
19.75708008	0.008337266	4.104121813
19.76318359	0.008123223	4.176932002
19.76928711	0.007279563	3.414920995
19.77539063	0.007114816	3.243864865
19.78149414	0.007523165	3.817661628
19.78759766	0.007200212	3.853452938
19.79370117	0.006066207	2.953367292
19.79980469	0.004904338	2.218761085
19.8059082	0.003921815	1.802449855
19.81201172	0.004082972	1.912469651
19.81811523	0.005458302	2.487364905
19.82421875	0.006620597	3.024882034
19.83032227	0.006558091	3.390941739
19.83642578	0.005218898	3.002451969
19.8425293	0.00367399	1.953684294
19.84863281	0.003447203	1.695813122
19.85473633	0.003719057	1.887920994
19.86083984	0.003682323	1.857698191
19.86694336	0.004227595	2.056623095
19.87304688	0.004662867	2.329742846
19.87915039	0.00430105	2.109235148
19.88525391	0.003442245	1.603257453
19.89135742	0.002628513	1.266091268
19.89746094	0.00228287	1.101561422
19.90356445	0.002840324	1.255358098
19.90966797	0.002988391	1.359634084
19.91577148	0.002666589	1.401436398
19.921875	0.00263967	1.401397111
19.92797852	0.00245645	1.177595474
19.93408203	0.002615425	1.205733569
19.94018555	0.003129967	1.498748253
19.94628906	0.003061335	1.622494328
19.95239258	0.003090414	1.772296977
19.95849609	0.003840739	2.081209462
19.96459961	0.005055705	2.539776144
19.97070313	0.005566493	2.677292925
19.97680664	0.00476817	2.333081874
19.98291016	0.003595509	2.152651533
19.98901367	0.003593077	2.650090045
19.99511719	0.00520901	3.458464427
20.0012207	0.006805575	4.14024508
20.00732422	0.007387274	4.683494565
20.01342773	0.007023078	4.241801361
20.01953125	0.006578378	3.771957897
20.02563477	0.006519391	4.253856433
20.03173828	0.006913429	5.453320691
20.0378418	0.007666645	6.287841489
20.04394531	0.008411745	5.889215913
20.05004883	0.00808521	4.994403667
20.05615234	0.006061047	3.856685724
20.06225586	0.003874046	2.728090257
20.06835938	0.003745826	2.632339939
20.07446289	0.005579413	3.574216866
20.08056641	0.007491314	4.399296415
20.08666992	0.007979431	4.769205003
20.09277344	0.006771371	4.37202288
20.09887695	0.004878553	3.168079187
20.10498047	0.00506181	3.011385051
20.11108398	0.006950431	4.185912274
20.1171875	0.00783006	4.840431448
20.12329102	0.006982096	4.378348128
20.12939453	0.005796815	3.532400981
20.13549805	0.00505295	3.103726586
20.14160156	0.004861818	3.062522957
20.14770508	0.004765197	3.061060111
20.15380859	0.003763315	2.410624771
20.15991211	0.002834472	1.848041234
20.16601563	0.002528546	1.643936464
20.17211914	0.00157613	0.930810467
20.17822266	0.00105144	0.593502753
20.18432617	0.001514534	0.938927225
20.19042969	0.002465377	1.548232907
20.1965332	0.002036098	1.166552176
20.20263672	0.00133826	0.740380983
20.20874023	0.002815841	1.551004881
20.21484375	0.003956525	2.087413003
20.22094727	0.004141092	2.281659597
20.22705078	0.003235628	1.968980829
20.2331543	0.001758901	1.034443801
20.23925781	0.001678444	0.898484757
20.24536133	0.00210315	1.095957946
20.25146484	0.002035574	1.069956637
20.25756836	0.002025309	1.059687967
20.26367188	0.001858829	0.962226951
20.26977539	0.001568948	0.828541826
20.27587891	0.001285521	0.729792366
20.28198242	0.002938198	1.640348802
20.28808594	0.005079535	2.558758811
20.29418945	0.006780097	3.325014457
20.30029297	0.007315167	3.63892515
20.30639648	0.006949575	3.433420252
20.3125	0.007001159	3.695573122

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
16.64	0.000112046	-4.75404E-07	-9.55874E-05	-0.021507173	0.000129946	0.017958994
16.645	7.56493E-05	-2.9149E-07	-5.84344E-05	-0.013147744	0.000129948	0.017958994
16.65	9.10766E-05	-3.64098E-07	-7.31058E-05	-0.016448805	0.00012995	0.017958994
16.655	0.00012818	-5.45179E-07	-0.000109695	-0.02468137	0.000129954	0.017958994
16.66	0.000155007	-6.76001E-07	-0.000136128	-0.030628903	0.00012996	0.017958994
16.665	0.000179187	-7.93469E-07	-0.000159863	-0.035969252	0.000129968	0.017958994
16.67	0.000217225	-9.79489E-07	-0.000197449	-0.044425942	0.00012998	0.017958994
16.675	0.000269495	-1.23632E-06	-0.000249339	-0.056101375	0.000129998	0.017958994
16.68	0.000335759	-1.56294E-06	-0.000315331	-0.070949377	0.000130027	0.017958994
16.685	0.00041474	-1.95353E-06	-0.000394242	-0.088704373	0.00013007	0.017958994
16.69	0.000482601	-2.29061E-06	-0.00046234	-0.104026472	0.000130129	0.017958994
16.695	0.000504178	-2.3993E-06	-0.000484297	-0.108966843	0.000130194	0.017958994
16.7	0.000486527	-2.31244E-06	-0.000466746	-0.105017883	0.000130253	0.017958994
16.705	0.000489112	-2.32368E-06	-0.000469018	-0.105528953	0.000130314	0.017958994
16.71	0.000552528	-2.63578E-06	-0.000532071	-0.119715918	0.000130391	0.017958994
16.715	0.000654494	-3.14054E-06	-0.000634038	-0.142658546	0.000130499	0.017958994
16.72	0.000747531	-3.60339E-06	-0.000727534	-0.163695077	0.00013064	0.017958994
16.725	0.000798934	-3.86167E-06	-0.000779704	-0.175433471	0.000130802	0.017958994
16.73	0.000798504	-3.86365E-06	-0.000780102	-0.175522899	0.000130963	0.017958994
16.735	0.000760556	-3.67889E-06	-0.000742769	-0.167123054	0.000131109	0.017958994
16.74	0.000720987	-3.48446E-06	-0.000703484	-0.158283824	0.000131241	0.017958994
16.745	0.000714688	-3.45385E-06	-0.000697299	-0.15689221	0.00013137	0.017958994
16.75	0.000739313	-3.57711E-06	-0.000722204	-0.16249595	0.000131508	0.017958994
16.755	0.000754585	-3.65556E-06	-0.000738056	-0.166062638	0.000131652	0.017958994
16.76	0.000731722	-3.54585E-06	-0.000715889	-0.161074957	0.000131787	0.017958994
16.765	0.000674922	-3.26785E-06	-0.000659717	-0.148436218	0.000131902	0.017958994
16.77	0.000587541	-2.83796E-06	-0.000572859	-0.128893324	0.000131989	0.017958994
16.775	0.000461679	-2.21635E-06	-0.000447273	-0.100636442	0.000132043	0.017958994
16.78	0.000317352	-1.50058E-06	-0.000302673	-0.068101473	0.000132069	0.017958994
16.785	0.000213993	-9.84531E-07	-0.000198426	-0.044645755	0.00013208	0.017958994
16.79	0.000194113	-8.80492E-07	-0.000177409	-0.039917113	0.00013209	0.017958994
16.795	0.000243426	-1.11989E-06	-0.000225782	-0.050800881	0.000132105	0.017958994
16.8	0.00032971	-1.54393E-06	-0.000311461	-0.070078675	0.000132132	0.017958994
16.805	0.000436079	-2.06937E-06	-0.000417622	-0.093964874	0.00013218	0.017958994
16.81	0.000535947	-2.56518E-06	-0.000517792	-0.116503297	0.000132253	0.017958994
16.815	0.000586486	-2.81897E-06	-0.000569065	-0.128039618	0.00013234	0.017958994
16.82	0.000566611	-2.72462E-06	-0.00055	-0.123749983	0.000132421	0.017958994
16.825	0.000497901	-2.38713E-06	-0.000481808	-0.108406752	0.000132484	0.017958994
16.83	0.000422854	-2.01623E-06	-0.000406866	-0.091544936	0.000132529	0.017958994
16.835	0.000375939	-1.78277E-06	-0.000359699	-0.080932172	0.000132565	0.017958994
16.84	0.00038277	-1.81427E-06	-0.000366064	-0.082364454	0.000132602	0.017958994
16.845	0.000455479	-2.17245E-06	-0.000438438	-0.098648525	0.000132654	0.017958994
16.85	0.000559897	-2.69026E-06	-0.000543059	-0.122188188	0.000132733	0.017958994
16.855	0.000627114	-3.02682E-06	-0.000611053	-0.137487024	0.000132833	0.017958994
16.86	0.000619811	-2.99566E-06	-0.000604756	-0.136070087	0.00013293	0.017958994
16.865	0.000547675	-2.64312E-06	-0.000533523	-0.120042704	0.000133006	0.017958994
16.87	0.000424526	-2.03693E-06	-0.000411044	-0.092484893	0.000133051	0.017958994
16.875	0.000260468	-1.22615E-06	-0.000247239	-0.055628824	0.000133068	0.017958994
16.88	9.18815E-05	-3.89726E-07	-7.82749E-05	-0.017611853	0.00013307	0.017958994
16.885	-2.43157E-05	1.90341E-07	3.88731E-05	0.00874644	0.000133071	0.017958994
16.89	-5.53461E-05	3.49998E-07	7.11122E-05	0.016000238	0.000133071	0.017958994
16.895	-9.29147E-06	1.27402E-07	2.61339E-05	0.005880134	0.000133071	0.017958994
16.9	8.59648E-05	-3.40468E-07	-6.84008E-05	-0.015390172	0.000133073	0.017958994
16.905	0.000198831	-8.9756E-07	-0.000180957	-0.040715242	0.000133083	0.017958994
16.91	0.000300528	-1.40114E-06	-0.000282696	-0.06360652	0.000133106	0.017958994
16.915	0.000370089	-1.74659E-06	-0.000352485	-0.079309093	0.000133141	0.017958994
16.92	0.000408313	-1.93648E-06	-0.000390846	-0.087940259	0.000133183	0.017958994
16.925	0.000455182	-2.16793E-06	-0.000437602	-0.098460418	0.000133235	0.017958994
16.93	0.000548575	-2.62987E-06	-0.000530918	-0.119456658	0.000133311	0.017958994
16.935	0.000666142	-3.21365E-06	-0.000648841	-0.145989232	0.000133423	0.017958994
16.94	0.000764213	-3.70325E-06	-0.000747734	-0.16824018	0.000133571	0.017958994
16.945	0.000823658	-4.00359E-06	-0.000808399	-0.181889885	0.000133742	0.017958994
16.95	0.000815144	-3.96929E-06	-0.000801464	-0.180329428	0.00013391	0.017958994
16.955	0.000707665	-3.44517E-06	-0.000695563	-0.156501704	0.000134037	0.017958994
16.96	0.000520408	-2.52393E-06	-0.000509434	-0.114622728	0.000134105	0.017958994
16.965	0.000299159	-1.43133E-06	-0.000288708	-0.064959218	0.000134128	0.017958994
16.97	7.29569E-05	-3.11217E-07	-6.24437E-05	-0.014049834	0.000134129	0.017958994
16.975	-0.000136291	7.28168E-07	0.000147473	0.033181473	0.000134134	0.017958994
16.98	-0.000290605	1.49901E-06	0.000303117	0.068201365	0.000134155	0.017958994
16.985	-0.000337458	1.74021E-06	0.000351818	0.079159002	0.000134184	0.017958994
16.99	-0.000253576	1.33367E-06	0.000269671	0.06067596	0.0001342	0.017958994
16.995	-8.03931E-05	4.81562E-07	9.75075E-05	0.021939194	0.000134202	0.017958994
17	0.000110841	-4.64455E-07	-9.36135E-05	-0.021063027	0.000134205	0.017958994
17.005	0.000258098	-1.19696E-06	-0.000241588	-0.054357341	0.000134222	0.017958994
17.01	0.000306668	-1.44377E-06	-0.000291444	-0.065574915	0.000134246	0.017958994
17.015	0.000230849	-1.0748E-06	-0.000216891	-0.048800467	0.000134259	0.017958994
17.02	7.21919E-05	-2.92668E-07	-5.8863E-05	-0.013244176	0.000134261	0.017958994
17.025	-8.51418E-05	4.86754E-07	9.8604E-05	0.022185898	0.000134262	0.017958994
17.03	-0.000194627	1.03128E-06	0.000208607	0.046936611	0.000134272	0.017958994
17.035	-0.000276964	1.44188E-06	0.000291553	0.06559952	0.000134291	0.017958994
17.04	-0.000351936	1.81717E-06	0.000367356	0.082655	0.000134323	0.017958994
17.045	-0.000389313	2.00813E-06	0.00040591	0.091329671	0.000134361	0.017958994
17.05	-0.000360857	1.87371E-06	0.000378749	0.085218533	0.000134394	0.017958994
17.055	-0.000282997	1.49391E-06	0.000302008	0.067951727	0.000134414	0.017958994
17.06	-0.000174638	9.62329E-07	0.000194605	0.043786023	0.000134422	0.017958994
17.065	-2.41624E-05	2.21336E-07	4.48994E-05	0.010102355	0.000134422	0.017958994
17.07	0.000169045	-7.33612E-07	-0.000148016	-0.033303652	0.000134429	0.017958994
17.075	0.000357643	-1.6693E-06	-0.000337026	-0.075830766	0.000134462	0.017958994
17.08	0.000492601	-2.34206E-06	-0.000472914	-0.106405669	0.000134523	0.017958994
17.085	0.000571578	-2.73893E-06	-0.000553073	-0.124441364	0.000134605	0.017958994
17.09	0.00059404	-2.85713E-06	-0.000576946	-0.129812832	0.000134695	0.017958994
17.095	0.000529701	-2.54589E-06	-0.000514057	-0.11566273	0.000134766	0.017958994
17.1	0.000384474	-1.83198E-06	-0.000369813	-0.083207849	0.000134803	0.017958994
17.105	0.000220605	-1.02233E-06	-0.000206237	-0.046403217	0.000134815	0.017958994
17.11	7.79225E-05	-3.15151E-07	-6.3373E-05	-0.014258915	0.000134817	0.017958994
17.115	-4.56967E-05	2.9949E-07	6.07885E-05	0.013677409	0.000134817	0.017958994
17.12	-0.00013071	7.25301E-07	0.000146801	0.033030255	0.000134822	0.017958994
17.125	-0.000131035	7.33282E-07	0.000148409	0.033392052	0.000134826	0.017958994
17.13	-3.81388E-05	2.78628E-07	5.6543E-05	0.01272217	0.000134826	0.017958994
17.135	0.000102547	-4.15637E-07	-8.37294E-05	-0.018839114	0.000134829	0.017958994
17.14	0.000239337	-1.09379E-06	-0.000220738	-0.049665972	0.000134843	0.017958994
17.145	0.000337716	-1.58444E-06	-0.000319857	-0.071967841	0.000134872	0.017958994
17.15	0.000363997	-1.71988E-06	-0.000347219	-0.078124197	0.000134906	0.017958994
17.155	0.000298955	-1.40283E-06	-0.000283154	-0.063709735	0.000134928	0.017958994

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
20.31860352	0.007676866	4.611488783
20.32470703	0.007942387	4.867659585
20.33081055	0.007129757	3.909193203
20.33691406	0.005387453	2.660166875
20.34301758	0.003792963	1.845850454
20.34912109	0.004420787	2.218501861
20.35522461	0.005624907	2.931858685
20.36132813	0.005483406	3.135672663
20.36743164	0.004879713	2.985210327
20.37353516	0.004972371	3.003140814
20.37963867	0.005671727	3.506077003
20.38574219	0.005782235	3.667753921
20.3918457	0.004175809	2.786939981
20.39794922	0.002402932	1.722317837
20.40405273	0.003674266	2.402429127
20.41015625	0.005728966	3.45823014
20.41625977	0.00511134	3.183006914
20.42236328	0.002273492	1.340707241
20.4284668	0.001261075	0.723058516
20.43457031	0.002333676	1.548085325
20.44067383	0.003781685	2.487372448
20.44677734	0.003973293	2.224136218
20.45288086	0.0026951	1.597433632
20.45898438	0.001102108	0.748924729
20.46508789	0.000920694	0.648593176
20.47119141	0.001468909	1.103201494
20.47729492	0.001384107	0.957993605
20.48339844	0.002504879	1.504804488
20.48950195	0.004211349	2.73707649
20.49560547	0.005036818	3.364100106
20.50170898	0.006024305	3.504321525
20.5078125	0.006886773	4.306184495
20.51391602	0.00637993	4.469597308
20.52001953	0.004953168	3.048374913
20.52612305	0.004209353	2.435585389
20.53222656	0.004309167	2.502912381
20.53833008	0.004686055	2.71884074
20.54443359	0.00358423	2.209422273
20.55053711	0.001316058	0.791581818
20.55664063	0.001684029	0.889923636
20.56274414	0.003218074	1.721380747
20.56884766	0.003248685	1.927347723
20.57495117	0.001887489	1.145931822
20.58105469	0.002981289	1.909807344
20.5871582	0.003467634	2.413101176
20.59326172	0.002566282	1.696160916
20.59936523	0.003231233	1.78265992
20.60546875	0.003219608	1.612540553
20.61157227	0.001325878	0.734933757
20.61767578	0.002010646	1.286521102
20.6237793	0.002538656	1.579821141
20.62988281	0.002111194	1.347388052
20.63598633	0.000746105	0.499832036
20.64208984	0.001324229	0.853317331
20.64819336	0.002561367	1.650901801
20.65429688	0.003509634	2.319449379
20.66040039	0.003483819	2.025561585
20.66650391	0.002415896	1.324890932
20.67260742	0.001888355	1.185737868
20.67871094	0.002444925	1.652087298
20.68481445	0.002395071	1.543944571
20.69091797	0.002018672	1.294582721
20.69702148	0.001866458	1.141389683
20.703125	0.001806988	1.026689203
20.70922852	0.002163501	1.334038462
20.71533203	0.001835156	1.239312471
20.72143555	0.001506588	1.040824653
20.72753906	0.001824734	1.317148169
20.73364258	0.00155819	1.083657264
20.73974609	0.001212487	0.870329018
20.74584961	0.000879771	0.740730403
20.75195313	0.001854661	1.423531064
20.75805664	0.00179916	1.178774738
20.76416016	0.000264497	0.182670497
20.77026367	0.00077192	0.550658996
20.77636719	9.80438E-05	0.062960148
20.7824707	0.000598896	0.398545606
20.78857422	0.000339705	0.277449809
20.79467773	0.001119336	1.056452973
20.80078125	0.002358463	1.839755423
20.80688477	0.002743124	1.700078153
20.81298828	0.002554271	1.542056028
20.8190918	0.002659322	1.673697532
20.82519531	0.003335053	2.106942576
20.83129883	0.004035782	2.676800491
20.83740234	0.00464942	3.275891124
20.84350586	0.00440149	3.121699064
20.84960938	0.002793776	1.923734685
20.85571289	0.001643679	1.036198163
20.86181641	0.001778069	1.17366331
20.86791992	0.001939977	1.382481434
20.87402344	0.001756907	1.144002151
20.88012695	0.002015444	1.420905242
20.88623047	0.003182776	2.685977165
20.89233398	0.003735884	2.884682627
20.8984375	0.003200263	2.146971842
20.90454102	0.002500175	1.63749742
20.91064453	0.00218085	1.352069328
20.91674805	0.00333551	2.101909854
20.92285156	0.004688322	3.197251058
20.92895508	0.004638838	3.139018517
20.93505859	0.003972167	2.748116509
20.94116211	0.002713624	1.856359194
20.94726563	0.001286406	0.768874012

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
17.16	0.000176126	-7.968E-07	-0.000160707	-0.036159112	0.000134936	0.017958994
17.165	6.5631E-05	-2.48352E-07	-4.99002E-05	-0.011227547	0.000134937	0.017958994
17.17	9.41327E-06	3.32628E-08	6.99424E-06	0.001573704	0.000134937	0.017958994
17.175	-1.60123E-06	9.1393E-08	1.8738E-05	0.004216059	0.000134937	0.017958994
17.18	1.96913E-05	-1.02841E-08	-1.80719E-06	-0.000406618	0.000134937	0.017958994
17.185	9.13204E-05	-3.61293E-07	-7.27311E-05	-0.016364494	0.000134939	0.017958994
17.19	0.000216696	-9.80327E-07	-0.000197805	-0.044506087	0.000134951	0.017958994
17.195	0.000342038	-1.60245E-06	-0.000323494	-0.072786064	0.000134981	0.017958994
17.2	0.000416028	-1.97235E-06	-0.000398219	-0.089599279	0.000135025	0.017958994
17.205	0.000445784	-2.12368E-06	-0.00042879	-0.096477856	0.000135075	0.017958994
17.21	0.00044242	-2.11149E-06	-0.000426324	-0.095923002	0.000135124	0.017958994
17.215	0.000386974	-1.84148E-06	-0.000371767	-0.08364759	0.000135162	0.017958994
17.22	0.0002865	-1.34704E-06	-0.000271866	-0.06116981	0.000135183	0.017958994
17.225	0.000179806	-8.19903E-07	-0.000165362	-0.037206481	0.000135191	0.017958994
17.23	8.09876E-05	-3.30645E-07	-6.65172E-05	-0.014966376	0.000135193	0.017958994
17.235	-1.88191E-05	1.64462E-07	3.35046E-05	0.007538537	0.000135193	0.017958994
17.24	-0.000110692	6.21808E-07	0.000125894	0.028326132	0.000135196	0.017958994
17.245	-0.000166744	9.03189E-07	0.000182733	0.041114935	0.000135203	0.017958994
17.25	-0.000174256	9.4448E-07	0.000191073	0.04299143	0.000135211	0.017958994
17.255	-0.000149708	8.26503E-07	0.000167234	0.037627685	0.000135216	0.017958994
17.26	-9.78332E-05	5.73076E-07	0.000116027	0.026106122	0.000135219	0.017958994
17.265	4.6215E-06	6.86565E-08	1.41097E-05	0.003174671	0.000135219	0.017958994
17.27	0.000144416	-6.23078E-07	-0.000125646	-0.028270365	0.000135224	0.017958994
17.275	0.000257906	-1.18749E-06	-0.000239672	-0.053926094	0.000135241	0.017958994
17.28	0.000311694	-1.4574E-06	-0.000294198	-0.066194492	0.000135265	0.017958994
17.285	0.000324281	-1.52305E-06	-0.000307459	-0.069178369	0.000135292	0.017958994
17.29	0.000309326	-1.45206E-06	-0.000293116	-0.065951084	0.000135316	0.017958994
17.295	0.000259094	-1.20584E-06	-0.000243364	-0.054756997	0.000135333	0.017958994
17.3	0.000182347	-8.26481E-07	-0.000166714	-0.037510631	0.000135341	0.017958994
17.305	0.00012904	-5.60567E-07	-0.000112987	-0.02542216	0.000135346	0.017958994
17.31	0.000149769	-6.60027E-07	-0.000133085	-0.029944022	0.000135351	0.017958994
17.315	0.000236299	-1.08646E-06	-0.000219248	-0.049330769	0.000135365	0.017958994
17.32	0.000349546	-1.64718E-06	-0.000332535	-0.074820362	0.000135396	0.017958994
17.325	0.00047186	-2.25499E-06	-0.000455316	-0.102446047	0.000135453	0.017958994
17.33	0.000568693	-2.73963E-06	-0.000553211	-0.124472546	0.000135534	0.017958994
17.335	0.000575239	-2.77927E-06	-0.000561215	-0.126273397	0.000135618	0.017958994
17.34	0.000484012	-2.33355E-06	-0.000471155	-0.10600986	0.000135677	0.017958994
17.345	0.000362486	-1.73472E-06	-0.000350162	-0.078786435	0.00013571	0.017958994
17.35	0.000261875	-1.23725E-06	-0.000249656	-0.056172682	0.000135728	0.017958994
17.355	0.000187728	-8.6973E-07	-0.000175408	-0.03946684	0.000135737	0.017958994
17.36	0.00014362	-6.50377E-07	-0.000131094	-0.029496234	0.000135742	0.017958994
17.365	0.000130771	-5.86253E-07	-0.00011814	-0.026581549	0.000135746	0.017958994
17.37	0.000123878	-5.53004E-07	-0.000111423	-0.025070274	0.00013575	0.017958994
17.375	9.18094E-05	-3.96182E-07	-7.9743E-05	-0.017942168	0.000135752	0.017958994
17.38	2.93201E-05	-8.87009E-08	-1.76283E-05	-0.003966374	0.000135752	0.017958994
17.385	-4.79321E-05	2.92552E-07	5.93867E-05	0.013362004	0.000135753	0.017958994
17.39	-0.000130983	7.03078E-07	0.000142312	0.032020236	0.000135757	0.017958994
17.395	-0.000228209	1.18441E-06	0.000239537	0.053895902	0.000135771	0.017958994
17.4	-0.000339376	1.73626E-06	0.000351	0.078974994	0.0001358	0.017958994
17.405	-0.000434228	2.20936E-06	0.00044654	0.100471418	0.000135847	0.017958994
17.41	-0.000482689	2.45398E-06	0.000495926	0.111583457	0.000135906	0.017958994
17.415	-0.00048357	2.46313E-06	0.000497769	0.111998049	0.000135965	0.017958994
17.42	-0.000436967	2.23685E-06	0.000452048	0.101710731	0.000136014	0.017958994
17.425	-0.000334928	1.73476E-06	0.000350599	0.07888473	0.000136042	0.017958994
17.43	-0.000209746	1.115E-06	0.000225383	0.050711093	0.000136053	0.017958994
17.435	-0.000132604	7.30111E-07	0.000147624	0.033215306	0.000136057	0.017958994
17.44	-0.000136268	7.44774E-07	0.000150588	0.033882294	0.000136062	0.017958994
17.445	-0.000188835	1.00304E-06	0.000202773	0.045623816	0.000136071	0.017958994
17.45	-0.000252027	1.31544E-06	0.000265895	0.059826369	0.000136087	0.017958994
17.455	-0.000316537	1.63552E-06	0.000330566	0.074377329	0.000136113	0.017958994
17.46	-0.000372068	1.91254E-06	0.000386535	0.086970442	0.000136148	0.017958994
17.465	-0.000389256	2.00086E-06	0.000404377	0.090984908	0.000136186	0.017958994
17.47	-0.000359582	1.85678E-06	0.000375266	0.084434762	0.000136218	0.017958994
17.475	-0.000315555	1.64044E-06	0.000331552	0.074599114	0.000136244	0.017958994
17.48	-0.000276214	1.44695E-06	0.000292457	0.065802742	0.000136263	0.017958994
17.485	-0.000219651	1.1683E-06	0.000236157	0.053135222	0.000136275	0.017958994
17.49	-0.000138718	7.68067E-07	0.000155293	0.034940814	0.00013628	0.017958994
17.495	-6.08478E-05	3.81587E-07	7.72137E-05	0.017373084	0.000136281	0.017958994
17.5	2.71574E-06	6.51823E-08	1.32946E-05	0.002991283	0.000136281	0.017958994
17.505	6.0956E-05	-2.25717E-07	-4.54704E-05	-0.010230841	0.000136282	0.017958994
17.51	9.32841E-05	-3.89999E-07	-7.86566E-05	-0.017697728	0.000136284	0.017958994
17.515	5.41294E-05	-2.01384E-07	-4.05446E-05	-0.009122529	0.000136285	0.017958994
17.52	-6.30847E-05	3.75128E-07	7.59411E-05	0.017086755	0.000136286	0.017958994
17.525	-0.000206096	1.08256E-06	0.00021887	0.049245769	0.000136297	0.017958994
17.53	-0.000318205	1.63991E-06	0.00033147	0.074580741	0.000136322	0.017958994
17.535	-0.00037321	1.9164E-06	0.000387326	0.08714829	0.000136357	0.017958994
17.54	-0.000352981	1.82128E-06	0.000368104	0.082823476	0.000136389	0.017958994
17.545	-0.000247862	1.30487E-06	0.000263761	0.059346147	0.000136404	0.017958994
17.55	-9.47449E-05	5.47388E-07	0.000110719	0.02491174	0.000136407	0.017958994
17.555	2.38027E-05	-4.32249E-08	-8.60154E-06	-0.001935347	0.000136407	0.017958994
17.56	3.78588E-05	-1.18959E-07	-2.38998E-05	-0.005377464	0.000136407	0.017958994
17.565	-5.89256E-05	3.54603E-07	7.1787E-05	0.016152064	0.000136408	0.017958994
17.57	-0.000227284	1.18501E-06	0.000239564	0.053901892	0.000136421	0.017958994
17.575	-0.000423141	2.15509E-06	0.000435544	0.097997465	0.000136466	0.017958994
17.58	-0.000583735	2.95476E-06	0.000597029	0.134331418	0.000136552	0.017958994
17.585	-0.000634978	3.21564E-06	0.000649696	0.14618157	0.000136654	0.017958994
17.59	-0.000570902	2.90455E-06	0.000586837	0.132038364	0.000136737	0.017958994
17.595	-0.000460938	2.3632E-06	0.000477458	0.107428128	0.00013679	0.017958994
17.6	-0.000360384	1.86598E-06	0.000377	0.084824888	0.000136823	0.017958994
17.605	-0.000284037	1.4869E-06	0.000300415	0.06759334	0.000136844	0.017958994
17.61	-0.000250746	1.3195E-06	0.000266595	0.059983942	0.00013686	0.017958994
17.615	-0.000286353	1.49277E-06	0.000301606	0.067861271	0.00013688	0.017958994
17.62	-0.000383339	1.97142E-06	0.000398319	0.089621712	0.000136917	0.017958994
17.625	-0.000493723	2.51894E-06	0.000508942	0.114512036	0.000136979	0.017958994
17.63	-0.000577016	2.93417E-06	0.000592833	0.13338732	0.000137063	0.017958994
17.635	-0.000626391	3.18241E-06	0.000642984	0.14467151	0.000137162	0.017958994
17.64	-0.000634604	3.22758E-06	0.000652106	0.146723931	0.000137264	0.017958994
17.645	-0.000585446	2.98865E-06	0.000603828	0.135861265	0.000137351	0.017958994
17.65	-0.000491067	2.52433E-06	0.00051001	0.114752306	0.000137412	0.017958994
17.655	-0.000391785	2.03369E-06	0.00041088	0.092447991	0.00013745	0.017958994
17.66	-0.000318102	1.66849E-06	0.000337097	0.075846901	0.000137476	0.017958994
17.665	-0.000275734	1.45802E-06	0.000294576	0.066279672	0.000137495	0.017958994
17.67	-0.000261289	1.38612E-06	0.000280051	0.063011443	0.000137513	0.017958994
17.675	-0.000267548	1.41792E-06	0.000286476	0.064457106	0.000137531	0.017958994

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
20.95336914	0.001169169	0.699053473
20.95947266	0.001649339	1.04673818
20.96557617	0.001993674	1.169143211
20.97167969	0.002203955	1.326227387
20.9777832	0.001021396	0.687470483
20.98388672	0.001522711	0.948667415
20.98999023	0.001707522	0.974469524
20.99609375	0.000586647	0.34057316
21.00219727	0.001251934	0.767463156
21.00830078	0.001395005	0.944895092
21.0144043	0.002473201	1.76264104
21.02050781	0.004269738	3.091446256
21.02661133	0.00525197	4.238553444
21.03271484	0.004895585	3.886219101
21.03881836	0.004437296	3.060837595
21.04492188	0.004294846	2.938671828
21.05102539	0.003973158	3.052411872
21.05712891	0.00274732	2.533585463
21.06323242	0.001297766	1.303650954
21.06933594	0.001604922	1.446505098
21.07543945	0.002464557	2.135529037
21.08154297	0.00326538	2.655501368
21.08764648	0.004049909	2.843390445
21.09375	0.004743253	3.17677845
21.09985352	0.005112699	3.713741533
21.10595703	0.005483079	4.738563618
21.11206055	0.005613972	5.004575272
21.11816406	0.006172934	4.434749016
21.12426758	0.007427567	4.749439829
21.13037109	0.007708773	5.058970609
21.13647461	0.007646208	4.987899717
21.14257813	0.007897736	5.58236489
21.14868164	0.007695554	6.04709606
21.15478516	0.007095045	5.698213496
21.16088867	0.005736741	4.557817224
21.16699219	0.004367458	3.189141808
21.1730957	0.005317585	3.799047015
21.17919922	0.005957093	4.405593109
21.18530273	0.005027646	3.382230488
21.19140625	0.003620109	2.36925083
21.19750977	0.003751768	2.586940648
21.20361328	0.004898107	3.290761543
21.2097168	0.005485811	4.136668502
21.21582031	0.005148354	4.482000685
21.22192383	0.004761445	3.775969991
21.22802734	0.005104581	3.85012508
21.23413086	0.004779311	3.897548622
21.24023438	0.003552834	2.896630184
21.24633789	0.002358784	1.951559983
21.25244141	0.002406206	1.998346272
21.25854492	0.003245362	2.589967961
21.26464844	0.003116445	2.445804846
21.27075195	0.00196991	1.408958963
21.27685547	0.001070962	0.71601136
21.28295898	0.001198911	0.82670215
21.2890625	0.000257947	0.17912518
21.29516602	0.002095091	1.52042082
21.30126953	0.004139089	3.440570942
21.30737305	0.004789393	4.379817303
21.31347656	0.004199169	3.73980015
21.31958008	0.003229733	2.647305063
21.32568359	0.001532784	1.100218127
21.33178711	0.002608062	1.724548726
21.33789063	0.003787985	3.053214879
21.34399414	0.003900216	4.466828837
21.35009766	0.003733385	4.240286981
21.35620117	0.003183709	2.937784426
21.36230469	0.002818674	2.547708192
21.3684082	0.003044488	2.752503331
21.37451172	0.003570132	3.247917173
21.38061523	0.004861953	4.929513753
21.38671875	0.006491698	6.972755806
21.39282227	0.007275387	8.089607099
21.39892578	0.007158761	7.719631862
21.4050293	0.007184723	6.517451999
21.41113281	0.007390199	6.221030429
21.41723633	0.00711851	6.912385831
21.42333984	0.006390036	6.703815853
21.42944336	0.005876828	6.202958718
21.43554688	0.0053986	6.484418883
21.44165039	0.004616256	5.290890179
21.44775391	0.004524924	4.226985206
21.45385742	0.004674447	4.345430215
21.45996094	0.004453441	4.514777616
21.46606445	0.004061517	4.088646274
21.47216797	0.003765887	4.198562741
21.47827148	0.003848229	4.877782702
21.484375	0.00442168	4.945051554
21.49047852	0.004757031	4.645017866
21.49658203	0.003642827	3.361513951
21.50268555	0.001520409	1.278012553
21.50878906	0.000441281	0.342655674
21.51489258	0.001781434	1.423291814
21.52099609	0.00283494	2.71705619
21.52709961	0.0030338	3.411498742
21.53320313	0.002541199	2.420923533
21.53930664	0.002593246	2.110268215
21.54541016	0.002836003	2.283532196
21.55151367	0.003103426	2.45375997
21.55761719	0.003914181	3.040540566
21.5637207	0.004772332	4.021798008
21.56982422	0.005048916	4.54607428
21.57592773	0.004773194	4.205689715
21.58203125	0.003555653	2.863795442

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
17.68	-0.000257758	1.37237E-06	0.000277273	0.062386406	0.000137547	0.017958994
17.685	-0.000174431	9.63948E-07	0.000194763	0.043821768	0.000137555	0.017958994
17.69	-8.60033E-06	1.45418E-07	2.94128E-05	0.006617871	0.000137555	0.017958994
17.695	0.00018323	-8.05342E-07	-0.000162635	-0.03659291	0.000137564	0.017958994
17.7	0.000346096	-1.61577E-06	-0.000326324	-0.073422873	0.000137594	0.017958994
17.705	0.000461171	-2.19164E-06	-0.000442631	-0.099591959	0.000137648	0.017958994
17.71	0.000515301	-2.46734E-06	-0.000498312	-0.112120266	0.000137715	0.017958994
17.715	0.000485235	-2.32678E-06	-0.00046991	-0.105729819	0.000137774	0.017958994
17.72	0.000370898	-1.76756E-06	-0.000356918	-0.080306615	0.000137809	0.017958994
17.725	0.000215774	-1.00347E-06	-0.000202542	-0.045571908	0.000137821	0.017958994
17.73	6.46647E-05	-2.5651E-07	-5.16366E-05	-0.011618238	0.000137822	0.017958994
17.735	-6.56353E-05	3.89701E-07	7.89058E-05	0.017753806	0.000137823	0.017958994
17.74	-0.00015025	8.11987E-07	0.000164209	0.036946965	0.000137829	0.017958994
17.745	-0.000152055	8.25368E-07	0.000166908	0.037554372	0.000137834	0.017958994
17.75	-7.44232E-05	4.44201E-07	8.98902E-05	0.020225299	0.000137836	0.017958994
17.755	3.70781E-05	-1.07259E-07	-2.1531E-05	-0.004844467	0.000137836	0.017958994
17.76	0.000144757	-6.42278E-07	-0.000129624	-0.029165411	0.000137842	0.017958994
17.765	0.00022762	-1.05674E-06	-0.000213357	-0.048005292	0.000137855	0.017958994
17.77	0.000251896	-1.18334E-06	-0.000238932	-0.053759722	0.000137871	0.017958994
17.775	0.000177812	-8.238E-07	-0.000166284	-0.037413903	0.000137879	0.017958994
17.78	7.64424E-06	1.31823E-08	2.82503E-06	0.000635632	0.000137879	0.017958994
17.785	-0.00020517	1.06477E-06	0.000215269	0.048435626	0.000137889	0.017958994
17.79	-0.000406944	2.065E-06	0.000417303	0.093893275	0.000137931	0.017958994
17.795	-0.000571369	2.88295E-06	0.000582505	0.131063543	0.000138014	0.017958994
17.8	-0.000676954	3.41174E-06	0.000689286	0.155089344	0.000138129	0.017958994
17.805	-0.00069992	3.5326E-06	0.000713685	0.160579036	0.000138253	0.017958994
17.81	-0.000641692	3.25074E-06	0.000656732	0.147764634	0.000138357	0.017958994
17.815	-0.000539406	2.7487E-06	0.000555294	0.124941102	0.000138431	0.017958994
17.82	-0.000430782	2.21334E-06	0.00044713	0.10060424	0.000138478	0.017958994
17.825	-0.000322654	1.67901E-06	0.000339179	0.07631532	0.000138504	0.017958994
17.83	-0.000217149	1.15585E-06	0.00023349	0.052535273	0.000138516	0.017958994
17.835	-0.000142116	7.81445E-07	0.000157857	0.035517714	0.000138521	0.017958994
17.84	-0.000122382	6.79672E-07	0.000137298	0.030891973	0.000138525	0.017958994
17.845	-0.000155223	8.38216E-07	0.000169333	0.038100026	0.000138531	0.017958994
17.85	-0.000235761	1.23365E-06	0.000249233	0.056077487	0.000138545	0.017958994
17.855	-0.000357415	1.83461E-06	0.000370655	0.083397277	0.000138577	0.017958994
17.86	-0.000478543	2.43614E-06	0.000492182	0.110740945	0.000138635	0.017958994
17.865	-0.000544574	2.76737E-06	0.000559099	0.125797251	0.00013871	0.017958994
17.87	-0.000542062	2.75982E-06	0.000557571	0.125453498	0.000138784	0.017958994
17.875	-0.000488461	2.49869E-06	0.000504808	0.113581695	0.000138845	0.017958994
17.88	-0.000394817	2.03812E-06	0.000411749	0.092643468	0.000138884	0.017958994
17.885	-0.000276907	1.45543E-06	0.000294021	0.066154798	0.000138904	0.017958994
17.89	-0.000170398	9.26868E-07	0.000187237	0.04212822	0.000138911	0.017958994
17.895	-0.000107723	6.1383E-07	0.000123997	0.027899366	0.000138914	0.017958994
17.9	-9.61884E-05	5.53895E-07	0.00011189	0.025175251	0.000138916	0.017958994
17.905	-0.000117499	6.57637E-07	0.000132852	0.029891812	0.00013892	0.017958994
17.91	-0.000140772	7.72428E-07	0.000156047	0.035110606	0.000138925	0.017958994
17.915	-0.000143964	7.88561E-07	0.000159307	0.035844075	0.00013893	0.017958994
17.92	-0.000119411	6.6734E-07	0.000134813	0.030332832	0.000138933	0.017958994
17.925	-6.77147E-05	4.1082E-07	8.29883E-05	0.018672374	0.000138935	0.017958994
17.93	-1.30882E-05	1.37842E-07	2.78471E-05	0.006265604	0.000138935	0.017958994
17.935	-4.79998E-06	9.25752E-08	1.87047E-05	0.004208556	0.000138935	0.017958994
17.94	-6.32374E-05	3.78132E-07	7.64045E-05	0.017191014	0.000138936	0.017958994
17.945	-0.00014646	7.88792E-07	0.000159379	0.035860277	0.000138941	0.017958994
17.95	-0.000200531	1.05722E-06	0.000213613	0.048062924	0.000138951	0.017958994
17.955	-0.000209692	1.10396E-06	0.000223057	0.050187892	0.000138962	0.017958994
17.96	-0.00018201	9.67852E-07	0.000195554	0.043999744	0.000138971	0.017958994
17.965	-0.000134232	7.30783E-07	0.000147653	0.033221842	0.000138975	0.017958994
17.97	-0.000101538	5.66293E-07	0.000114417	0.025743831	0.000138978	0.017958994
17.975	-0.000121753	6.62225E-07	0.000133801	0.030105327	0.000138982	0.017958994
17.98	-0.000205966	1.07491E-06	0.000217187	0.048866972	0.000138992	0.017958994
17.985	-0.000340972	1.74021E-06	0.000351601	0.07911022	0.000139022	0.017958994
17.99	-0.000506539	2.55884E-06	0.000516981	0.116320614	0.000139087	0.017958994
17.995	-0.000674534	3.39221E-06	0.000685326	0.154198409	0.000139202	0.017958994
18	-0.000803017	4.0328E-06	0.000814663	0.183299174	0.000139365	0.017958994
18.005	-0.000855481	4.29872E-06	0.000868344	0.195377431	0.0001395	0.017958994
18.01	-0.000828465	4.17097E-06	0.00084253	0.189569259	0.000139723	0.017958994
18.015	-0.000747521	3.77467E-06	0.000762455	0.17155229	0.000139864	0.017958994
18.02	-0.000648339	3.2859E-06	0.000663701	0.149332689	0.00013997	0.017958994
18.025	-0.000568733	2.89213E-06	0.000584145	0.131432691	0.000140052	0.017958994
18.03	-0.00052974	2.69878E-06	0.000545082	0.122643554	0.000140123	0.017958994
18.035	-0.000515011	2.62634E-06	0.000530446	0.119350379	0.00014019	0.017958994
18.04	-0.000485437	2.48144E-06	0.000501174	0.112764098	0.00014025	0.017959068
18.045	-0.0004153	2.13565E-06	0.000431316	0.097046107	0.000140293	0.017959546
18.05	-0.000316006	1.64379E-06	0.000331953	0.074689454	0.000140319	0.017959585
18.055	-0.000232142	1.22574E-06	0.000247506	0.05568875	0.000140332	0.017959585
18.06	-0.000214142	1.13182E-06	0.000228534	0.051420082	0.000140344	0.017959857
18.065	-0.000290489	1.50487E-06	0.000303912	0.068380201	0.000140365	0.017960946
18.07	-0.000450372	2.29371E-06	0.000463294	0.104241262	0.000140416	0.017961309
18.075	-0.000642523	3.24626E-06	0.000655735	0.147540416	0.000140521	0.017961309
18.08	-0.0007987	4.02486E-06	0.000813024	0.182930301	0.000140682	0.017961309
18.085	-0.000861095	4.34214E-06	0.000877109	0.197349421	0.000140869	0.017961309
18.09	-0.000798739	4.04255E-06	0.000816574	0.183729134	0.000141031	0.017961309
18.095	-0.000618164	3.15593E-06	0.000637434	0.14342275	0.000141127	0.017961309
18.1	-0.000356991	1.86653E-06	0.000376943	0.084812073	0.000141159	0.017961309
18.105	-7.16557E-05	4.52447E-07	9.12976E-05	0.020541957	0.000141161	0.017961309
18.11	0.000162865	-7.15422E-07	-0.000144587	-0.032532076	0.000141167	0.017961309
18.115	0.0002729	-1.27089E-06	-0.000256773	-0.057773857	0.000141186	0.017961309
18.12	0.000224716	-1.04406E-06	-0.000210937	-0.047460911	0.000141199	0.017961309
18.125	3.46438E-05	-1.12706E-07	-2.27601E-05	-0.005121023	0.000141199	0.017961309
18.13	-0.000243745	1.26029E-06	0.000254619	0.0572892	0.000141214	0.017961309
18.135	-0.000533044	2.69279E-06	0.000543984	0.12239641	0.000141286	0.017961309
18.14	-0.000758438	3.81375E-06	0.000770392	0.17333821	0.000141432	0.017961309
18.145	-0.000877285	4.41007E-06	0.000890822	0.200434902	0.000141626	0.017961309
18.15	-0.000885184	4.45775E-06	0.000900438	0.202598442	0.000141824	0.017961309
18.155	-0.000805156	4.06893E-06	0.000821873	0.184921511	0.000141988	0.017961309
18.16	-0.000675936	3.43431E-06	0.000693652	0.156071659	0.000142103	0.017961309
18.165	-0.000536261	2.74563E-06	0.000554514	0.124765669	0.000142176	0.017961309
18.17	-0.000407336	2.10846E-06	0.000425793	0.095803477	0.000142218	0.017961309
18.175	-0.000291538	1.53506E-06	0.00030996	0.069741107	0.000142239	0.017961309
18.18	-0.000190541	1.03366E-06	0.000208679	0.046952779	0.000142249	0.017961309
18.185	-0.000119499	6.79273E-07	0.000137095	0.030846299	0.000142252	0.017961309
18.19	-9.43165E-05	5.51366E-07	0.000111259	0.025033265	0.000142255	0.017961309
18.195	-0.000105038	6.0187E-07	0.000121464	0.027329393	0.000142257	0.017961309

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
21.58813477	0.002209498	1.523400148
21.59423828	0.002241909	1.414443492
21.6003418	0.003551255	2.355008937
21.60644531	0.00428858	3.170386622
21.61254883	0.0028521	2.17508504
21.61865234	0.000614791	0.448779241
21.62475586	0.003388078	2.395841026
21.63085938	0.003980494	2.905997279
21.63696289	0.002174307	1.561542879
21.64306641	0.00091782	0.584280629
21.64916992	0.000716521	0.462725504
21.65527344	0.002112246	1.564000624
21.66137695	0.004310412	3.269554697
21.66748047	0.004129132	3.200382556
21.67358398	0.002966111	2.527290127
21.6796875	0.002565843	2.032861575
21.68579102	0.002753242	1.903552644
21.69189453	0.002468812	1.843077436
21.69799805	0.001988464	1.784784178
21.70410156	0.001609647	1.544383888
21.71020508	0.001689046	1.781191696
21.71630859	0.002702638	3.448185895
21.72241211	0.004140534	5.243276241
21.72851563	0.005212015	5.686931211
21.73461914	0.005629448	5.76387365
21.74072266	0.005427687	5.3935486
21.74682617	0.004856644	5.01993639
21.75292969	0.004978304	5.65226496
21.7590332	0.006267557	6.900790629
21.76513672	0.006367122	7.461790471
21.77124023	0.004800113	6.615668366
21.77734375	0.003555799	4.139027824
21.78344727	0.004356823	4.53236741
21.78955078	0.005781183	6.786312687
21.7956543	0.005520944	6.00168566
21.80175781	0.003982079	4.062604323
21.80786133	0.003542595	4.396667437
21.81396484	0.003471036	6.10669642
21.82006836	0.002126224	3.210106543
21.82617188	0.001007614	1.16632642
21.83227539	0.001583784	1.724701792
21.83837891	0.000895517	1.158937534
21.84448242	0.000362998	0.45347833
21.85058594	0.000806211	0.873269844
21.85668945	0.003212037	3.900955111
21.86279297	0.005463908	7.569666672
21.86889648	0.006473447	7.85887608
21.875	0.00608394	6.655706935
21.88110352	0.004782749	4.888321732
21.88720703	0.004183038	4.273223173
21.89331055	0.004618892	5.246844665
21.89941406	0.004824289	6.209238561
21.90551758	0.004626734	6.101511614
21.91162109	0.004212373	4.804114873
21.91772461	0.003790557	3.667205498
21.92382813	0.003983509	3.561216298
21.92993164	0.004409476	3.953914888
21.93603516	0.00434803	4.391413543
21.94213867	0.004584007	4.966436976
21.94824219	0.004591565	4.194106304
21.9543457	0.003765867	3.253452037
21.96044922	0.003274499	3.265912873
21.96655273	0.002862401	2.602091024
21.97265625	0.002478366	1.907859098
21.97875977	0.002178699	1.827890143
21.98486328	0.001552589	1.520913155
21.9909668	0.001205177	1.14276719
21.99707031	0.001660476	1.496590696
22.00317383	0.002566949	2.324376084
22.00927734	0.00293722	2.853145516
22.01538086	0.001661858	1.905084058
22.02148438	0.001281094	1.428737947
22.02758789	0.003998237	4.26681108
22.03369141	0.004418531	5.366990969
22.03979492	0.002853093	3.24829176
22.04589844	0.001485782	1.537902186
22.05200195	0.000830071	0.998323754
22.05810547	0.001558217	1.792354117
22.06420898	0.001843903	1.998641163
22.0703125	0.000568607	0.827317059
22.07641602	0.00273821	4.575392696
22.08251953	0.00407142	5.68495302
22.08862305	0.003977714	4.821807906
22.09472656	0.003729729	3.500199479
22.10083008	0.004380754	4.138780531
22.10693359	0.005174643	6.778310479
22.11303711	0.004694142	6.515326446
22.11914063	0.003227367	3.992362044
22.12524414	0.002945352	4.24182126
22.13134766	0.003850989	5.888528965
22.13745117	0.004529859	5.272094617
22.14355469	0.005637469	5.534943897
22.1496582	0.006347844	6.388305035
22.15576172	0.005614501	6.357375697
22.16186523	0.004158867	4.957155779
22.16796875	0.003129004	3.606589114
22.17407227	0.002707251	3.015488525
22.18017578	0.003014228	3.147116703
22.1862793	0.004124041	4.085294161
22.19238281	0.004524933	4.459293604
22.19848633	0.003399897	3.285847246
22.20458984	0.001778282	1.699374374
22.21069336	0.000288539	0.294010644
22.21679688	0.001881983	2.116368266

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
18.2	-0.000119446	6.71716E-07	0.000135577	0.030504887	0.000142261	0.017961309
18.205	-0.000116414	6.55668E-07	0.000132334	0.029775255	0.000142264	0.017961309
18.21	-9.85426E-05	5.65789E-07	0.000114173	0.025688976	0.000142267	0.017961309
18.215	-8.23779E-05	4.83403E-07	9.75313E-05	0.021944547	0.000142269	0.017961309
18.22	-9.42293E-05	5.38622E-07	0.000108689	0.024455026	0.000142271	0.017961309
18.225	-0.000160212	8.61424E-07	0.000173914	0.039130673	0.000142277	0.017961309
18.23	-0.000287351	1.48805E-06	0.000300523	0.067617663	0.000142298	0.017961309
18.235	-0.000450634	2.29632E-06	0.00046382	0.104359519	0.000142349	0.017961309
18.24	-0.000594564	3.0123E-06	0.000608461	0.136903775	0.000142439	0.017961309
18.245	-0.000662163	3.35309E-06	0.000677303	0.152393232	0.00014255	0.017961309
18.25	-0.000627118	3.18642E-06	0.000643625	0.144815733	0.000142649	0.017961309
18.255	-0.000500013	2.56234E-06	0.000517529	0.116444083	0.000142712	0.017961309
18.26	-0.000330446	1.7244E-06	0.000348234	0.078352592	0.00014274	0.017961309
18.265	-0.000193997	1.04639E-06	0.000211261	0.047533709	0.000142749	0.017961309
18.27	-0.000149173	8.19524E-07	0.000165431	0.037221944	0.000142755	0.017961309
18.275	-0.000214271	1.13687E-06	0.000229554	0.051649581	0.000142767	0.017961309
18.28	-0.000365015	1.88097E-06	0.000379898	0.085476963	0.0001428	0.017961309
18.285	-0.000528797	2.69428E-06	0.000544212	0.122447588	0.000142871	0.017961309
18.29	-0.000613665	3.12118E-06	0.000630455	0.141852385	0.000142966	0.017961309
18.295	-0.000561569	2.87166E-06	0.000580037	0.130508325	0.000143046	0.017961309
18.3	-0.000377248	1.96561E-06	0.000396971	0.089318364	0.000143082	0.017961309
18.305	-0.000128907	7.38023E-07	0.000148967	0.033517515	0.000143086	0.017961309
18.31	9.31056E-05	-3.63953E-07	-7.3617E-05	-0.016563833	0.000143088	0.017961309
18.315	0.000236709	-1.08066E-06	-0.000218367	-0.04913268	0.000143102	0.017961309
18.32	0.000297306	-1.38744E-06	-0.000280324	-0.063072914	0.000143125	0.017961309
18.325	0.000289409	-1.35497E-06	-0.000273761	-0.061596125	0.000143146	0.017961309
18.33	0.000230619	-1.06974E-06	-0.000216127	-0.048628541	0.000143159	0.017961309
18.335	0.000136545	-6.08674E-07	-0.000122969	-0.027668056	0.000143164	0.017961309
18.34	2.03065E-05	-3.65193E-08	-7.37121E-06	-0.001658523	0.000143164	0.017961309
18.345	-0.000106903	5.91508E-07	0.000119508	0.026889258	0.000143167	0.017961309
18.35	-0.000231158	1.20677E-06	0.000243801	0.054855232	0.0001418	0.017961309
18.355	-0.000327031	1.68337E-06	0.000340077	0.076517436	0.000143207	0.017961309
18.36	-0.000374192	1.9197E-06	0.000387816	0.087258607	0.000143243	0.017961309
18.365	-0.000381891	1.96034E-06	0.000396026	0.089105784	0.00014328	0.017961309
18.37	-0.000374216	1.92416E-06	0.000388713	0.087460499	0.000143315	0.017961309
18.375	-0.000365327	1.88146E-06	0.000380086	0.085519459	0.000143349	0.017961309
18.38	-0.000358495	1.84877E-06	0.000373481	0.084033306	0.000143381	0.017961309
18.385	-0.000348566	1.80086E-06	0.000363799	0.0818548	0.000143412	0.017961309
18.39	-0.000321115	1.66638E-06	0.000336626	0.075740931	0.000143438	0.017961309
18.395	-0.000259732	1.3636E-06	0.000275449	0.061976021	0.000143455	0.017961309
18.4	-0.000166478	9.01551E-07	0.000182094	0.040971245	0.000143462	0.017961309
18.405	-7.57236E-05	4.49549E-07	9.0774E-05	0.020424146	0.000143464	0.017961309
18.41	-2.98654E-05	2.17992E-07	4.39929E-05	0.009898402	0.000143464	0.017961309
18.415	-4.89226E-05	3.07301E-07	6.20389E-05	0.013958754	0.000143464	0.017961309
18.42	-0.000134084	7.24731E-07	0.000146383	0.032936283	0.000143469	0.017961309
18.425	-0.000267148	1.38171E-06	0.000279123	0.062802625	0.000143487	0.017961309
18.43	-0.000397315	2.02776E-06	0.000409643	0.092169786	0.000143527	0.017961309
18.435	-0.0004646	2.36519E-06	0.000477802	0.10750542	0.000143581	0.017961309
18.44	-0.000444078	2.26845E-06	0.000458253	0.103106969	0.000143631	0.017961309
18.445	-0.00035419	1.82686E-06	0.000369027	0.083031172	0.000143663	0.017961309
18.45	-0.000228349	1.20495E-06	0.000243374	0.054759067	0.000143676	0.017961309
18.455	-9.39236E-05	5.37872E-07	0.000108604	0.024435857	0.000143678	0.017961309
18.46	1.69571E-05	-1.55795E-08	-3.20443E-06	-0.000720997	0.000143678	0.017961309
18.465	6.07686E-05	-2.39368E-07	-4.84126E-05	-0.010892833	0.000143679	0.017961309
18.47	1.38256E-05	-1.43464E-08	-2.94429E-06	-0.000662464	0.000143679	0.017961309
18.475	-0.000105857	5.72204E-07	0.000115569	0.026003096	0.000143682	0.017961309
18.48	-0.000266062	1.3616E-06	0.000275057	0.0618879	0.0001437	0.017961309
18.485	-0.000444352	2.24318E-06	0.000453154	0.101959754	0.00014375	0.017961309
18.49	-0.000610002	3.06536E-06	0.000619224	0.139325497	0.000143844	0.017961309
18.495	-0.000714973	3.58987E-06	0.000725163	0.163161756	0.000143973	0.017961309
18.5	-0.000731815	3.67877E-06	0.000743118	0.167201541	0.000144109	0.017961309
18.505	-0.000685739	3.45475E-06	0.000697852	0.157016737	0.000144228	0.017961309
18.51	-0.000620843	3.13573E-06	0.000633392	0.142513211	0.000144325	0.017961309
18.515	-0.00055093	2.79051E-06	0.00056364	0.126819111	0.000144402	0.017961309
18.52	-0.000482847	2.45261E-06	0.000495372	0.111458708	0.000144461	0.017961309
18.525	-0.000453691	2.30563E-06	0.000465676	0.104777141	0.000144513	0.017961309
18.53	-0.000486137	2.46345E-06	0.000497567	0.111952638	0.000144572	0.017961309
18.535	-0.000552707	2.79148E-06	0.000563847	0.126865465	0.00014465	0.017961309
18.54	-0.000626382	3.15584E-06	0.000637465	0.14342961	0.000144749	0.017961309
18.545	-0.000701729	3.52967E-06	0.000712994	0.160423637	0.000144873	0.017961309
18.55	-0.000756415	3.80278E-06	0.000768164	0.172836953	0.000145018	0.017961309
18.555	-0.000761166	3.82943E-06	0.000773544	0.174047471	0.000145164	0.017961309
18.56	-0.000721106	3.63336E-06	0.000733927	0.165133577	0.000145296	0.017961309
18.565	-0.000671863	3.39017E-06	0.000684788	0.154077401	0.00014541	0.017961309
18.57	-0.000643746	3.25047E-06	0.000656562	0.147726495	0.000145514	0.017961309
18.575	-0.000634334	3.20333E-06	0.000647037	0.145583261	0.000145616	0.017961309
18.58	-0.000623895	3.15117E-06	0.000636498	0.143212128	0.000145715	0.017961309
18.585	-0.000609497	3.07903E-06	0.000621923	0.139932779	0.000145808	0.017961309
18.59	-0.000595416	3.00798E-06	0.000607566	0.136702403	0.000145898	0.017961309
18.595	-0.000584759	2.95294E-06	0.000596447	0.134200478	0.000145984	0.017961309
18.6	-0.000609334	3.07086E-06	0.000620275	0.139561806	0.000146078	0.017961309
18.605	-0.00071253	3.57774E-06	0.000722692	0.16260571	0.000146207	0.017961309
18.61	-0.000888572	4.44754E-06	0.000898381	0.202135718	0.000146406	0.017961309
18.615	-0.00108008	5.39769E-06	0.00109018	0.245290575	0.000146701	0.017961309
18.62	-0.001227912	6.13498E-06	0.001239001	0.278775205	0.000147082	0.017961309
18.625	-0.001300147	6.50017E-06	0.001312709	0.295359587	0.000147509	0.017961309
18.63	-0.001281937	6.41853E-06	0.001296208	0.291646764	0.000147925	0.017961309
18.635	-0.001165669	5.85079E-06	0.001181495	0.265836315	0.000148268	0.017961309
18.64	-0.000972902	4.90163E-06	0.000989726	0.222688438	0.000148507	0.017961309
18.645	-0.000762299	3.8603E-06	0.000779358	0.175355621	0.000148654	0.017961309
18.65	-0.000588138	2.99621E-06	0.000604811	0.136082504	0.000148742	0.017961309
18.655	-0.000470295	2.40913E-06	0.000486225	0.109400657	0.000148797	0.017963231
18.66	-0.000410543	2.10881E-06	0.000425567	0.095752547	0.00014884	0.017967616
18.665	-0.000406768	2.08574E-06	0.00042091	0.094704693	0.000148882	0.017971594
18.67	-0.000440515	2.24956E-06	0.00045401	0.102152302	0.000148931	0.017974858
18.675	-0.000477963	2.4329E-06	0.000491057	0.110487743	0.000148989	0.017977606
18.68	-0.000509097	2.58508E-06	0.000521805	0.117406142	0.000149054	0.017979892
18.685	-0.000561857	2.84405E-06	0.000574129	0.129179033	0.000149134	0.01798172
18.69	-0.000646783	3.2633E-06	0.000658835	0.148237877	0.00014924	0.017983105
18.695	-0.000726586	3.65906E-06	0.000738791	0.166228036	0.000149373	0.017984067
18.7	-0.000771052	3.88068E-06	0.000783565	0.176302102	0.000149523	0.017984631
18.705	-0.000794871	3.99967E-06	0.000807604	0.181710935	0.000149683	0.017984811
18.71	-0.000820303	4.12635E-06	0.000833196	0.187469017	0.000149853	0.017984811
18.715	-0.000846952	4.25913E-06	0.000860021	0.193504656	0.000150034	0.017984811

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
22.22290039	0.003021057	3.282178287
22.22900391	0.002680078	2.817426892
22.23510742	0.002521864	2.336445754
22.24121094	0.00343792	3.132995695
22.24731445	0.003198115	3.185739155
22.25341797	0.002182012	2.382377329
22.25952148	0.002299696	2.611209515
22.265625	0.003035459	3.11181296
22.27172852	0.002918066	2.616389932
22.27783203	0.001692898	1.524097829
22.28393555	0.000252659	0.2312446
22.29003906	0.000392622	0.354845864
22.29614258	0.000472646	0.460971629
22.30224609	0.001764099	1.606691071
22.30834961	0.00204207	1.579939634
22.31445313	0.001497128	1.195369395
22.32055664	0.001720331	1.560814097
22.32666016	0.001755687	1.785379076
22.33276367	0.000418499	0.497495524
22.33886719	0.001004634	1.120973515
22.3449707	0.001267304	1.154877022
22.35107422	0.00131929	1.209023576
22.35717773	0.001311226	1.384795315
22.36328125	0.001546917	1.922410289
22.36938477	0.001760619	2.092189152
22.37548828	0.002920269	3.020497409
22.3815918	0.003962541	4.769174347
22.38769531	0.003624664	5.647315667
22.39379883	0.003143205	4.117453218
22.39990234	0.003566035	4.259521207
22.40600586	0.004083048	5.340871128
22.41210938	0.00366247	4.356583811
22.41821289	0.003469888	4.149298346
22.42431641	0.004608913	6.770649832
22.43041992	0.005095996	6.882576711
22.43652344	0.004273122	4.556505678
22.44262695	0.003153992	3.561691874
22.44873047	0.001715276	2.180101869
22.45483398	0.00140099	1.525888109
22.4609375	0.002428861	2.56757247
22.46704102	0.003421535	3.709341321
22.47314453	0.003031908	2.673128886
22.47924805	0.001760041	1.469869533
22.48535156	0.000746222	0.771406532
22.49145508	0.00243354	2.53722537
22.49755859	0.002047077	1.873145032
22.50366211	0.000787481	0.682334498
22.50976563	0.002525641	2.086894503
22.51586914	0.003224649	2.672935226
22.52197266	0.00330656	2.730334942
22.52807617	0.002251231	1.798303193
22.53417969	0.002142809	1.754638601
22.5402832	0.003142722	2.612847941
22.54638672	0.002973272	2.455643547
22.55249023	0.002300144	1.906816828
22.55859375	0.003164871	2.515018264
22.56469727	0.00393107	3.293447787
22.57080078	0.003966561	3.552835639
22.5769043	0.004224036	3.38281596
22.58300781	0.004089461	3.005154912
22.58911133	0.002950404	2.166885328
22.59521484	0.002181448	1.710857632
22.60131836	0.002630881	2.330254297
22.60742188	0.002868681	2.457629389
22.61352539	0.002561461	2.035837214
22.61962891	0.001857885	1.552979312
22.62573242	0.001472555	1.104658563
22.63183594	0.001632938	1.154949673
22.63793945	0.001770562	1.45313177
22.64404297	0.002254497	1.795653759
22.65014648	0.002647733	1.89541973
22.65625	0.001878766	1.435241829
22.66235352	0.00083761	0.650030151
22.66845703	0.000896044	0.669747058
22.67456055	0.000596698	0.452635594
22.68066406	0.000507726	0.358086332
22.68676758	0.001210223	0.832984113
22.69287109	0.001609643	1.184733553
22.69897461	0.001294729	0.975603471
22.70507813	0.003036511	2.330327289
22.71118164	0.00562195	4.286865044
22.71728516	0.006516262	4.704214567
22.72338867	0.005075249	3.84096812
22.72949219	0.002618839	2.155819634
22.7355957	0.001433349	1.168707875
22.74169922	0.001890077	1.460105937
22.74780273	0.002603466	1.83036486
22.75390625	0.003302655	2.259725676
22.76000977	0.003993722	3.127827341
22.76611328	0.003760753	3.066228997
22.7722168	0.002621901	1.956737672
22.77832031	0.001985969	1.593985629
22.78442383	0.001627822	1.449790368
22.79052734	0.001448917	1.162169443
22.79663086	0.001718307	1.221191053
22.80273438	0.001645522	1.108346042
22.80883789	0.001408567	0.898505581
22.81494141	0.002796692	1.794012111
22.82104492	0.003670711	2.390490428
22.82714844	0.003514446	2.236782428
22.83325195	0.00341301	2.204019707
22.83935547	0.003787863	2.352281636
22.84545898	0.004201006	2.321684931
22.8515625	0.004614172	2.599410863

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
18.72	-0.000873799	4.39284E-06	0.000887031	0.199581973	0.000150227	0.017984811
18.725	-0.0009117	4.58148E-06	0.00092514	0.208156451	0.000150438	0.017984811
18.73	-0.000949583	4.77128E-06	0.000963481	0.216783213	0.000150665	0.017984811
18.735	-0.000945136	4.75269E-06	0.000959724	0.215937856	0.000150891	0.017984811
18.74	-0.000884646	4.45587E-06	0.000899748	0.202443385	0.000151089	0.017984811
18.745	-0.00081447	4.10884E-06	0.00082963	0.186666811	0.000151257	0.017984811
18.75	-0.000781778	3.94588E-06	0.000796704	0.179258306	0.000151411	0.017984811
18.755	-0.000789512	3.98284E-06	0.000804174	0.180939043	0.000151569	0.017984811
18.76	-0.000830472	4.18451E-06	0.000844922	0.190107428	0.000151743	0.017984811
18.765	-0.000909383	4.57498E-06	0.000923818	0.207859144	0.000151952	0.017984811
18.77	-0.001004752	5.04937E-06	0.001019657	0.229422756	0.000152207	0.017984811
18.775	-0.001056986	5.31304E-06	0.001072918	0.241406575	0.000152489	0.017984811
18.78	-0.001024104	5.15644E-06	0.001041275	0.234286932	0.000152755	0.017984811
18.785	-0.000914559	4.61946E-06	0.000932776	0.20987464	0.000152966	0.017984811
18.79	-0.000752338	3.81988E-06	0.000771231	0.173526998	0.000153109	0.017984811
18.795	-0.000559828	2.86767E-06	0.000578862	0.13024398	0.000153188	0.017984811
18.8	-0.000384114	1.99519E-06	0.000402618	0.090589134	0.000153226	0.017984811
18.805	-0.000280954	1.4795E-06	0.000298463	0.06715418	0.000153245	0.017984811
18.81	-0.000260262	1.37202E-06	0.000276755	0.06226988	0.000153263	0.017984811
18.815	-0.000285728	1.49433E-06	0.000301469	0.067830532	0.000153283	0.017984811
18.82	-0.000327247	1.69703E-06	0.000342425	0.077045732	0.00015331	0.017984811
18.825	-0.00038754	1.99311E-06	0.00040225	0.090506242	0.000153348	0.017984811
18.83	-0.000469991	2.40004E-06	0.000484467	0.109005146	0.000153404	0.017984811
18.835	-0.000540815	2.7513E-06	0.000555436	0.124973046	0.000153478	0.017984811
18.84	-0.00056192	2.8573E-06	0.000576851	0.129791373	0.000153558	0.017984811
18.845	-0.000544867	2.77364E-06	0.000559947	0.125988144	0.000153633	0.017984811
18.85	-0.000520356	2.65221E-06	0.00053541	0.120467147	0.000153701	0.017985036
18.855	-0.000494397	2.52302E-06	0.000509307	0.114594073	0.000153763	0.017989642
18.86	-0.000480267	2.45153E-06	0.000494861	0.111343792	0.000153821	0.017994083
18.865	-0.000504101	2.56787E-06	0.00051837	0.116633154	0.000153886	0.017998352
18.87	-0.000551921	2.8045E-06	0.000566184	0.127391347	0.000153963	0.018002451
18.875	-0.00057698	2.93025E-06	0.000591589	0.133107498	0.000154047	0.018006392
18.88	-0.000557512	2.83602E-06	0.00057255	0.128823687	0.000154125	0.018010178
18.885	-0.000507259	2.58874E-06	0.000522584	0.117581401	0.00015419	0.018013802
18.89	-0.000443384	2.27308E-06	0.000458805	0.103231015	0.00015424	0.018017244
18.895	-0.000372821	1.92303E-06	0.000388078	0.087317473	0.000154275	0.018020484
18.9	-0.000323003	1.67361E-06	0.000337687	0.075979514	0.000154301	0.018023497
18.905	-0.000346502	1.7859E-06	0.000360376	0.081084573	0.000154332	0.018026267
18.91	-0.000446533	2.27873E-06	0.000459955	0.1034899	0.000154382	0.0180288
18.915	-0.000552139	2.80244E-06	0.000565767	0.12729768	0.000154459	0.018033587
18.92	-0.000605743	3.07069E-06	0.000619962	0.139491505	0.000154552	0.018039893
18.925	-0.000604775	3.06912E-06	0.000619643	0.139419775	0.000154644	0.018045892
18.93	-0.000557955	2.84012E-06	0.000573373	0.129008893	0.000154723	0.01805158
18.935	-0.000474178	2.42686E-06	0.000489871	0.110220986	0.00015478	0.018056925
18.94	-0.000381799	1.96889E-06	0.000397343	0.089402089	0.000154817	0.018061871
18.945	-0.00031795	1.65034E-06	0.000332983	0.074921108	0.000154842	0.018066361
18.95	-0.0002948	1.53288E-06	0.000309254	0.069582121	0.000154864	0.018070354
18.955	-0.000285126	1.48236E-06	0.000299046	0.067285259	0.000154885	0.018073831
18.96	-0.000269359	1.40124E-06	0.000282659	0.063598235	0.000154903	0.018076783
18.965	-0.000282257	1.46058E-06	0.000294649	0.066295993	0.000154923	0.018079202
18.97	-0.00036321	1.8566E-06	0.000374668	0.084300222	0.000154957	0.018081228
18.975	-0.000501501	2.53798E-06	0.000512338	0.115276112	0.0001550 2	0.018083021
18.98	-0.000675444	3.39792E-06	0.000686071	0.154365934	0.000155136	0.018084621
18.985	-0.000874882	4.38695E-06	0.000885868	0.199320278	0.000155329	0.018086083
18.99	-0.001051856	5.26891E-06	0.00106402	0.239404451	0.000155609	0.018087467
18.995	-0.001131343	5.67138E-06	0.001145311	0.257695047	0.000155932	0.018088826
19	-0.00109541	5.50239E-06	0.001111167	0.250012498	0.000156235	0.018090181
19.005	-0.000992022	4.99743E-06	0.001009136	0.227055586	0.000156484	0.018091524
19.01	-0.00086146	4.35605E-06	0.000879551	0.197898883	0.000156672	0.018092821
19.015	-0.000708585	3.6027E-06	0.000727354	0.16365474	0.000156799	0.018094031
19.02	-0.000536535	2.75257E-06	0.000555617	0.125013753	0.000156871	0.018095105
19.025	-0.000364971	1.90274E-06	0.000383952	0.086389289	0.000156905	0.01809599
19.03	-0.000207529	1.12125E-06	0.000226107	0.050874172	0.000156916	0.018096632
19.035	-5.44536E-05	3.59977E-07	7.2363E-05	0.016281667	0.000156917	0.018096981
19.04	8.45976E-05	-3.34423E-07	-6.78683E-05	-0.015270371	0.000156918	0.018097031
19.045	0.000146194	-6.48115E-07	-0.000131215	-0.029523278	0.000156924	0.018097031
19.05	8.95859E-05	-3.76558E-07	-7.63436E-05	-0.017177302	0.000156926	0.018097031
19.055	-3.96797E-05	2.57525E-07	5.17731E-05	0.011648944	0.000156926	0.018097031
19.06	-0.000182255	9.60416E-07	0.000193783	0.043601082	0.000156935	0.018097031
19.065	-0.000316856	1.62623E-06	0.000328293	0.073865884	0.00015696	0.018097031
19.07	-0.000414809	2.11284E-06	0.000426594	0.095983724	0.000157004	0.018097031
19.075	-0.000446481	2.27194E-06	0.000458733	0.103214975	0.000157054	0.018097031
19.08	-0.000436686	2.2241E-06	0.000449065	0.101039671	0.000157102	0.018097031
19.085	-0.000444276	2.26033E-06	0.000456388	0.102687235	0.000157152	0.018097031
19.09	-0.000497791	2.52348E-06	0.000509545	0.114647722	0.000157215	0.018097031
19.095	-0.000582411	2.94153E-06	0.000593989	0.133647632	0.0001573	0.018097031
19.1	-0.000678424	3.4172E-06	0.00069007	0.155265787	0.000157417	0.018097031
19.105	-0.000778886	3.91648E-06	0.000790914	0.177955712	0.00015757	0.018097031
19.11	-0.000854875	4.29699E-06	0.000867768	0.195247821	0.000157755	0.018097031
19.115	-0.000850022	4.27904E-06	0.000864136	0.194430624	0.000157937	0.018097031
19.12	-0.000747601	3.77706E-06	0.000762707	0.17160905	0.000158079	0.018097031
19.125	-0.000601091	3.05366E-06	0.00061655	0.138723735	0.00015817	0.018097031
19.13	-0.0004695	2.40138E-06	0.000484771	0.10907337	0.000158226	0.018097031
19.135	-0.000367417	1.89359E-06	0.000382187	0.085992133	0.00015826	0.018097031
19.14	-0.000297491	1.54365E-06	0.000311497	0.070086826	0.000158282	0.018097031
19.145	-0.000276992	1.4375E-06	0.000290053	0.065261935	0.000158301	0.018097031
19.15	-0.000309019	1.59156E-06	0.000321182	0.072266044	0.000158326	0.018097031
19.155	-0.000376563	1.92217E-06	0.000387985	0.087296734	0.000158361	0.018097031
19.16	-0.000475615	2.40948E-06	0.000486444	0.109450002	0.000158419	0.018097031
19.165	-0.000607622	3.06144E-06	0.000618164	0.139086825	0.000158512	0.018097031
19.17	-0.000740847	3.72208E-06	0.000751627	0.16911609	0.000158651	0.018097031
19.175	-0.00082338	4.13401E-06	0.000834842	0.187839558	0.000158822	0.018097031
19.18	-0.000840278	4.22129E-06	0.000852474	0.191806619	0.000159	0.018097031
19.185	-0.000826599	4.15616E-06	0.000839314	0.188845691	0.000159173	0.018097031
19.19	-0.000813839	4.09502E-06	0.00082696	0.186065995	0.000159341	0.018097031
19.195	-0.000797562	4.0166E-06	0.000811113	0.182500465	0.000159501	0.018097031
19.2	-0.000767159	3.86823E-06	0.000781134	0.175755176	0.00015965	0.018097031
19.205	-0.000720191	3.63774E-06	0.000734563	0.16527672	0.000159781	0.018097031
19.21	-0.000642697	3.25593E-06	0.00065742	0.14791943	0.000159886	0.018097031
19.215	-0.000524653	2.67201E-06	0.000539448	0.121375909	0.000159955	0.018097031
19.22	-0.000397503	2.0401E-06	0.000411787	0.092651995	0.000159995	0.018097031
19.225	-0.000324477	1.6732E-06	0.000337666	0.075974887	0.000160022	0.018097031
19.23	-0.000347737	1.78199E-06	0.00035965	0.080921163	0.000160052	0.018097031
19.235	-0.000456334	2.31467E-06	0.00046728	0.105138028	0.000160105	0.018097031

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
22.85766602	0.005055895	3.130410902
22.86376953	0.004640014	2.734482002
22.86987305	0.003873426	2.126020696
22.87597656	0.004051994	2.297269717
22.88208008	0.004224831	2.482785958
22.88818359	0.004196324	2.403165542
22.89428711	0.00459951	2.627934531
22.90039063	0.005215795	3.124945105
22.90649414	0.004916711	2.886914941
22.91259766	0.003770816	2.042326036
22.91870117	0.00306679	1.705800507
22.92480469	0.003444893	2.115331405
22.9309082	0.003882192	2.438810191
22.93701172	0.003588583	2.256806517
22.94311523	0.003076618	1.916047
22.94921875	0.002649197	1.557718877
22.95532227	0.002471888	1.422634978
22.96142578	0.002249724	1.306216599
22.9675293	0.001461497	0.868292545
22.97363281	0.000806757	0.51502394
22.97973633	0.000513322	0.332002373
22.98583984	4.27691E-05	0.025727755
22.99194336	0.000482387	0.278111722
22.99804688	0.000118589	0.066762399
23.00415039	0.001201315	0.68876557
23.01025391	0.002276311	1.428647023
23.01635742	0.002437592	1.640159001
23.02246094	0.001448365	0.956711655
23.02856445	0.00051824	0.314521538
23.03466797	0.001093327	0.642700221
23.04077148	0.001334308	0.832442466
23.046875	0.001661405	1.010207021
23.05297852	0.002201407	1.293718796
23.05908203	0.003045923	1.968582248
23.06518555	0.003707562	2.425945514
23.07128906	0.004039905	2.364745027
23.07739258	0.003861814	2.176459802
23.08349609	0.003024273	1.746213029
23.08959961	0.002663971	1.651680242
23.09570313	0.002895554	1.861267597
23.10180664	0.001980334	1.160346466
23.10791016	0.000480333	0.273828148
23.11401367	0.001493493	0.896019627
23.12011719	0.001994534	1.129628199
23.1262207	0.001662196	0.890246269
23.13232422	0.00172813	0.959318491
23.13842773	0.002193437	1.212038365
23.14453125	0.002502647	1.341754323
23.15063477	0.002482762	1.339657318
23.15673828	0.001899651	1.024410159
23.1628418	0.001958471	1.037172699
23.16894531	0.002465768	1.268291343
23.17504883	0.00210527	1.030273747
23.18115234	0.001612375	0.768781924
23.18725586	0.002382627	1.17260889
23.19335938	0.003754858	1.939593696
23.19946289	0.00445482	2.282764284
23.20556641	0.00417922	2.033732636
23.21166992	0.003268668	1.549259021
23.21777344	0.002669881	1.261984634
23.22387695	0.002783793	1.292294121
23.22998047	0.003257707	1.5563893
23.23608398	0.003269897	1.649637245
23.2421875	0.001949053	0.948949798
23.24829102	0.001412081	0.662768879
23.25439453	0.00359355	1.776404716
23.26049805	0.004150209	2.121278674
23.26660156	0.003027309	1.469058455
23.27270508	0.001675106	0.783054061
23.27880859	0.001140149	0.537341412
23.28491211	0.001428866	0.660242214
23.29101563	0.001467944	0.653952815
23.29711914	0.001327966	0.594814139
23.30322266	0.00137502	0.603508387
23.30932617	0.001752135	0.719473823
23.31542969	0.001368628	0.586979727
23.3215332	0.001337666	0.665596888
23.32763672	0.00281386	1.377001186
23.33374023	0.003491274	1.481087851
23.33984375	0.002878774	1.199947598
23.34594727	0.001850423	0.814998782
23.35205078	0.001463555	0.649264627
23.3581543	0.003067516	1.42453539
23.36425781	0.004072153	2.043360074
23.37036133	0.003532977	1.700991885
23.37646484	0.002499066	1.126352052
23.38256836	0.001875568	0.8701796
23.38867188	0.002020494	0.974973887
23.39477539	0.002766788	1.325052616
23.40087891	0.003172603	1.504489972
23.40698242	0.002523828	1.218593602
23.41308594	0.001371458	0.684507521
23.41918945	0.001100759	0.540269304
23.42529297	0.001504886	0.720279328
23.43139648	0.001996712	0.992815905
23.4375	0.002656879	1.319809698
23.44360352	0.003114611	1.454056925
23.44970703	0.003093296	1.41202025
23.45581055	0.002812305	1.263705547
23.46191406	0.002255638	0.993520311
23.46801758	0.001612081	0.722027713
23.47412109	0.001201544	0.554365285
23.48022461	0.001013612	0.475325735
23.48632813	0.001535994	0.686734302

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
19.24	-0.000609668	3.0715E-06	0.000620191	0.139542932	0.000160199	0.018097031
19.245	-0.000769345	3.86271E-06	0.000780036	0.175508157	0.000160348	0.018097031
19.25	-0.000894031	4.48357E-06	0.000905451	0.203726539	0.00016055	0.018097031
19.255	-0.000944477	4.73848E-06	0.000956935	0.215310371	0.000160776	0.018097031
19.26	-0.000925341	4.64825E-06	0.000938702	0.21120805	0.000160992	0.018097031
19.265	-0.000886782	4.46024E-06	0.000900714	0.202660622	0.000161191	0.018097031
19.27	-0.000857799	4.31918E-06	0.000872211	0.196247369	0.000161377	0.018097031
19.275	-0.000816144	4.11573E-06	0.000831103	0.186998256	0.000161545	0.018097031
19.28	-0.000743898	3.7603E-06	0.000759291	0.170840541	0.000161685	0.018097031
19.285	-0.000656815	3.3301E-06	0.000672374	0.151284058	0.000161794	0.018097031
19.29	-0.000564782	2.87407E-06	0.000580244	0.130554854	0.000161875	0.018097031
19.295	-0.000472183	2.41338E-06	0.000487174	0.109614242	0.000161931	0.018097031
19.3	-0.000415736	2.12918E-06	0.000429762	0.096696437	0.000161975	0.018097031
19.305	-0.000442592	2.25597E-06	0.000455383	0.102461064	0.000162024	0.018097031
19.31	-0.000563752	2.85058E-06	0.000575524	0.129492959	0.000162105	0.018097031
19.315	-0.000744419	3.74285E-06	0.000755799	0.170054693	0.000162245	0.018097031
19.32	-0.000922579	4.62654E-06	0.000934321	0.210222113	0.0001624 6	0.018097031
19.325	-0.001048444	5.25424E-06	0.001061098	0.238747018	0.000162738	0.018097031
19.33	-0.001098958	5.51048E-06	0.001112845	0.250390129	0.000163043	0.018097031
19.335	-0.001062872	5.33777E-06	0.001077949	0.242538435	0.000163328	0.018097031
19.34	-0.000971061	4.88663E-06	0.000986793	0.222028377	0.000163567	0.018097031
19.345	-0.00090405	4.55528E-06	0.000919846	0.206965273	0.000163773	0.018097031
19.35	-0.000898926	4.52997E-06	0.000914731	0.205814426	0.000163978	0.018097031
19.355	-0.000910381	4.58837E-06	0.000926532	0.208469761	0.000164187	0.018097031
19.36	-0.000890462	4.49262E-06	0.000907186	0.204116841	0.000164387	0.018097031
19.365	-0.000826705	4.17998E-06	0.00084402	0.189904594	0.0001646 6	0.018097031
19.37	-0.000715613	3.63225E-06	0.000733363	0.165006637	0.00016469	0.018097031
19.375	-0.000570879	2.91594E-06	0.000588656	0.132447574	0.000164772	0.018097031
19.38	-0.000438041	2.25585E-06	0.000455313	0.102445524	0.000164821	0.018097031
19.385	-0.000362774	1.8791E-06	0.000379213	0.085322844	0.000164854	0.018097031
19.39	-0.00035075	1.8158E-06	0.000366425	0.082445589	0.000164885	0.018097031
19.395	-0.000366579	1.89198E-06	0.000381819	0.085909211	0.000164919	0.018097031
19.4	-0.00037504	1.93294E-06	0.000390096	0.08777155	0.000164954	0.018097031
19.405	-0.000370622	1.91063E-06	0.000385587	0.086757034	0.000164989	0.018097031
19.41	-0.000350647	1.81169E-06	0.000365596	0.082259154	0.0001650 2	0.018097031
19.415	-0.000296168	1.5418E-06	0.000311079	0.069992875	0.000165042	0.018097031
19.42	-0.000214731	1.13664E-06	0.000229244	0.051579866	0.000165054	0.018097031
19.425	-0.000158729	8.5486E-07	0.000172331	0.038774569	0.0001650 6	0.018097031
19.43	-0.000170907	9.09395E-07	0.000183353	0.041254342	0.000165068	0.018097031
19.435	-0.000252189	1.30655E-06	0.0002636	0.059309977	0.000165084	0.018097031
19.44	-0.000386605	1.96837E-06	0.000397319	0.089396664	0.000165122	0.018097031
19.445	-0.00054926	2.77269E-06	0.000559815	0.125958454	0.000165198	0.018097031
19.45	-0.000692484	3.48403E-06	0.000703518	0.158291579	0.000165319	0.018097031
19.455	-0.000767092	3.85781E-06	0.000779024	0.175280505	0.000165468	0.018097031
19.46	-0.000764394	3.84885E-06	0.000777211	0.174872462	0.000165615	0.018097031
19.465	-0.000716306	3.61365E-06	0.000729687	0.164179584	0.000165745	0.018097031
19.47	-0.000654653	3.30961E-06	0.000668254	0.150357261	0.000165853	0.018097031
19.475	-0.000593745	3.00772E-06	0.000607258	0.136633153	0.000165943	0.018097031
19.48	-0.000549681	2.78765E-06	0.000562795	0.126628847	0.000166019	0.018097031
19.485	-0.000544628	2.75959E-06	0.000557126	0.125353422	0.000166094	0.018097031
19.49	-0.000586525	2.96393E-06	0.000598415	0.134643375	0.000166181	0.018097031
19.495	-0.00066441	3.34724E-06	0.000675865	0.152069689	0.000166292	0.018097031
19.5	-0.000766956	3.85376E-06	0.000778205	0.175096111	0.000166441	0.018097031
19.505	-0.000887999	4.45337E-06	0.000899326	0.202348369	0.0001666 4	0.018097031
19.51	-0.001007151	5.04568E-06	0.001018965	0.229267227	0.000166897	0.018097031
19.515	-0.001094347	5.48151E-06	0.001106995	0.249073793	0.000167199	0.018097031
19.52	-0.001144908	5.7367E-06	0.00115853	0.260669333	0.000167531	0.018097031
19.525	-0.001170866	5.87065E-06	0.001185583	0.266756095	0.000167877	0.018097031
19.53	-0.001159032	5.81852E-06	0.001175047	0.264385666	0.000168217	0.018097031
19.535	-0.00107895	5.42893E-06	0.001096328	0.246673716	0.000168511	0.018097031
19.54	-0.000922482	4.65985E-06	0.000940938	0.211711015	0.000168726	0.018097242
19.545	-0.000719358	3.65672E-06	0.000738279	0.16611267	0.000168857	0.018097882
19.55	-0.00052253	2.68112E-06	0.0005412	0.121769965	0.000168926	0.018098765
19.555	-0.000373472	1.93917E-06	0.00039133	0.088049149	0.000168961	0.018099636
19.56	-0.000292789	1.53397E-06	0.000309486	0.069634323	0.000168983	0.01809991
19.565	-0.000295161	1.53965E-06	0.000310637	0.069893346	0.000169005	0.01809991
19.57	-0.000365317	1.88272E-06	0.000379958	0.085490533	0.000169038	0.01809991
19.575	-0.000446972	2.28552E-06	0.000461343	0.103802223	0.000169089	0.01809991
19.58	-0.000498956	2.54321E-06	0.000513408	0.115516775	0.000169152	0.018100132
19.585	-0.000517937	2.63808E-06	0.000532575	0.119829429	0.0001692 2	0.018100744
19.59	-0.000508099	2.59005E-06	0.00052287	0.117645674	0.000169285	0.018101116
19.595	-0.000484722	2.47397E-06	0.000499415	0.112368415	0.000169344	0.018101302
19.6	-0.000477506	2.43698E-06	0.000491941	0.11068677	0.000169402	0.018101907
19.605	-0.000493723	2.51621E-06	0.000507951	0.114288915	0.000169464	0.018102269
19.61	-0.000509441	2.59388E-06	0.000523644	0.117819902	0.000169529	0.018102392
19.615	-0.000502636	2.56051E-06	0.000516902	0.116302883	0.000169593	0.018102392
19.62	-0.000475022	2.42371E-06	0.000489259	0.110083204	0.00016965	0.018102392
19.625	-0.000446446	2.28133E-06	0.000460491	0.103610507	0.0001697	0.018102392
19.63	-0.00043144	2.20576E-06	0.00044522	0.100174603	0.000169747	0.018102392
19.635	-0.000423351	2.16455E-06	0.000436895	0.098301486	0.000169793	0.018102392
19.64	-0.000410661	2.10055E-06	0.000423964	0.095391997	0.000169835	0.018102392
19.645	-0.000396396	2.02842E-06	0.000409389	0.092112466	0.000169875	0.018102392
19.65	-0.000387422	1.98225E-06	0.000400061	0.090013729	0.000169913	0.018102392
19.655	-0.000382895	1.95802E-06	0.000395166	0.088912388	0.00016995	0.018102392
19.66	-0.000382842	1.9558E-06	0.000394718	0.088811461	0.000169987	0.018102392
19.665	-0.000389673	1.98752E-06	0.000401125	0.090253212	0.000170026	0.018102392
19.67	-0.000403902	2.05562E-06	0.000414888	0.093349768	0.000170067	0.018102392
19.675	-0.000431889	2.19147E-06	0.000442337	0.099525825	0.000170114	0.018102392
19.68	-0.000485157	2.45234E-06	0.000495048	0.111385708	0.000170173	0.018102392
19.685	-0.000567335	2.85686E-06	0.000576776	0.129774703	0.000170255	0.018102392
19.69	-0.000668916	3.35863E-06	0.000678149	0.152583569	0.000170368	0.018102392
19.695	-0.000769592	3.85746E-06	0.000778922	0.17525738	0.000170518	0.018102392
19.7	-0.000850963	4.26194E-06	0.000860632	0.193642171	0.000170701	0.018102392
19.705	-0.00090822	4.54778E-06	0.000918373	0.206633919	0.000170909	0.018102392
19.71	-0.000939651	4.70623E-06	0.00095038	0.213835554	0.000171132	0.018102392
19.715	-0.000943252	4.72688E-06	0.000954551	0.214774014	0.000171357	0.018102392
19.72	-0.000926053	4.64407E-06	0.000937819	0.211009168	0.000171574	0.018102392
19.725	-0.000892443	4.4793E-06	0.000904526	0.203518324	0.000171775	0.018102392
19.73	-0.000846551	4.25243E-06	0.000858686	0.193204245	0.000171956	0.018102392
19.735	-0.000817528	4.10731E-06	0.000829363	0.186606618	0.000172125	0.018102392
19.74	-0.000837302	4.203E-06	0.000848698	0.19095716	0.000172302	0.018102392
19.745	-0.000899055	4.50742E-06	0.00091021	0.204797233	0.000172507	0.018102456
19.75	-0.000969742	4.8578E-06	0.000980998	0.220724551	0.000172744	0.018103012
19.755	-0.001016399	5.09083E-06	0.001028069	0.231315549	0.000173005	0.018103135

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
23.49243164	0.002272152	0.950983934
23.49853516	0.002728705	1.167920426
23.50463867	0.003040486	1.343827438
23.51074219	0.003579474	1.511165932
23.5168457	0.00456629	1.894365772
23.52294922	0.005345255	2.283735486
23.52905273	0.005394053	2.302138505
23.53515625	0.005291776	2.231725691
23.54125977	0.005585638	2.379383013
23.54736328	0.005765509	2.479157506
23.5534668	0.004767321	2.017378014
23.55957031	0.002166836	0.905399864
23.56567383	0.001056426	0.452846399
23.57177734	0.002176184	0.965147302
23.57788086	0.002115675	0.935058917
23.58398438	0.002354789	1.016833895
23.59008789	0.00378612	1.610627317
23.59619141	0.005526517	2.380950288
23.60229492	0.006390069	2.784245472
23.60839844	0.006579623	2.747079409
23.61450195	0.006474732	2.585059191
23.62060547	0.006119436	2.481106988
23.62670898	0.005956563	2.494010219
23.6328125	0.004959417	2.090537267
23.63891602	0.003669255	1.562969679
23.64501953	0.004051068	1.746098632
23.65112305	0.003956598	1.683684744
23.65722656	0.003152414	1.322363732
23.66333008	0.002843262	1.21918708
23.66943359	0.002894325	1.282164954
23.67553711	0.003735174	1.649379352
23.68164063	0.005476068	2.402035878
23.68774414	0.005948624	2.625541305
23.69384766	0.004616467	1.988232859
23.69995117	0.003560958	1.518823227
23.70605469	0.004328934	1.918468307
23.7121582	0.005887004	2.590248214
23.71826172	0.005953292	2.462665297
23.72436523	0.003822754	1.547064443
23.73046875	0.001730617	0.711597095
23.73657227	0.001805212	0.768410298
23.74267578	0.001711802	0.770138103
23.7487793	0.001525778	0.69133205
23.75488281	0.001119131	0.477622806
23.76098633	0.000816753	0.341252904
23.76708984	0.001806086	0.791787749
23.77319336	0.002315889	1.039755957
23.77929688	0.00291512	1.283529554
23.78540039	0.003890011	1.744304054
23.79150391	0.004645382	2.147190743
23.79760742	0.004567944	2.039485599
23.80371094	0.003566528	1.504743245
23.80981445	0.002349989	0.965013675
23.81591797	0.001502377	0.620948798
23.82202148	0.000701251	0.295901621
23.828125	0.001320201	0.555369771
23.83422852	0.002607065	1.07241607
23.84033203	0.00285822	1.173901176
23.84643555	0.001251748	0.528673447
23.85253906	0.00084308	0.362652202
23.85864258	0.001698209	0.707901068
23.86474609	0.001687757	0.691166321
23.87084961	0.001263646	0.534908479
23.87695313	0.000378045	0.156157498
23.88305664	0.001038207	0.405282375
23.88916016	0.002687742	1.094030022
23.89526367	0.003701236	1.578416905
23.90136719	0.002853283	1.190801057
23.9074707	0.001025463	0.434998603
23.91357422	0.000802904	0.342403798
23.91967773	0.001918888	0.775375743
23.92578125	0.002596583	1.045574817
23.93188477	0.002444318	1.003279429
23.93798828	0.003676522	1.479856203
23.9440918	0.005285834	2.138696916
23.95019531	0.0054556	2.221456742
23.95629883	0.005012676	1.978408259
23.96240234	0.005274912	2.068081581
23.96850586	0.006813819	2.67266521
23.97460938	0.008637673	3.321338919
23.98071289	0.008893727	3.5327787
23.98681641	0.008229585	3.398923863
23.99291992	0.008374362	3.295949258
23.99902344	0.00904946	3.438534348
24.00512695	0.00908309	3.61416566
24.01123047	0.008577504	3.478285052
24.01733398	0.008114288	3.180328533
24.0234375	0.007550008	2.895135965
24.02954102	0.00687882	2.664865374
24.03564453	0.006531421	2.585776893
24.04174805	0.006595951	2.573014211
24.04785156	0.007167867	2.734339441
24.05395508	0.00785448	3.11574699
24.06005859	0.007625682	3.09231201
24.06616211	0.006754224	2.602037317
24.07226563	0.005781819	2.23740159
24.07836914	0.004468498	1.859085486
24.08447266	0.003326965	1.396630247
24.09057617	0.003129256	1.271008869
24.09667969	0.003601159	1.489358766
24.1027832	0.004156675	1.759425477
24.10888672	0.004059586	1.679728694
24.11499023	0.002628097	1.083248783
24.12109375	0.000863952	0.370159719

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
19.76	-0.001014194	5.08267E-06	0.001026417	0.230943879	0.000173265	0.018103135
19.765	-0.000966236	4.84712E-06	0.000978822	0.22023506	0.000173501	0.018103135
19.77	-0.000910845	4.57291E-06	0.000923416	0.207768608	0.000173711	0.018103135
19.775	-0.00088878	4.46234E-06	0.000901075	0.202741897	0.000173911	0.018103135
19.78	-0.00091222	4.57709E-06	0.000924263	0.207959182	0.000174121	0.018103135
19.785	-0.00096339	4.83034E-06	0.000975434	0.219472579	0.000174356	0.018104753
19.79	-0.00101047	5.06485E-06	0.001022817	0.230133888	0.000174614	0.018106471
19.795	-0.001030121	5.16457E-06	0.001042964	0.234666901	0.000174882	0.018108573
19.8	-0.001013827	5.08675E-06	0.001027239	0.231128709	0.000175142	0.018112005
19.805	-0.00095301	4.7883E-06	0.000966934	0.217560241	0.000175371	0.018116555
19.81	-0.000849366	4.27636E-06	0.000863498	0.19428694	0.000175553	0.018121222
19.815	-0.000742519	3.74602E-06	0.000756349	0.170178456	0.000175693	0.018124992
19.82	-0.000682616	3.44628E-06	0.000695791	0.156552897	0.000175811	0.018128044
19.825	-0.000678584	3.42315E-06	0.000691119	0.155501856	0.000175927	0.01813153
19.83	-0.000705655	3.55512E-06	0.000717786	0.161501788	0.000176053	0.018135093
19.835	-0.00073723	3.71067E-06	0.000749216	0.168573648	0.00017619	0.018137757
19.84	-0.000752732	3.78748E-06	0.000764735	0.172065368	0.000176333	0.018139816
19.845	-0.000748851	3.76818E-06	0.000760836	0.171188059	0.000176475	0.018141287
19.85	-0.000743204	3.73943E-06	0.000755026	0.169880812	0.000176615	0.018142276
19.855	-0.000749894	3.77127E-06	0.000761461	0.171328707	0.000176757	0.018142992
19.86	-0.000767231	3.85572E-06	0.000778524	0.175167935	0.000176906	0.018143432
19.865	-0.000789032	3.96218E-06	0.000800034	0.180007732	0.000177063	0.0181436
19.87	-0.000816183	4.09475E-06	0.00082682	0.186034595	0.000177231	0.01814394
19.875	-0.000864332	4.33082E-06	0.000874516	0.196766167	0.00017742	0.018144231
19.88	-0.000951604	4.76087E-06	0.000961403	0.21631576	0.000177649	0.018144364
19.885	-0.001070985	5.35143E-06	0.001080707	0.243159137	0.000177939	0.018144379
19.89	-0.001191786	5.95118E-06	0.001201844	0.27041494	0.000178298	0.018144379
19.895	-0.00128352	6.40887E-06	0.001294271	0.291211078	0.000178714	0.018144379
19.9	-0.001326847	6.62791E-06	0.001338487	0.301159605	0.000179159	0.018144379
19.905	-0.001320426	6.60052E-06	0.001332951	0.299913874	0.0001796	0.018144379
19.91	-0.001280308	6.40545E-06	0.001293534	0.291045256	0.000180014	0.018144379
19.915	-0.001220308	6.11098E-06	0.001234034	0.277657706	0.000180391	0.018144379
19.92	-0.001147134	5.75017E-06	0.001161134	0.261255121	0.000180723	0.018144436
19.925	-0.001074073	5.38852E-06	0.001088067	0.244815068	0.000181015	0.018144861
19.93	-0.001020752	5.12318E-06	0.001034459	0.232753329	0.000181278	0.01814522
19.935	-0.001009072	5.06297E-06	0.001022295	0.230016347	0.000181535	0.018150663
19.94	-0.001053953	5.28294E-06	0.001066743	0.240017183	0.000181816	0.01815626
19.945	-0.001138563	5.7013E-06	0.001151274	0.259036709	0.000182144	0.018161858
19.95	-0.001223747	6.12468E-06	0.001236815	0.278283425	0.000182522	0.018166745
19.955	-0.001284766	6.43018E-06	0.001298538	0.292171094	0.000182939	0.018171323
19.96	-0.001305307	6.53673E-06	0.001320064	0.297014416	0.00018337	0.018175907
19.965	-0.001265414	6.34472E-06	0.001281266	0.288284741	0.000183775	0.018180505
19.97	-0.00116741	5.8642E-06	0.001184176	0.266439498	0.000184119	0.018185086
19.975	-0.00103661	5.21969E-06	0.001053958	0.237140587	0.000184391	0.018189625
19.98	-0.000891118	4.50075E-06	0.000908713	0.204460493	0.000184591	0.018194438
19.985	-0.00074064	3.75519E-06	0.0007581	0.170572455	0.00018473	0.018200482
19.99	-0.000606088	3.08609E-06	0.000622941	0.14016168	0.000184823	0.018205753
19.995	-0.000525083	2.67985E-06	0.000540886	0.121699268	0.000184893	0.018211058
20	-0.000525841	2.67772E-06	0.000540459	0.121603374	0.000184963	0.018224435
20.005	-0.000590802	2.99473E-06	0.000604514	0.136015567	0.000185051	0.018237664
20.01	-0.000679493	3.43098E-06	0.000692658	0.155848012	0.000185167	0.018249998
20.015	-0.00077955	3.92494E-06	0.000792459	0.178303171	0.000185321	0.018261505
20.02	-0.000881766	4.43165E-06	0.000894829	0.201336487	0.000185518	0.01827227
20.025	-0.000942051	4.73296E-06	0.0009557	0.21503255	0.000185742	0.018282374
20.03	-0.000932333	4.68804E-06	0.000946623	0.2129901	0.000185962	0.018291998
20.035	-0.000881481	4.43802E-06	0.000896104	0.201623483	0.000186158	0.018305592
20.04	-0.000827965	4.17324E-06	0.000842604	0.18958598	0.000186331	0.018318259
20.045	-0.000789811	3.98329E-06	0.000804226	0.180950802	0.000186489	0.018329961
20.05	-0.000785829	3.96174E-06	0.00079987	0.179970842	0.000186645	0.018340949
20.055	-0.00082222	4.14057E-06	0.000836005	0.188101226	0.000186816	0.01835127
20.06	-0.000866104	4.35814E-06	0.000879967	0.197992571	0.000187005	0.018360944
20.065	-0.000876066	4.40887E-06	0.000890218	0.200299135	0.000187199	0.018369998
20.07	-0.000847786	4.26978E-06	0.000862112	0.193975224	0.000187381	0.018378431
20.075	-0.000816335	4.1136E-06	0.000830555	0.186874934	0.000187549	0.01838621
20.08	-0.000816485	4.11337E-06	0.000830508	0.186864364	0.000187718	0.018396484
20.085	-0.000838677	4.2233E-06	0.000852721	0.191862182	0.000187896	0.018409549
20.09	-0.000846424	4.26287E-06	0.000860716	0.193661118	0.000188077	0.018421846
20.095	-0.000831856	4.19205E-06	0.000846406	0.190441332	0.000188252	0.018435312
20.1	-0.000806386	4.06699E-06	0.000821137	0.184755726	0.000188416	0.018448125
20.105	-0.000766089	3.8681E-06	0.000780951	0.175713877	0.000188564	0.018460786
20.11	-0.000718259	3.6307E-06	0.000732987	0.164922058	0.000188695	0.018476633
20.115	-0.000691306	3.49555E-06	0.000705681	0.15877824	0.000188816	0.018491629
20.12	-0.000687681	3.47598E-06	0.000701727	0.15788868	0.000188935	0.018505856
20.125	-0.000680529	3.43942E-06	0.000694342	0.156226875	0.000189052	0.018519297
20.13	-0.000661501	3.34374E-06	0.00067501	0.151877319	0.000189163	0.018533985
20.135	-0.000652669	3.29781E-06	0.00066573	0.149789273	0.00018927	0.018549945
20.14	-0.000670845	3.3856E-06	0.000683471	0.153780982	0.000189384	0.018565173
20.145	-0.00070225	3.53967E-06	0.000714601	0.160785328	0.000189509	0.018579829
20.15	-0.000731722	3.68449E-06	0.000743864	0.16736929	0.000189644	0.018593943
20.155	-0.000775546	3.90028E-06	0.000787465	0.177179691	0.000189796	0.018607543
20.16	-0.000842024	4.22917E-06	0.000853916	0.192131172	0.000189975	0.018620675
20.165	-0.000896306	4.49936E-06	0.000908504	0.204413356	0.000190178	0.018633404
20.17	-0.000911167	4.57503E-06	0.000923793	0.207853354	0.000190388	0.018645782
20.175	-0.000898157	4.51245E-06	0.000911148	0.20500833	0.000190592	0.018657823
20.18	-0.000866572	4.35768E-06	0.000879875	0.197971929	0.000190782	0.018669585
20.185	-0.000814687	4.10185E-06	0.000828183	0.186341227	0.00019095	0.018681145
20.19	-0.000757519	3.81871E-06	0.000770974	0.173469085	0.000191095	0.01869246
20.195	-0.000717539	3.61969E-06	0.000730763	0.164421702	0.000191225	0.018703485
20.2	-0.000700867	3.53583E-06	0.00071382	0.160609571	0.000191349	0.018716397
20.205	-0.000696512	3.51316E-06	0.000709239	0.159578874	0.000191471	0.018729621
20.21	-0.000697939	3.51901E-06	0.000710421	0.159844823	0.000191595	0.018742362
20.215	-0.000721693	3.63526E-06	0.000733912	0.165130158	0.000191726	0.01875462
20.22	-0.000770877	3.87858E-06	0.000783077	0.176192249	0.000191876	0.018766418
20.225	-0.000797796	4.01364E-06	0.000810366	0.182332445	0.000192037	0.018777801
20.23	-0.000763177	3.84436E-06	0.000776161	0.174636255	0.000192184	0.01878879
20.235	-0.000688936	3.47733E-06	0.000702002	0.157950398	0.000192304	0.018799347
20.24	-0.000606892	3.06974E-06	0.000619655	0.139422292	0.000192398	0.018809393
20.245	-0.000533077	2.7006E-06	0.000545079	0.122642781	0.000192469	0.018818835
20.25	-0.000510949	2.58461E-06	0.000521648	0.117370734	0.000192535	0.018827979
20.255	-0.000593426	2.98539E-06	0.000602629	0.135591494	0.000192624	0.018838206
20.26	-0.00077492	3.87849E-06	0.000783075	0.176191885	0.000192776	0.018847644
20.265	-0.000988887	4.93642E-06	0.000996803	0.224280781	0.000193023	0.018856536
20.27	-0.001168067	5.82574E-06	0.001176452	0.26470175	0.000193368	0.018865171
20.275	-0.001288675	6.42712E-06	0.001297929	0.292033972	0.000193788	0.018873797

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
24.12719727	0.000747213	0.321039777
24.13330078	0.000975471	0.41018481
24.1394043	0.002335217	1.003537708
24.14550781	0.003530165	1.506178122
24.15161133	0.003300031	1.326655967
24.15771484	0.002229882	0.895943938
24.16381836	0.001771665	0.737964661
24.16992188	0.001761444	0.727962947
24.17602539	0.002225233	0.905813149
24.18212891	0.001940722	0.770467742
24.18823242	0.001551366	0.599142793
24.19433594	0.002183435	0.88513488
24.20043945	0.002237901	0.95624122
24.20654297	0.001039255	0.429495929
24.21264648	0.000578575	0.236402643
24.21875	0.000441325	0.185711223
24.22485352	0.002234198	0.935881328
24.23095703	0.004275378	1.782290589
24.23706055	0.004153486	1.76764457
24.24316406	0.002704363	1.164112335
24.24926758	0.001723344	0.737647248
24.25537109	0.001947746	0.82021837
24.26147461	0.003064384	1.277467312
24.26757813	0.003635707	1.534853726
24.27368164	0.003385758	1.460090068
24.27978516	0.002968159	1.292335188
24.28588867	0.002718957	1.170374399
24.29199219	0.002964471	1.269687306
24.2980957	0.003632458	1.574144497
24.30419922	0.004132714	1.76315515
24.31030273	0.004464793	1.876499467
24.31640625	0.004794036	2.071648316
24.32250977	0.004570772	1.989680144
24.32861328	0.003545013	1.487987911
24.3347168	0.002748249	1.118968613
24.34082031	0.002779687	1.117129236
24.34692383	0.003120365	1.278660153
24.35302734	0.003638168	1.561897724
24.35913086	0.003721122	1.639956968
24.36523438	0.002188745	0.96224128
24.37133789	0.002803831	1.23149847
24.37744141	0.003962885	1.728853615
24.38354492	0.003201147	1.384829722
24.38964844	0.001924375	0.839695466
24.39575195	0.001695949	0.748326049
24.40185547	0.002810631	1.246849907
24.40795898	0.003397382	1.564830192
24.4140625	0.003827108	1.844468754
24.42016602	0.003668181	1.737447476
24.42626953	0.003031832	1.389707992
24.43237305	0.003091764	1.439537046
24.43847656	0.003323061	1.54769614
24.44458008	0.003626954	1.64354652
24.45068359	0.003918736	1.811298765
24.45678711	0.003834736	1.83194095
24.46289063	0.003201645	1.52238856
24.46899414	0.002829663	1.355700753
24.47509766	0.003358324	1.623915868
24.48120117	0.003750658	1.765798101
24.48730469	0.003830944	1.77259697
24.4934082	0.004031813	1.86367157
24.49951172	0.003588886	1.642671188
24.50561523	0.002281612	1.034219134
24.51171875	0.000775464	0.343763933
24.51782227	0.000790688	0.340671809
24.52392578	0.001222552	0.526742248
24.5300293	0.001651725	0.726955367
24.53613281	0.002594919	1.167197759
24.54223633	0.003270204	1.462292913
24.54833984	0.002238141	0.966938428
24.55444336	0.001497097	0.656397255
24.56054688	0.00189052	0.879282686
24.56665039	0.001362423	0.622529044
24.57275391	0.000989592	0.425900216
24.57885742	0.001115821	0.47987474
24.58496094	0.000808837	0.35285997
24.59106445	0.001356025	0.593690754
24.59716797	0.002274982	1.015087094
24.60327148	0.00246823	1.082471686
24.609375	0.002411676	1.012781496
24.61547852	0.002022354	0.855930539
24.62158203	0.001938605	0.825601308
24.62768555	0.002976713	1.229559879
24.63378906	0.003653953	1.574479817
24.63989258	0.003222381	1.488328264
24.64599609	0.002557537	1.130454323
24.65209961	0.00273693	1.162854501
24.65820313	0.003418703	1.490017656
24.66430664	0.004158869	1.801445393
24.67041016	0.004508008	1.97230576
24.67651367	0.003903116	1.788513109
24.68261719	0.002985561	1.329475494
24.6887207	0.00308686	1.322426027
24.69482422	0.003847354	1.692396873
24.70092773	0.004310503	1.931784372
24.70703125	0.00495634	2.23112037
24.71313477	0.005664024	2.573761602
24.71923828	0.005494592	2.472966129
24.7253418	0.004990013	2.254425917
24.73144531	0.005408889	2.497289105
24.73754883	0.006768704	3.16833317
24.74365234	0.007443103	3.527197546
24.74975586	0.006979274	3.270453145
24.75585938	0.005636437	2.637883275

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
20.28	-0.001353698	6.75442E-06	0.001364022	0.306904934	0.000194251	0.018882581
20.285	-0.001356423	6.77369E-06	0.001367906	0.307778751	0.000194716	0.01889161
20.29	-0.001298935	6.49372E-06	0.001311334	0.295050242	0.000195142	0.018900886
20.295	-0.001223075	6.12052E-06	0.001235928	0.278083784	0.000195521	0.01891033
20.3	-0.001170285	5.86002E-06	0.001183296	0.266241536	0.000195867	0.018919838
20.305	-0.001139802	5.7097E-06	0.001152926	0.259408241	0.000196195	0.018929334
20.31	-0.001122275	5.62357E-06	0.001135523	0.255492761	0.000196513	0.018938768
20.315	-0.001118775	5.60742E-06	0.00113226	0.254758584	0.00019683	0.018948116
20.32	-0.001102446	5.5291E-06	0.001116437	0.251198353	0.000197137	0.018957379
20.325	-0.001031117	5.17894E-06	0.001045693	0.235280935	0.000197406	0.018966592
20.33	-0.000911096	4.58596E-06	0.000925898	0.208327032	0.000197615	0.018976268
20.335	-0.000792914	3.99944E-06	0.000807413	0.181667919	0.000197774	0.018986489
20.34	-0.000713262	3.60191E-06	0.000727111	0.163599945	0.000197903	0.018996156
20.345	-0.000676893	3.41806E-06	0.000689972	0.155243789	0.000198019	0.019005146
20.35	-0.000675579	3.40783E-06	0.000687907	0.154779082	0.000198134	0.019013401
20.355	-0.000699444	3.52285E-06	0.000711149	0.160008568	0.000198258	0.019020911
20.36	-0.000729031	3.66726E-06	0.000740328	0.166573837	0.000198392	0.019027704
20.365	-0.000736043	3.7006E-06	0.000747065	0.168089561	0.000198529	0.019033816
20.37	-0.00071902	3.61421E-06	0.000729609	0.164162077	0.00019866	0.019039378
20.375	-0.000715823	3.59485E-06	0.000725696	0.163281634	0.000198789	0.019044588
20.38	-0.000753328	3.77651E-06	0.000762403	0.171540686	0.000198933	0.019049475
20.385	-0.000823894	4.12224E-06	0.000832257	0.187257834	0.000199104	0.019054067
20.39	-0.00092553	4.62212E-06	0.000933255	0.209982398	0.000199321	0.01905844
20.395	-0.001073719	5.35339E-06	0.001080994	0.243223539	0.000199612	0.01906274
20.4	-0.001258135	6.26659E-06	0.001265471	0.284731	0.000200012	0.01906704
20.405	-0.001425123	7.09692E-06	0.001433152	0.322459158	0.000200525	0.019071632
20.41	-0.001525941	7.60196E-06	0.001535082	0.345393418	0.000201114	0.019076673
20.415	-0.001555432	7.7546E-06	0.001565886	0.352324414	0.000201725	0.01908193
20.42	-0.001515069	7.56151E-06	0.00152687	0.343545665	0.000202305	0.019087422
20.425	-0.001390216	6.94904E-06	0.001403118	0.315701637	0.000202794	0.019093253
20.43	-0.001209756	6.05774E-06	0.001223045	0.275185199	0.000203164	0.019099949
20.435	-0.001060082	5.3147E-06	0.001072935	0.241410381	0.000203448	0.019106533
20.44	-0.000996876	4.99792E-06	0.001008942	0.227012013	0.000203699	0.01911419
20.445	-0.001000896	5.01461E-06	0.001012316	0.227771109	0.000203952	0.019121268
20.45	-0.001030284	5.15819E-06	0.001041328	0.234298742	0.00020422	0.019130002
20.455	-0.001059214	5.30066E-06	0.001070115	0.240775951	0.000204504	0.019139825
20.46	-0.0010625	5.31709E-06	0.001073435	0.241522872	0.000204789	0.019151649
20.465	-0.001018196	5.09756E-06	0.001029076	0.231542209	0.000205051	0.019163596
20.47	-0.000953596	4.77514E-06	0.00096394	0.216886477	0.000205281	0.019174893
20.475	-0.000945327	4.72904E-06	0.000954629	0.214791576	0.000205507	0.019185956
20.48	-0.001032239	5.15436E-06	0.001040569	0.234128058	0.000205776	0.019196622
20.485	-0.001169828	5.8332E-06	0.001177725	0.264988231	0.000206122	0.019206878
20.49	-0.001304327	6.49903E-06	0.001312244	0.295254863	0.000206552	0.019217107
20.495	-0.001432492	7.13479E-06	0.00144068	0.324153077	0.000207071	0.019227489
20.5	-0.001556407	7.75114E-06	0.001565187	0.352167149	0.000207683	0.019238162
20.505	-0.001646498	8.2018E-06	0.001656135	0.372630468	0.000208368	0.019249254
20.51	-0.001683886	8.3922E-06	0.001694557	0.381275284	0.000209085	0.019260857
20.515	-0.001681848	8.38728E-06	0.001693558	0.381050497	0.0002098	0.019273011
20.52	-0.00164216	8.196E-06	0.001654908	0.372354198	0.000210481	0.019285709
20.525	-0.001547519	7.73202E-06	0.001561159	0.351260778	0.000211087	0.019299515
20.53	-0.00141471	7.07666E-06	0.00142875	0.321468695	0.000211592	0.019314828
20.535	-0.001301155	6.51372E-06	0.001315018	0.295879117	0.00021202	0.019330703
20.54	-0.001241601	6.21678E-06	0.00125503	0.282381792	0.00021241	0.019347152
20.545	-0.001220715	6.11141E-06	0.001233745	0.277592552	0.000212787	0.019363355
20.55	-0.001219925	6.1058E-06	0.001232611	0.277337491	0.000213163	0.019388219
20.555	-0.00124342	6.22091E-06	0.00125587	0.28257084	0.000213554	0.019418349
20.56	-0.00127856	6.39518E-06	0.001291083	0.290493713	0.000213967	0.019448248
20.565	-0.001286371	6.43568E-06	0.001299266	0.292334938	0.000214385	0.019483219
20.57	-0.001252635	6.27066E-06	0.001265922	0.284832533	0.000214781	0.019525224
20.575	-0.001194089	5.98216E-06	0.001207635	0.271717877	0.000215142	0.019570335
20.58	-0.001117	5.60108E-06	0.001130653	0.25439692	0.000215457	0.019619574
20.585	-0.00102498	5.14452E-06	0.001038426	0.233645956	0.000215723	0.019672396
20.59	-0.000951577	4.77777E-06	0.00096433	0.216974318	0.000215952	0.019724835
20.595	-0.000947706	4.75321E-06	0.000959386	0.215861757	0.000216179	0.019775727
20.6	-0.001040575	5.2079E-06	0.00105126	0.236533436	0.000216452	0.019825062
20.605	-0.001203043	6.01E-06	0.001213318	0.272996597	0.000216818	0.019873794
20.61	-0.001367939	6.82802E-06	0.001378581	0.310180741	0.000217291	0.019921898
20.615	-0.00147699	7.37274E-06	0.001488622	0.33493987	0.000217842	0.019970823
20.62	-0.001496568	7.47616E-06	0.001509513	0.339640374	0.000218408	0.020024544
20.625	-0.001415499	7.08072E-06	0.001429612	0.321662603	0.000218915	0.020078911
20.63	-0.001271306	6.36975E-06	0.001285962	0.289341447	0.000219323	0.020134223
20.635	-0.001137996	5.709E-06	0.00115247	0.259305743	0.000219651	0.020191462
20.64	-0.001060064	5.32028E-06	0.001073939	0.241636336	0.000219935	0.020255204
20.645	-0.001037239	5.20371E-06	0.00105039	0.236337786	0.000220207	0.020317767
20.65	-0.001063694	5.33121E-06	0.001076153	0.242134315	0.000220492	0.020382884
20.655	-0.001133348	5.67365E-06	0.001145346	0.257702818	0.000220817	0.020446839
20.66	-0.001215853	6.08181E-06	0.001227814	0.276258153	0.000221191	0.020509967
20.665	-0.001267571	6.33934E-06	0.001279845	0.287965196	0.000221597	0.020580123
20.67	-0.001273645	6.37109E-06	0.001286259	0.289408347	0.000222007	0.020653192
20.675	-0.00125938	6.30115E-06	0.001272126	0.286228423	0.000222408	0.020725857
20.68	-0.001257067	6.28949E-06	0.00126977	0.285698336	0.000222807	0.02079801
20.685	-0.001280876	6.40706E-06	0.001293526	0.29104338	0.000223222	0.020869599
20.69	-0.001330519	6.65328E-06	0.001343273	0.302236327	0.000223669	0.020940709
20.695	-0.001390679	6.95331E-06	0.001403886	0.315874361	0.000224158	0.021011561
20.7	-0.001419256	7.09931E-06	0.001433383	0.322511093	0.000224667	0.021082416
20.705	-0.001363991	6.8315E-06	0.001379268	0.310335246	0.000225137	0.021153358
20.71	-0.001216821	6.10722E-06	0.001232928	0.27740869	0.000225511	0.021224034
20.715	-0.001031693	5.19158E-06	0.001047938	0.235786159	0.0002578	0.021293629
20.72	-0.000867595	4.37684E-06	0.000883361	0.198756124	0.000225971	0.021361125
20.725	-0.000751304	3.79654E-06	0.00076615	0.172383643	0.000226113	0.021425604
20.73	-0.000704619	3.55933E-06	0.00071824	0.161604044	0.000226239	0.021486507
20.735	-0.000746651	3.76143E-06	0.000759078	0.170792474	0.0002638	0.021544097
20.74	-0.00085469	4.29264E-06	0.000866409	0.194941986	0.000226564	0.021598831
20.745	-0.000965657	4.841151E-06	0.000977304	0.219893484	0.0002268	0.021651177
20.75	-0.001031171	5.16722E-06	0.001043108	0.234699256	0.000227069	0.021701598
20.755	-0.0010557	5.29008E-06	0.00106793	0.240284165	0.000227351	0.02175039
20.76	-0.001064011	5.33232E-06	0.001076462	0.242204	0.000227637	0.021797705
20.765	-0.001055259	5.2899E-06	0.00106789	0.240275297	0.000227918	0.021843721
20.77	-0.001029119	5.1605E-06	0.001041744	0.234392496	0.000228186	0.021888637
20.775	-0.001014486	5.08688E-06	0.001026869	0.231045436	0.000228446	0.021932355
20.78	-0.001025384	5.13955E-06	0.001037511	0.233439949	0.000228712	0.021974813
20.785	-0.001041277	5.21752E-06	0.001053266	0.236984749	0.000228986	0.02201603
20.79	-0.001052942	5.27469E-06	0.001064817	0.23958384	0.000229266	0.022056048
20.795	-0.00107359	5.37643E-06	0.001085373	0.244209035	0.000229557	0.022094902

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
24.76196289	0.003503874	1.768191752
24.76806641	0.00239046	1.295535333
24.77416992	0.003928726	2.069594515
24.78027344	0.004800982	2.393391226
24.78637695	0.004054481	1.996951505
24.79248047	0.002613641	1.304975099
24.79858398	0.001827984	0.932388924
24.8046875	0.00182699	0.953923572
24.81079102	0.001450027	0.763632225
24.81689453	0.000752141	0.395695016
24.82299805	0.000704203	0.37489897
24.82910156	0.00204312	1.089744127
24.83520508	0.002319846	1.193221317
24.84130859	0.000754592	0.380378671
24.84741211	0.001281394	0.665715726
24.85351563	0.000884004	0.470500739
24.85961914	0.000889758	0.456974067
24.86572266	0.001629532	0.799300037
24.87182617	0.001566599	0.766852496
24.87792969	0.001389472	0.68194714
24.8840332	0.000911408	0.447809929
24.89013672	0.00088368	0.455462809
24.89624023	0.000935288	0.494068213
24.90234375	0.001039014	0.511924599
24.90844727	0.000818632	0.376801811
24.91455078	3.94528E-05	0.018107928
24.9206543	0.000938623	0.444606925
24.92675781	0.001388447	0.664997071
24.93286133	0.002249361	1.042622408
24.93896484	0.003615868	1.665389116
24.94506836	0.004666088	2.251387888
24.95117188	0.004867523	2.357908448
24.95727539	0.004809627	2.244036433
24.96337891	0.004928138	2.371083162
24.96948242	0.004918436	2.535838233
24.97558594	0.004926825	2.538885651
24.98168945	0.005491664	2.72960149
24.98779297	0.006056656	2.96609439
24.99389648	0.005620857	2.744558455
25	0.004683957	2.292381287
25.00610352	0.004583464	2.232035257
25.01220703	0.004379148	2.095681404
25.01831055	0.003515844	1.684254071
25.02441406	0.003255992	1.567565066
25.03051758	0.004199448	1.962143259
25.03662109	0.005760081	2.632235039
25.04272461	0.006913166	3.283211054
25.04882813	0.006986648	3.51254973
25.05493164	0.006596667	3.307834997
25.06103516	0.007001353	3.397986278
25.06713867	0.00778931	3.868639037
25.07324219	0.007838505	4.055276467
25.0793457	0.007049827	3.553719839
25.08544922	0.006559949	3.246095487
25.09155273	0.006138124	3.164355728
25.09765625	0.004832496	2.522605649
25.10375977	0.003453879	1.75283745
25.10986328	0.00334314	1.676992618
25.1159668	0.00409449	2.056701536
25.12207031	0.004202982	2.156292063
25.12817383	0.003395977	1.815625143
25.13427734	0.00259252	1.393158287
25.14038086	0.002745644	1.448505169
25.14648438	0.003607149	1.924804447
25.15258789	0.004003135	2.172403565
25.15869141	0.003557356	1.916074582
25.16479492	0.003113737	1.671746951
25.17089844	0.003225679	1.761298999
25.17700195	0.003900314	2.154411649
25.18310547	0.004497987	2.444465658
25.18920898	0.004266541	2.270505636
25.1953125	0.003696832	1.997536736
25.20141602	0.003574505	1.946673257
25.20751953	0.002684803	1.393227054
25.21362305	0.002047418	1.070479256
25.21972656	0.001733377	0.989922121
25.22583008	0.001215326	0.678748319
25.23193359	0.001973433	1.009590093
25.23803711	0.002370049	1.241203778
25.24414063	0.00319075	1.693453501
25.25024414	0.003988248	2.022899366
25.25634766	0.004300415	2.27461968
25.26245117	0.00424562	2.351926828
25.26855469	0.004501801	2.355072208
25.2746582	0.00560505	2.866331245
25.28076172	0.006473271	3.365325585
25.28686523	0.006010258	3.130529623
25.29296875	0.005075682	2.684809358
25.29907227	0.004936566	2.612396965
25.30517578	0.004888521	2.583577612
25.3112793	0.004526347	2.46062244
25.31738281	0.004600673	2.49995642
25.32348633	0.005544566	3.039333628
25.32958984	0.006742725	3.772388684
25.33569336	0.007365564	3.899277582
25.34179688	0.006995017	3.620817806
25.34790039	0.005716261	3.065888546
25.35400391	0.004633666	2.41322576
25.36010742	0.004714263	2.472349693
25.36621094	0.005228618	2.925017431
25.37231445	0.005105626	2.785440499
25.37841797	0.004585573	2.434135526
25.38452148	0.004272299	2.308104079
25.390625	0.003836738	2.043076234

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
20.8	-0.001100518	5.51012E-06	0.001112382	0.250285961	0.000229863	0.022132749
20.805	-0.001106443	5.54075E-06	0.00111857	0.251678262	0.000230173	0.022169758
20.81	-0.001080384	5.41269E-06	0.001092694	0.245856189	0.000230468	0.022205936
20.815	-0.001051079	5.26724E-06	0.001063304	0.239243351	0.000230747	0.022241196
20.82	-0.001046256	5.24221E-06	0.001058247	0.238105607	0.000231024	0.022275443
20.825	-0.001062418	5.32109E-06	0.001074185	0.241691694	0.000231309	0.022308651
20.83	-0.001093824	5.47565E-06	0.001105415	0.248718409	0.000231611	0.022340863
20.835	-0.001136769	5.68806E-06	0.00114833	0.258374232	0.000231938	0.022372175
20.84	-0.001168693	5.84695E-06	0.001180429	0.265596433	0.000232283	0.022402763
20.845	-0.001177567	5.89202E-06	0.001189534	0.267645196	0.000232634	0.022432802
20.85	-0.001180516	5.90761E-06	0.001192682	0.268353399	0.000232986	0.022462317
20.855	-0.001185095	5.93163E-06	0.001197535	0.269445334	0.000233341	0.022491314
20.86	-0.001173876	5.87812E-06	0.001186723	0.267012678	0.000233689	0.022523491
20.865	-0.001129484	5.66045E-06	0.00114274	0.257116544	0.000234011	0.022555434
20.87	-0.001054681	5.29119E-06	0.001068131	0.240329384	0.000234293	0.02258657
20.875	-0.000975361	4.89787E-06	0.000988661	0.22244879	0.000234533	0.022616653
20.88	-0.000916405	4.60407E-06	0.000929303	0.209093082	0.000234745	0.022645432
20.885	-0.000881285	4.42765E-06	0.00089366	0.201073604	0.000234942	0.022672885
20.89	-0.000872446	4.38092E-06	0.000884219	0.198949294	0.000235134	0.022698949
20.895	-0.000899488	4.51193E-06	0.000910692	0.20490568	0.000235338	0.022723597
20.9	-0.000953844	4.77916E-06	0.000964689	0.217054935	0.000235568	0.022746928
20.905	-0.001011971	5.0662E-06	0.001022684	0.230103913	0.000235827	0.022769188
20.91	-0.001063746	5.32232E-06	0.001074433	0.24174741	0.000236113	0.022790629
20.915	-0.001117019	5.58602E-06	0.001127711	0.253734923	0.000236429	0.022811395
20.92	-0.001181142	5.90384E-06	0.00119192	0.268182044	0.000236781	0.022831609
20.925	-0.001251017	6.25106E-06	0.001262065	0.283964546	0.000237177	0.022851416
20.93	-0.001310511	6.54797E-06	0.001322042	0.297459539	0.000237611	0.022870971
20.935	-0.001348517	6.73941E-06	0.001360713	0.306160478	0.00023807	0.022890405
20.94	-0.00135151	6.75834E-06	0.001364535	0.307020333	0.000238532	0.0229098
20.945	-0.001297716	6.4963E-06	0.001311587	0.295107097	0.000238958	0.02292915
20.95	-0.001189146	5.96171E-06	0.001203572	0.270803775	0.000239315	0.022948326
20.955	-0.001061896	5.33219E-06	0.001076386	0.242186922	0.0002396	0.022967075
20.96	-0.000952805	4.79018E-06	0.000966885	0.217549211	0.000239829	0.022985104
20.965	-0.000891402	4.48223E-06	0.000904672	0.203551285	0.00024003	0.023002159
20.97	-0.000907922	4.55904E-06	0.000920195	0.207043768	0.000240239	0.023018101
20.975	-0.001005994	5.04071E-06	0.001017518	0.228941578	0.000240494	0.023032994
20.98	-0.001143292	5.71954E-06	0.001154672	0.259801292	0.000240825	0.023047145
20.985	-0.001260123	6.30033E-06	0.001272008	0.286201841	0.000241226	0.0230609
20.99	-0.001312475	6.56415E-06	0.001325306	0.298193895	0.000241661	0.023074468
20.995	-0.001281733	6.41712E-06	0.001295596	0.291509175	0.000242077	0.023087934
21	-0.001179966	5.91699E-06	0.001194544	0.268772372	0.000242429	0.023101243
21.005	-0.001049891	5.27378E-06	0.001064589	0.239532474	0.000242707	0.023114226
21.01	-0.000947929	4.76656E-06	0.000962115	0.21647577	0.000242934	0.023126699
21.015	-0.000923084	4.6391E-06	0.000936364	0.210681956	0.00024315	0.023138643
21.02	-0.000992766	4.97999E-06	0.001005245	0.226180199	0.000243399	0.023150224
21.025	-0.001121111	5.61415E-06	0.001133376	0.255009668	0.000243716	0.023161487
21.03	-0.001240888	6.20954E-06	0.001253666	0.282074814	0.000244106	0.023172372
21.035	-0.001297901	6.49702E-06	0.001311744	0.295142308	0.000244531	0.023183073
21.04	-0.001258737	6.30947E-06	0.001273848	0.286615786	0.000244932	0.023193678
21.045	-0.001120637	5.6307E-06	0.001136702	0.255757984	0.000245249	0.023204116
21.05	-0.000935828	4.71704E-06	0.00095211	0.214224664	0.000245471	0.023214168
21.055	-0.000777655	3.93146E-06	0.000793411	0.17851743	0.000245623	0.023223643
21.06	-0.000689596	3.49064E-06	0.000704367	0.158482636	0.000245744	0.023232345
21.065	-0.000685203	3.46347E-06	0.000698882	0.157248453	0.000245862	0.02324022
21.07	-0.000748049	3.77046E-06	0.000760913	0.171205446	0.000246004	0.023247297
21.075	-0.000833916	4.1936E-06	0.000846408	0.19044191	0.000246179	0.023253649
21.08	-0.000909081	4.56542E-06	0.000921533	0.207344898	0.000246388	0.023259428
21.085	-0.000964645	4.84117E-06	0.000977244	0.219879841	0.000246623	0.023264788
21.09	-0.00099842	5.00963E-06	0.001011277	0.227537373	0.000246875	0.02326978
21.095	-0.001007503	5.05619E-06	0.001020683	0.229653694	0.000247132	0.023274434
21.1	-0.000982982	4.93642E-06	0.000996483	0.224208609	0.000247376	0.023278759
21.105	-0.000922291	4.63665E-06	0.000935912	0.210580188	0.000247591	0.023282729
21.11	-0.000854019	4.29738E-06	0.000867363	0.195156716	0.000247775	0.023286291
21.115	-0.000820536	4.12858E-06	0.000833258	0.187482945	0.000247946	0.023289384
21.12	-0.000846813	4.25511E-06	0.000858825	0.193235623	0.000248127	0.023291979
21.125	-0.000932065	4.67488E-06	0.000943641	0.212319252	0.000248346	0.023294101
21.13	-0.0010371	5.19554E-06	0.001048835	0.23598797	0.000248618	0.023295913
21.135	-0.001094848	5.48506E-06	0.001107325	0.249148196	0.000248921	0.023297546
21.14	-0.001063821	5.33595E-06	0.001077197	0.24236943	0.000249207	0.023299032
21.145	-0.00095985	4.82398E-06	0.000973752	0.219094138	0.00024944	0.023300353
21.15	-0.000840295	4.23163E-06	0.000854072	0.192166101	0.000249619	0.023301447
21.155	-0.000767769	3.86926E-06	0.000780861	0.175693742	0.000249768	0.023302368
21.16	-0.000773352	3.89255E-06	0.000785568	0.176752871	0.000249919	0.023303135
21.165	-0.000846273	4.25013E-06	0.000857821	0.193009686	0.0002501	0.023303747
21.17	-0.00095	4.76243E-06	0.000961329	0.21629905	0.000250328	0.023304228
21.175	-0.001037833	5.19849E-06	0.00104943	0.236121639	0.0002506	0.023304608
21.18	-0.001072997	5.37526E-06	0.001085144	0.244157299	0.000250891	0.023304914
21.185	-0.001053149	5.27956E-06	0.001065806	0.239806283	0.000251171	0.023305156
21.19	-0.001006027	5.04776E-06	0.001018968	0.229267722	0.000251427	0.02330533
21.195	-0.000956165	4.80146E-06	0.000969204	0.218070877	0.000251658	0.023305421
21.2	-0.00090628	4.55451E-06	0.000919307	0.206844019	0.000251866	0.023305431
21.205	-0.000851616	4.28318E-06	0.000864488	0.194509727	0.000252049	0.023305431
21.21	-0.000799422	4.02293E-06	0.000811906	0.182678922	0.000252211	0.023305431
21.215	-0.000769753	3.87294E-06	0.000781603	0.17586077	0.00025236	0.023305431
21.22	-0.000782004	3.92989E-06	0.000793112	0.178450283	0.000252515	0.023305431
21.225	-0.00083633	4.19576E-06	0.000846833	0.190537356	0.000252692	0.023305431
21.23	-0.000907511	4.54646E-06	0.000917693	0.206480944	0.0002529	0.023305431
21.235	-0.000970341	4.85685E-06	0.000980407	0.220591506	0.000253138	0.023305431
21.24	-0.001026528	5.13461E-06	0.001036523	0.23321768	0.000253404	0.023305431
21.245	-0.00109066	5.4519E-06	0.001100628	0.247641209	0.000253705	0.023305431
21.25	-0.001163161	5.81141E-06	0.001173255	0.26398227	0.000254047	0.023305431
21.255	-0.001230636	6.14717E-06	0.001241083	0.279243618	0.00025443	0.023305431
21.26	-0.001275962	6.37443E-06	0.001286989	0.289572601	0.000254841	0.023305431
21.265	-0.001286104	6.42822E-06	0.001297855	0.292017486	0.000255259	0.023305431
21.27	-0.00126186	6.31198E-06	0.001274369	0.286733008	0.000255662	0.023305431
21.275	-0.001206075	6.03969E-06	0.00121935	0.274353709	0.000256029	0.023305431
21.28	-0.00110536	5.54479E-06	0.001119355	0.251854854	0.000256338	0.023305431
21.285	-0.000951533	4.78545E-06	0.000965941	0.217336777	0.000256567	0.023305431
21.29	-0.000769384	3.88281E-06	0.00078359	0.176307749	0.000256716	0.023305431
21.295	-0.000607608	3.0772E-06	0.000620865	0.139694613	0.00025681	0.023305431
21.3	-0.000523671	2.6535E-06	0.000535293	0.120441014	0.000256879	0.023305431
21.305	-0.000566231	2.85456E-06	0.000575922	0.12958236	0.00025696	0.023305431
21.31	-0.0007373	3.6936E-06	0.000745449	0.167725993	0.000257097	0.023305431
21.315	-0.000980449	4.89385E-06	0.000987934	0.222285119	0.00025734	0.023305431

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
25.39672852	0.002999958	1.634824886
25.40283203	0.001921453	1.094214809
25.40893555	0.002465607	1.400811952
25.41503906	0.003843016	2.272766422
25.42114258	0.003978865	2.407789773
25.42724609	0.002942234	1.69813295
25.43334961	0.002251461	1.307950385
25.43945313	0.0026908	1.584084809
25.44555664	0.003020782	1.741160317
25.45166016	0.002620984	1.582825541
25.45776367	0.001586751	0.992912347
25.46386719	0.000568191	0.334613555
25.4699707	0.000651694	0.378411263
25.47607422	0.002315581	1.396728952
25.48217773	0.003452364	2.024268343
25.48828125	0.003948998	2.259054785
25.49438477	0.004252385	2.504692762
25.50048828	0.00410206	2.370965612
25.5065918	0.003260416	1.815915757
25.51269531	0.002680753	1.524507877
25.51879883	0.003460651	1.957416931
25.52490234	0.00449046	2.458652551
25.53100586	0.004316114	2.420806444
25.53710938	0.00248092	1.43952082
25.54321289	0.000788901	0.456942316
25.54931641	0.001856156	1.042022983
25.55541992	0.002198542	1.16593831
25.56152344	0.001544122	0.808805268
25.56762695	0.000742661	0.404439094
25.57373047	0.000625098	0.341722803
25.57983398	0.00051697	0.272170828
25.5859375	0.001823851	0.934796757
25.59204102	0.00326515	1.705432304
25.59814453	0.003577451	1.917359932
25.60424805	0.00384637	2.029100294
25.61035156	0.00402348	2.187383962
25.61645508	0.003496149	2.071642133
25.62255859	0.003077733	1.819119829
25.62866211	0.003860971	2.163623309
25.63476563	0.004619658	2.516408677
25.64086914	0.004341293	2.323503826
25.64697266	0.003345809	1.845988581
25.65307617	0.002422515	1.374612896
25.65917969	0.00190955	1.045108341
25.6652832	0.001567337	0.846169211
25.67138672	0.000673669	0.370968603
25.67749023	0.001304326	0.722272632
25.68359375	0.002796575	1.560697506
25.68969727	0.003367523	1.901785408
25.69580078	0.003240065	1.844499116
25.7019043	0.003422671	1.939613686
25.70800781	0.004100293	2.271039836
25.71411133	0.004297659	2.420168959
25.72021484	0.003652736	2.196733933
25.72631836	0.003718437	2.337943215
25.73242188	0.004029645	2.509567164
25.73852539	0.003490169	2.114660672
25.74462891	0.002254187	1.371672103
25.75073242	0.000334846	0.206589035
25.75683594	0.001982192	1.213584812
25.76293945	0.00343871	2.149407701
25.76904297	0.003274397	2.171447296
25.77514648	0.002118468	1.452810606
25.78125	0.001129025	0.765891217
25.78735352	0.00097746	0.651448252
25.79345703	0.001770978	1.200089909
25.79956055	0.002732547	1.902356785
25.80566406	0.003224111	2.239892348
25.81176758	0.003240369	2.286941957
25.81787109	0.002902872	2.121112755
25.82397461	0.002267738	1.659048139
25.83007813	0.002054417	1.456652063
25.83618164	0.00256466	1.761537628
25.84228516	0.003004769	2.051937256
25.84838867	0.002892421	1.991397773
25.85449219	0.002247336	1.569063134
25.8605957	0.001666154	1.1861102
25.86669922	0.000948615	0.646613475
25.87280273	0.001721628	1.11047434
25.87890625	0.002153373	1.424113385
25.88500977	0.001934786	1.335358384
25.89111328	0.0014693	1.019617976
25.8972168	0.000947801	0.661311298
25.90332031	0.000604525	0.406424234
25.90942383	0.001393918	0.924408257
25.91552734	0.003206873	2.262047306
25.92163086	0.004138724	2.909428126
25.92773438	0.003474997	2.317463688
25.93383789	0.001818385	1.244884535
25.93994141	0.001046369	0.721786051
25.94604492	0.00178985	1.171745804
25.95214844	0.003003878	2.002029803
25.95825195	0.003863417	2.698370112
25.96435547	0.004119373	2.80189413
25.97045898	0.003759347	2.516096451
25.9765625	0.002781424	1.951222671
25.98266602	0.002485668	1.802970329
25.98876953	0.002848786	2.073092608
25.99487305	0.002361189	1.720069775
26.00097656	0.001854447	1.315082182
26.00708008	0.002183545	1.511707383
26.01318359	0.002578673	1.830062963
26.01928711	0.002225707	1.63648553
26.02539063	0.002075073	1.522974383

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
21.32	-0.001216682	6.06489E-06	0.001224492	0.275510599	0.000257715	0.023305431
21.325	-0.001378514	6.87162E-06	0.001387442	0.312174478	0.000258195	0.023305431
21.33	-0.001423614	7.10229E-06	0.001434033	0.32265735	0.000258707	0.023305431
21.335	-0.001349239	6.74038E-06	0.001360905	0.306203662	0.000259167	0.023305431
21.34	-0.001203581	6.02183E-06	0.001215724	0.273537886	0.000259533	0.023305431
21.345	-0.001070695	5.36191E-06	0.001082398	0.243539622	0.000259823	0.023305431
21.35	-0.00102458	5.12859E-06	0.001035262	0.232934005	0.000260088	0.023305431
21.355	-0.001084024	5.41792E-06	0.001093724	0.246087928	0.000260385	0.023305431
21.36	-0.001211541	6.04676E-06	0.001220782	0.274675868	0.000260756	0.023305431
21.365	-0.001350998	6.7381E-06	0.001360457	0.306102903	0.000261218	0.023305431
21.37	-0.001450552	7.23502E-06	0.001460842	0.32868934	0.000261749	0.023305621
21.375	-0.001466912	7.32173E-06	0.001478353	0.3326295	0.000262293	0.023306464
21.38	-0.00139706	6.98066E-06	0.001409425	0.317120724	0.000262787	0.023308355
21.385	-0.001299764	6.50064E-06	0.001312448	0.295300836	0.000263214	0.023310158
21.39	-0.001240027	6.20432E-06	0.001252579	0.281830328	0.000263602	0.023311806
21.395	-0.001231544	6.1613E-06	0.001243888	0.279874762	0.000263986	0.02331325
21.4	-0.001259253	6.2981E-06	0.001271531	0.286094581	0.000264386	0.023314475
21.405	-0.001306804	6.53457E-06	0.00131931	0.29684485	0.000264818	0.02331641
21.41	-0.001338714	6.69567E-06	0.001351862	0.304168991	0.000265271	0.023319285
21.415	-0.001308531	6.55069E-06	0.001322566	0.297577444	0.000265704	0.023322
21.42	-0.001202885	6.0314E-06	0.001217644	0.273969953	0.000266069	0.023324518
21.425	-0.001048427	5.26811E-06	0.001063438	0.23927347	0.000266347	0.023326759
21.43	-0.000883906	4.45189E-06	0.000898552	0.202174235	0.000266545	0.023328617
21.435	-0.000754317	3.80535E-06	0.00076795	0.172788682	0.000266688	0.023329982
21.44	-0.000710387	3.58048E-06	0.000722528	0.162568749	0.000266816	0.023330929
21.445	-0.000777144	3.90349E-06	0.000787795	0.177253882	0.000266969	0.02333157
21.45	-0.000929473	4.6526E-06	0.000939151	0.211308895	0.000267187	0.023331924
21.455	-0.001104394	5.51737E-06	0.001113862	0.250618859	0.000267495	0.023332036
21.46	-0.001237177	6.17668E-06	0.001247054	0.280587071	0.000267882	0.023332036
21.465	-0.001306637	6.52366E-06	0.001317146	0.296357834	0.000268314	0.023332188
21.47	-0.001334139	6.6628E-06	0.001345253	0.302681893	0.000268763	0.023332387
21.475	-0.001335836	6.67371E-06	0.001347457	0.303177854	0.000269214	0.023332524
21.48	-0.001327996	6.63626E-06	0.001339889	0.30147513	0.00026966	0.0233326
21.485	-0.001350429	6.74764E-06	0.001362391	0.306537919	0.000270121	0.023332615
21.49	-0.001416442	7.0755E-06	0.001428618	0.321439045	0.000270628	0.023332615
21.495	-0.001488073	7.43221E-06	0.001500872	0.33769621	0.000271188	0.023332615
21.5	-0.001525936	7.62553E-06	0.001539715	0.346435887	0.000271776	0.023332615
21.505	-0.00150801	7.54269E-06	0.001522975	0.342669434	0.000272351	0.023332615
21.51	-0.00142078	7.11665E-06	0.001436891	0.323300447	0.000272861	0.023332615
21.515	-0.001271754	6.38304E-06	0.00128867	0.289950682	0.00027327	0.023332822
21.52	-0.001095944	5.51391E-06	0.001113081	0.250443181	0.000273574	0.023333198
21.525	-0.000945454	4.76712E-06	0.000962219	0.216499357	0.0002738	0.023333366
21.53	-0.000853813	4.31014E-06	0.000869909	0.19572942	0.000273984	0.023333366
21.535	-0.000808591	4.08293E-06	0.000824014	0.185403235	0.000274149	0.023333366
21.54	-0.000793017	4.00258E-06	0.000807784	0.18175145	0.000274308	0.023333366
21.545	-0.000814413	4.10556E-06	0.000828593	0.18643335	0.000274476	0.023333566
21.55	-0.000862834	4.34357E-06	0.000876684	0.197253941	0.000274664	0.023335825
21.555	-0.000908444	4.56887E-06	0.000922206	0.207496425	0.000274872	0.023337892
21.56	-0.000944306	4.74617E-06	0.00095803	0.21555686	0.000275098	0.023339778
21.565	-0.000984392	4.94431E-06	0.000998062	0.224563996	0.000275343	0.023341493
21.57	-0.001035163	5.19571E-06	0.001048855	0.235992273	0.000275613	0.023343047
21.575	-0.001084524	5.44094E-06	0.001098401	0.247140268	0.000275911	0.023344453
21.58	-0.001116686	5.60157E-06	0.001130852	0.254441801	0.000276226	0.023345726
21.585	-0.001138931	5.713E-06	0.001153365	0.259507208	0.000276554	0.023346955
21.59	-0.001168913	5.86285E-06	0.001183639	0.266318709	0.000276899	0.023348047
21.595	-0.00120349	6.03613E-06	0.001218644	0.274194975	0.000277265	0.023348964
21.6	-0.00123425	6.19117E-06	0.001249966	0.281242405	0.00027765	0.02334978
21.605	-0.001260918	6.3269E-06	0.001277386	0.287411895	0.000278052	0.023350503
21.61	-0.001255579	6.30594E-06	0.001273149	0.286458528	0.00027845	0.02335114
21.615	-0.001161412	5.84624E-06	0.001180263	0.265559096	0.000278791	0.023351687
21.62	-0.000963635	4.87167E-06	0.000983359	0.221255878	0.000279026	0.023352113
21.625	-0.000722032	3.67577E-06	0.00074177	0.166898339	0.000279158	0.023352357
21.63	-0.000514455	2.6439E-06	0.000533355	0.120004976	0.000279225	0.023352389
21.635	-0.00039418	2.04115E-06	0.000411628	0.092616362	0.000279264	0.023352389
21.64	-0.000394164	2.03281E-06	0.000409952	0.092239197	0.000279303	0.023352389
21.645	-0.000506043	2.5805E-06	0.000520616	0.117138674	0.000279368	0.023352389
21.65	-0.000660973	3.34574E-06	0.000675227	0.151925993	0.000279478	0.023352389
21.655	-0.00077028	3.88933E-06	0.000785048	0.176635704	0.000279628	0.023352389
21.66	-0.000784457	3.96373E-06	0.000800077	0.180017404	0.000279784	0.023352389
21.665	-0.000721437	3.65499E-06	0.000737693	0.165980955	0.000279915	0.023352389
21.67	-0.000633876	3.22296E-06	0.000650401	0.146340214	0.000280017	0.023352389
21.675	-0.000544302	2.77978E-06	0.00056086	0.126193424	0.000280092	0.023352389
21.68	-0.000454109	2.33222E-06	0.000470439	0.105848718	0.000280144	0.023352389
21.685	-0.000388335	2.0041E-06	0.000404149	0.090933536	0.000280182	0.023352389
21.69	-0.000359159	1.85691E-06	0.000374422	0.084244959	0.000280215	0.023352389
21.695	-0.000337727	1.74845E-06	0.000352519	0.079316881	0.000280243	0.023352389
21.7	-0.000313255	1.62437E-06	0.000327462	0.073678908	0.000280268	0.023352389
21.705	-0.000313253	1.62048E-06	0.000326679	0.073502706	0.000280293	0.023352389
21.71	-0.000352414	1.81043E-06	0.00036506	0.082138518	0.000280324	0.023352389
21.715	-0.000421183	2.1476E-06	0.000433188	0.097467245	0.000280369	0.023352389
21.72	-0.000515037	2.60983E-06	0.000526578	0.118480132	0.000280436	0.023352389
21.725	-0.000629664	3.17644E-06	0.000641055	0.144237297	0.000280537	0.023352389
21.73	-0.00073373	3.69306E-06	0.000745424	0.16772043	0.000280673	0.023352389
21.735	-0.00078356	3.94269E-06	0.000795855	0.179067348	0.000280828	0.023352389
21.74	-0.000774383	3.89965E-06	0.000787156	0.177110077	0.000280979	0.023352389
21.745	-0.000749783	3.77849E-06	0.000762676	0.171602054	0.000281121	0.023352389
21.75	-0.000749657	3.77753E-06	0.000762481	0.171558273	0.000281263	0.023352389
21.755	-0.000773599	3.89606E-06	0.000786432	0.176947299	0.000281415	0.023352389
21.76	-0.000804384	4.04921E-06	0.000817372	0.183908644	0.000281578	0.023352389
21.765	-0.000836605	4.21015E-06	0.000849884	0.191223822	0.000281755	0.023352389
21.77	-0.000859922	4.32797E-06	0.000873684	0.196578978	0.000281942	0.023352389
21.775	-0.000848577	4.27469E-06	0.00086292	0.194156963	0.000282124	0.023352389
21.78	-0.000802906	4.05042E-06	0.000817604	0.183960906	0.000282287	0.023352389
21.785	-0.000763171	3.85394E-06	0.000777904	0.175028373	0.000282434	0.023352389
21.79	-0.000750032	3.78888E-06	0.000764758	0.172070644	0.000282576	0.023352389
21.795	-0.000735172	3.71613E-06	0.000750059	0.168763224	0.000282713	0.023352389
21.8	-0.00069074	3.4972E-06	0.000705824	0.158810442	0.000282834	0.023352389
21.805	-0.000624162	3.16788E-06	0.000639289	0.143840053	0.000282932	0.023352389
21.81	-0.000552732	2.81363E-06	0.000567718	0.127736649	0.000283009	0.023352389
21.815	-0.000481931	2.46158E-06	0.000496593	0.111733515	0.000283068	0.023352389
21.82	-0.000424461	2.1742E-06	0.000438537	0.098670887	0.000283113	0.023352389
21.825	-0.00040868	2.09215E-06	0.000421961	0.094941131	0.000283156	0.023352389
21.83	-0.000443988	2.2633E-06	0.000456543	0.102722227	0.000283206	0.023352389
21.835	-0.000506447	2.57011E-06	0.000518538	0.11667104	0.00028327	0.023352389

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
26.03149414	0.002452694	1.706576729
26.03759766	0.002139318	1.432260872
26.04370117	0.001708016	1.193982917
26.04980469	0.002041932	1.515013617
26.0559082	0.002029387	1.512552035
26.06201172	0.001725037	1.273658204
26.06811523	0.001619102	1.167260944
26.07421875	0.00113127	0.806922844
26.08032227	0.001542128	1.156822939
26.08642578	0.002199271	1.713511025
26.0925293	0.00187326	1.471809828
26.09863281	0.001492192	1.192998498
26.10473633	0.001081043	0.837444812
26.11083984	0.000470066	0.343777577
26.11694336	0.000539161	0.387647955
26.12304688	0.000731488	0.528476378
26.12915039	0.001503481	1.113609729
26.13525391	0.00188404	1.428792078
26.14135742	0.00143889	1.080468738
26.14746094	0.000659572	0.491130012
26.15356445	0.000814387	0.615659821
26.15966797	0.001241509	0.982584783
26.16577148	0.001428771	1.206908746
26.171875	0.001715581	1.447778152
26.17797852	0.002581643	2.064535112
26.18408203	0.003408313	2.711074157
26.19018555	0.00365257	3.077754571
26.19628906	0.003824004	3.341236052
26.20239258	0.004283842	3.625307902
26.20849609	0.004740446	3.940295026
26.21459961	0.00515241	4.466913967
26.22070313	0.005459043	4.789376086
26.22680664	0.005343311	4.592402823
26.23291016	0.004985636	4.243662057
26.23901367	0.004902696	3.926220684
26.24511719	0.004814925	3.665636731
26.2512207	0.004632765	3.807105408
26.25732422	0.004586542	4.077334128
26.26342773	0.004779118	4.073783567
26.26953125	0.005103596	4.189509154
26.27563477	0.004714927	3.798470944
26.28173828	0.003438627	2.724335456
26.2878418	0.002658883	2.266297346
26.29394531	0.002602397	2.396769461
26.30004883	0.002592774	2.392359565
26.30615234	0.003021464	2.949683649
26.31225586	0.003343601	3.334311247
26.31835938	0.003683137	3.348348797
26.32446289	0.003338063	2.993193021
26.33056641	0.002466932	2.37164946
26.33666992	0.002643857	2.714112627
26.34277344	0.002778921	3.006215934
26.34887695	0.00457827	4.679508501
26.35498047	0.006043678	5.842090918
26.36108398	0.005183744	5.385165595
26.3671875	0.003540871	3.710306556
26.37329102	0.002853443	2.876159259
26.37939453	0.003063451	3.35374101
26.38549805	0.00303683	3.346701717
26.39160156	0.002013421	2.022249434
26.39770508	0.001106105	1.129692623
26.40380859	0.000910712	0.987657707
26.40991211	0.00134562	1.508638011
26.41601563	0.00157417	1.830800463
26.42211914	0.00193145	2.144385867
26.42822266	0.002080562	2.171825318
26.43432617	0.001904101	2.042119633
26.44042969	0.002890011	3.260058822
26.4465332	0.003710139	4.293565177
26.45263672	0.003243099	3.731637027
26.45874023	0.00236717	2.720728924
26.46484375	0.00309986	3.914094185
26.47094727	0.0040689	5.457519435
26.47705078	0.004301831	5.095262489
26.4831543	0.003972971	4.484365416
26.48925781	0.003015516	3.898273876
26.49536133	0.002073966	2.945225222
26.50146484	0.002016762	2.985157181
26.50756836	0.003044482	4.97577828
26.51367188	0.002975782	4.517952895
26.51977539	0.001349676	1.72026154
26.52587891	0.001391184	1.699811552
26.53198242	0.002744063	3.440733514
26.53808594	0.003149199	4.120582416
26.54418945	0.00317258	4.218127589
26.55029297	0.003314756	4.170013155
26.55639648	0.004573301	5.807127447
26.5625	0.00541502	7.168716201
26.56860352	0.004716774	5.697658411
26.57470703	0.003088195	3.748815882
26.58081055	0.002041162	2.785076913
26.58691406	0.002334391	3.189004751
26.59301758	0.003134511	4.158573937
26.59912109	0.003531321	4.763526446
26.60522461	0.00354692	4.705403493
26.61132813	0.003693855	4.944026483
26.61743164	0.003968893	5.654445944
26.62353516	0.004254728	6.004994073
26.62963867	0.004337157	5.869211998
26.63574219	0.004139229	5.874421699
26.6418457	0.004140042	6.330172297
26.64794922	0.004068314	6.252604139
26.65405273	0.002969066	4.570813733
26.66015625	0.001458556	2.399264415

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
21.84	-0.00057562	2.91131E-06	0.000587475	0.132181963	0.000283354	0.023352389
21.845	-0.000646353	3.26139E-06	0.000658207	0.148096489	0.00028346	0.023352389
21.85	-0.000699628	3.52648E-06	0.000711764	0.160146901	0.000283583	0.023352389
21.855	-0.000711622	3.58788E-06	0.00072417	0.162938145	0.000283711	0.023352389
21.86	-0.000691691	3.49057E-06	0.000704506	0.158513932	0.000283832	0.023352389
21.865	-0.00067187	3.39284E-06	0.00068476	0.154070898	0.000283946	0.023352389
21.87	-0.000663994	3.35411E-06	0.000676932	0.152309756	0.000284058	0.023352389
21.875	-0.000652054	3.29551E-06	0.000665093	0.149645856	0.000284165	0.023352389
21.88	-0.000625234	3.16289E-06	0.000638296	0.143616595	0.000284264	0.023352389
21.885	-0.000600865	3.04154E-06	0.000613777	0.138099882	0.000284355	0.023352389
21.89	-0.000596802	3.02063E-06	0.000609552	0.137149127	0.000284445	0.023352389
21.895	-0.000593434	3.00413E-06	0.000606217	0.136398905	0.000284534	0.023352389
21.9	-0.000555793	2.81859E-06	0.00056873	0.12796428	0.000284612	0.023352389
21.905	-0.000475907	2.42331E-06	0.000488867	0.109995062	0.00028467	0.023352389
21.91	-0.000365101	1.87324E-06	0.000377739	0.084991237	0.000284703	0.023352389
21.915	-0.000248971	1.29376E-06	0.000260699	0.058657294	0.000284719	0.023352389
21.92	-0.000195064	1.01835E-06	0.000205085	0.046144097	0.000284729	0.023352389
21.925	-0.000284071	1.44833E-06	0.000291966	0.065692318	0.000284749	0.023352389
21.93	-0.000528865	2.65163E-06	0.000535082	0.120393457	0.00028482	0.023352389
21.935	-0.000858358	4.2798E-06	0.000863993	0.194398368	0.000285006	0.023352389
21.94	-0.001172579	5.83887E-06	0.001178904	0.265253355	0.000285353	0.023352389
21.945	-0.00138602	6.90444E-06	0.00139411	0.31367477	0.000285839	0.023352389
21.95	-0.001444451	7.20535E-06	0.001454881	0.327348257	0.000286366	0.023352389
21.955	-0.00134578	6.72749E-06	0.001358324	0.305622887	0.000286824	0.023352389
21.96	-0.001156591	5.79711E-06	0.001170348	0.263328252	0.000287162	0.023352389
21.965	-0.000981851	4.93315E-06	0.000995807	0.224056516	0.000287406	0.023352389
21.97	-0.000891624	4.48464E-06	0.000905203	0.203670627	0.000287607	0.023352389
21.975	-0.000884239	4.44598E-06	0.000897395	0.201913847	0.000287804	0.023352389
21.98	-0.000922978	4.63667E-06	0.000935926	0.210583318	0.00028802	0.023352389
21.985	-0.000978424	4.91135E-06	0.000991425	0.223070638	0.000288262	0.023352389
21.99	-0.00102555	5.14623E-06	0.001038884	0.233748856	0.000288527	0.023352389
21.995	-0.001034985	5.19553E-06	0.001048844	0.235989936	0.000288798	0.023352389
22	-0.000998517	5.01725E-06	0.00101282	0.227884431	0.00028905	0.023352389
22.005	-0.00094606	4.75852E-06	0.000960543	0.216122105	0.000289276	0.023352389
22.01	-0.000905934	4.56011E-06	0.000920453	0.207101913	0.000289484	0.023352389
22.015	-0.000873546	4.39985E-06	0.000888074	0.199816593	0.000289677	0.023352389
22.02	-0.000849707	4.28129E-06	0.000864125	0.194428125	0.000289859	0.023352389
22.025	-0.000859939	4.33092E-06	0.000874153	0.196684469	0.000290046	0.023352389
22.03	-0.000905484	4.55623E-06	0.000919679	0.206927836	0.000290253	0.023352389
22.035	-0.00095159	4.7858E-06	0.000966065	0.217364628	0.000290482	0.023352389
22.04	-0.000973555	4.89676E-06	0.000988485	0.222409134	0.000290722	0.023352389
22.045	-0.000964464	4.85436E-06	0.000979916	0.220481195	0.000290957	0.023352389
22.05	-0.000914641	4.6102E-06	0.000930581	0.209380763	0.000291168	0.023352389
22.055	-0.000827309	4.17912E-06	0.000843485	0.189784122	0.000291341	0.023352389
22.06	-0.000739258	3.7423E-06	0.000755248	0.169930724	0.000291479	0.023352389
22.065	-0.000700822	3.54944E-06	0.000716292	0.161165715	0.000291603	0.023352389
22.07	-0.000735152	3.71705E-06	0.000750159	0.168785693	0.00029174	0.023352389
22.075	-0.000820856	4.14106E-06	0.000835833	0.188062425	0.00029191	0.023352389
22.08	-0.000916019	4.61467E-06	0.000931522	0.209592517	0.000292122	0.023352389
22.085	-0.000981965	4.94641E-06	0.000998546	0.22467287	0.000292366	0.023352389
22.09	-0.000968018	4.88509E-06	0.000986154	0.221884732	0.000292603	0.023352389
22.095	-0.000816776	4.14442E-06	0.000836501	0.188212729	0.000292772	0.023352389
22.1	-0.000532805	2.74293E-06	0.000553389	0.12451243	0.000292843	0.023352389
22.105	-0.000210567	1.14544E-06	0.000230749	0.051918628	0.000292854	0.023352389
22.11	4.23148E-05	-1.14569E-07	-2.36787E-05	-0.005327705	0.000292855	0.023352389
22.115	0.000170048	-7.58431E-07	-0.000153681	-0.034578188	0.000292862	0.023352389
22.12	0.000152232	-6.82711E-07	-0.000138372	-0.031133664	0.000292868	0.023352389
22.125	-1.0254E-05	1.10935E-07	2.19855E-05	0.004946739	0.000292868	0.023352389
22.13	-0.000273981	1.41019E-06	0.000284474	0.064006675	0.000292887	0.023352389
22.135	-0.000559449	2.82265E-06	0.000569798	0.128204502	0.000292966	0.023352389
22.14	-0.000798058	4.00779E-06	0.000809176	0.182064527	0.000293127	0.023352389
22.145	-0.000957319	4.80325E-06	0.000969832	0.218212259	0.000293359	0.023352389
22.15	-0.001012554	5.08566E-06	0.001026866	0.231044824	0.000293618	0.023352389
22.155	-0.00093696	4.72014E-06	0.000953009	0.214426994	0.00029384	0.023352389
22.16	-0.000758279	3.84064E-06	0.000775311	0.174445003	0.000293985	0.023352389
22.165	-0.000572031	2.91854E-06	0.000589021	0.13252972	0.000294068	0.023352389
22.17	-0.00045566	2.33892E-06	0.000471931	0.106184499	0.00029412	0.023352389
22.175	-0.000422778	2.17147E-06	0.000438104	0.098573336	0.000294165	0.023352389
22.18	-0.000468973	2.39561E-06	0.000483395	0.108763841	0.000294221	0.023352389
22.185	-0.000590574	2.99468E-06	0.000604438	0.135998456	0.000294309	0.023352389
22.19	-0.000750601	3.78742E-06	0.000764599	0.172034803	0.000294452	0.023352389
22.195	-0.000878264	4.42372E-06	0.000893147	0.200957991	0.000294647	0.023352389
22.2	-0.000920499	4.63918E-06	0.000936674	0.210751587	0.000294861	0.023352389
22.205	-0.000873795	4.41431E-06	0.000891237	0.200528245	0.000295054	0.023352389
22.21	-0.000754322	3.82798E-06	0.000772767	0.173872568	0.000295198	0.023352389
22.215	-0.000575329	2.94461E-06	0.000594295	0.133716423	0.000295281	0.023352389
22.22	-0.0003798	1.97558E-06	0.000398533	0.089669909	0.000295318	0.023352389
22.225	-0.000241307	1.2853E-06	0.0002591	0.058297587	0.000295332	0.023352389
22.23	-0.000199915	1.07451E-06	0.000216522	0.048717524	0.000295342	0.023352389
22.235	-0.000238244	1.25945E-06	0.000253892	0.057125699	0.000295357	0.023352389
22.24	-0.000323092	1.67673E-06	0.000338205	0.076096211	0.000295383	0.023352389
22.245	-0.000426403	2.18794E-06	0.000441492	0.099335797	0.000295429	0.023352389
22.25	-0.000511444	2.61141E-06	0.000527048	0.118585819	0.000295495	0.023352389
22.255	-0.000543058	2.77208E-06	0.000559509	0.125889536	0.00029557	0.023352389
22.26	-0.000518733	2.65586E-06	0.000536025	0.12060565	0.000295638	0.023352389
22.265	-0.000459515	2.36617E-06	0.000477492	0.107435601	0.000295691	0.023352389
22.27	-0.000370807	1.92981E-06	0.000389325	0.087598126	0.000295726	0.023352389
22.275	-0.000246821	1.31753E-06	0.000265621	0.059764699	0.000295741	0.023352389
22.28	-0.000107236	6.2569E-07	0.000125869	0.028320597	0.000295744	0.023352389
22.285	6.62505E-06	5.8761E-08	1.13644E-05	0.002556995	0.000295744	0.023352389
22.29	6.79639E-05	-2.49502E-07	-5.08945E-05	-0.011451272	0.000295745	0.023352389
22.295	7.71054E-05	-2.99541E-07	-6.10003E-05	-0.013725057	0.000295747	0.023352389
22.3	4.0968E-05	-1.25067E-07	-2.57455E-05	-0.005792738	0.000295747	0.023352389
22.305	-4.28985E-05	2.86667E-07	5.74472E-05	0.01292563	0.000295748	0.023352389
22.31	-0.000160661	8.68532E-07	0.000175009	0.039377114	0.000295754	0.023352389
22.315	-0.000257919	1.35185E-06	0.000272657	0.061347716	0.000295771	0.023352389
22.32	-0.000285479	1.49149E-06	0.000300867	0.067694966	0.000295792	0.023352389
22.325	-0.000250352	1.31984E-06	0.000266183	0.059891194	0.000295808	0.023352389
22.33	-0.000188619	1.01443E-06	0.000204474	0.04600654	0.000295817	0.023352389
22.335	-0.000135079	7.47149E-07	0.000150469	0.033855433	0.000295821	0.023352389
22.34	-0.00013608	7.47711E-07	0.000150583	0.033881197	0.000295826	0.023352389
22.345	-0.000224211	1.17948E-06	0.000237826	0.053510749	0.000295839	0.023352389
22.35	-0.000374221	1.91994E-06	0.000387422	0.08717003	0.000295874	0.023352389
22.355	-0.00053082	2.69618E-06	0.000544231	0.122451887	0.000295945	0.023352389

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
26.66625977	0.000973103	1.723316203
26.67236328	0.001527771	2.836871283
26.6784668	0.001960864	3.50613611
26.68457031	0.001694932	2.701726454
26.69067383	0.001193258	1.851996531
26.69677734	0.001004598	1.642569848
26.70288086	0.000996235	1.591454392
26.70898438	0.001451663	2.34878649
26.71508789	0.001987094	3.542486889
26.72119141	0.001621264	2.91576811
26.72729492	0.000648115	1.123789706
26.73339844	0.001276304	2.44332135
26.73950195	0.002388186	4.987966266
26.74560547	0.00274775	5.896349408
26.75170898	0.002574879	6.153517291
26.7578125	0.002053848	5.328274796
26.76391602	0.001184468	3.075057739
26.77001953	0.001094392	2.657435104
26.77612305	0.001647188	3.649249256
26.78222656	0.002010916	5.428917815
26.78833008	0.002535433	10.19736095
26.79443359	0.003005007	9.715455066
26.80053711	0.002785759	6.629932742
26.80664063	0.001702319	4.408055858
26.81274414	0.002080718	6.179424778
26.81884766	0.00291677	9.03411843
26.82495117	0.002252631	7.492598726
26.83105469	0.00181822	5.856782447
26.8371582	0.001629384	4.77703097
26.84326172	0.001331904	4.099452402
26.84936523	0.002759995	11.23263036
26.85546875	0.003837502	19.0283965
26.86157227	0.004045583	15.31579364
26.86767578	0.003799518	13.00081211
26.8737793	0.003567612	14.25754395
26.87988281	0.003097254	11.34217962
26.88598633	0.002182309	7.607203202
26.89208984	0.001475533	5.185102132
26.89819336	0.001493005	4.222530138
26.90429688	0.001836997	5.69092353
26.91040039	0.002302857	10.67565203
26.91650391	0.002944234	14.07445402
26.92260742	0.003416386	11.87428833
26.92871094	0.003918847	13.49844263
26.93481445	0.005703419	23.72016249
26.94091797	0.007845848	36.40871819
26.94702148	0.008004996	31.62016266
26.953125	0.006264075	25.2317919
26.95922852	0.004952689	19.39790744
26.96533203	0.00546038	18.68548597
26.97143555	0.00649849	22.02259462
26.97753906	0.006346308	28.69532275
26.98364258	0.005273453	23.00828395
26.98974609	0.004428898	18.29920523
26.99584961	0.003762961	22.8069645
27.00195313	0.003031363	21.60511824
27.00805664	0.002459149	12.02754536
27.01416016	0.002612114	10.9427128
27.02026367	0.003081791	13.89948131
27.02636719	0.003432931	26.51079735
27.0324707	0.003609206	101.8437189
27.03857422	0.003197953	73.23264145
27.04467773	0.002462148	149.446302
27.05078125	0.002629547	66.00603352
27.05688477	0.003835969	92.40588725
27.06298828	0.004807582	114.1509614
27.0690918	0.004618861	47.51307224
27.07519531	0.003680953	28.36081651
27.08129883	0.003179188	22.52293229
27.08740234	0.003563983	28.62430885
27.09350586	0.004884314	43.5112952
27.09960938	0.006063933	36.56443622
27.10571289	0.005531734	30.86293471
27.11181641	0.004025524	22.5166618
27.11791992	0.003484896	16.95650932
27.12402344	0.004097638	17.33371585
27.13012695	0.004730583	25.39087129
27.13623047	0.005270051	26.09050033
27.14233398	0.006087366	19.94422944
27.1484375	0.006769907	19.1793819
27.15454102	0.00691451	21.1330475
27.16064453	0.006383526	20.78458544
27.16674805	0.006004072	18.32433472
27.17285156	0.006359513	18.49329671
27.17895508	0.005768102	16.44948194
27.18505859	0.004426321	12.41521185
27.19116211	0.004030899	11.72961342
27.19726563	0.004572338	12.98092679
27.20336914	0.004562751	11.84810113
27.20947266	0.003803452	10.09489871
27.21557617	0.003433708	9.081617922
27.22167969	0.00420213	9.374103566
27.2277832	0.005699134	12.55522202
27.23388672	0.006502187	17.05339485
27.23999023	0.006039448	15.85532761
27.24609375	0.005302726	13.77134239
27.25219727	0.005066477	16.51765553
27.25830078	0.005456536	19.69209732
27.2644043	0.006142186	19.63118145
27.27050781	0.005818814	17.37318903
27.27661133	0.004245388	11.74506051
27.28271484	0.003369027	9.022476108
27.28881836	0.003419916	9.241283535
27.29492188	0.00323196	8.126065342

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
22.36	-0.000658307	3.33094E-06	0.000672452	0.151301622	0.000296055	0.023352389
22.365	-0.000737342	3.72796E-06	0.000752646	0.169345324	0.000296192	0.023352389
22.37	-0.000744892	3.77264E-06	0.000761668	0.171375298	0.000296332	0.023352389
22.375	-0.00065888	3.35441E-06	0.000677162	0.152361366	0.000296442	0.023352389
22.38	-0.000484763	2.49822E-06	0.000504174	0.11343907	0.000296501	0.023352389
22.385	-0.000267813	1.42671E-06	0.000287701	0.064732797	0.00029652	0.023352389
22.39	-5.32831E-05	3.64077E-07	7.30439E-05	0.016434869	0.00029652	0.023352389
22.395	0.000143784	-6.14855E-07	-0.000124682	-0.028053389	0.000296526	0.023352389
22.4	0.000295791	-1.37401E-06	-0.000277966	-0.062542262	0.000296548	0.023352389
22.405	0.000340833	-1.60626E-06	-0.000324857	-0.073092751	0.000296577	0.023352389
22.41	0.000246453	-1.14796E-06	-0.000232253	-0.052256874	0.000296592	0.023352389
22.415	5.26252E-05	-1.93846E-07	-3.94813E-05	-0.008883284	0.000296593	0.023352389
22.42	-0.000166937	8.92443E-07	0.000179974	0.040494064	0.0002966	0.023352389
22.425	-0.000347377	1.78965E-06	0.000361214	0.081273185	0.000296631	0.023352389
22.43	-0.000431534	2.21378E-06	0.000446885	0.100549141	0.000296678	0.023352389
22.435	-0.000375922	1.94709E-06	0.000392997	0.088424292	0.000296713	0.023352389
22.44	-0.000196129	1.06309E-06	0.000214388	0.048237261	0.000296723	0.023352389
22.445	2.53013E-05	-3.1684E-08	-6.78715E-06	-0.00152711	0.000296723	0.023352389
22.45	0.000216879	-9.82532E-07	-0.000198867	-0.044745016	0.000296735	0.023352389
22.455	0.000364068	-1.71624E-06	-0.000347061	-0.078088644	0.000296769	0.023352389
22.46	0.000453382	-2.16599E-06	-0.00043786	-0.098518486	0.000296821	0.023352389
22.465	0.000445224	-2.13492E-06	-0.000431572	-0.097103644	0.000296871	0.023352389
22.47	0.000328712	-1.56676E-06	-0.000316772	-0.071273799	0.000296898	0.023352389
22.475	0.000137781	-6.27627E-07	-0.000127031	-0.028581875	0.000296903	0.023352389
22.48	-8.88757E-05	4.91624E-07	9.90793E-05	0.022292849	0.000296905	0.023352389
22.485	-0.00031498	1.61175E-06	0.000325344	0.073202369	0.00029693	0.023352389
22.49	-0.000494947	2.50683E-06	0.000506133	0.11387997	0.000296992	0.023352389
22.495	-0.000593116	2.99887E-06	0.000605511	0.136239946	0.000297081	0.023352389
22.5	-0.000609196	3.0844E-06	0.000622785	0.14012659	0.000297174	0.023352389
22.505	-0.000577345	2.9312E-06	0.000591829	0.133161438	0.000297259	0.023352389
22.51	-0.000533669	2.71812E-06	0.000548774	0.123474204	0.000297331	0.023352389
22.515	-0.000486664	2.48782E-06	0.000502243	0.113004604	0.000297391	0.023352389
22.52	-0.000440203	2.25942E-06	0.000456095	0.102621307	0.00029744	0.023352389
22.525	-0.000415252	2.13702E-06	0.000431363	0.097056778	0.000297483	0.023352389
22.53	-0.000405122	2.08891E-06	0.000421643	0.094869709	0.000297525	0.023352389
22.535	-0.000361128	1.87426E-06	0.000378277	0.085112231	0.000297558	0.023352389
22.54	-0.000263218	1.39193E-06	0.000280831	0.063186893	0.000297575	0.023352389
22.545	-0.000146286	8.13229E-07	0.00016392	0.036881942	0.00029758	0.023352389
22.55	-4.82841E-05	3.2619E-07	6.55318E-05	0.014744657	0.000297581	0.023352389
22.555	9.52904E-06	3.66511E-08	7.04338E-06	0.001584762	0.000297581	0.023352389
22.56	1.02422E-05	2.92538E-08	5.55125E-06	0.001249032	0.000297581	0.023352389
22.565	-4.23422E-05	2.86729E-07	5.75768E-05	0.012954771	0.000297582	0.023352389
22.57	-0.000113123	6.36434E-07	0.000128236	0.028853038	0.000297585	0.023352389
22.575	-0.000160183	8.7073E-07	0.000175574	0.039504229	0.000297591	0.023352389
22.58	-0.000159645	8.70318E-07	0.00017549	0.039485333	0.000297598	0.023352389
22.585	-0.000114863	6.50394E-07	0.000131052	0.02948677	0.000297601	0.023352389
22.59	-5.20305E-05	3.39681E-07	6.82715E-05	0.015361078	0.000297602	0.023352389
22.595	-1.89522E-06	9.02466E-08	1.78738E-05	0.004021604	0.000297602	0.023352389
22.6	1.03999E-05	2.6932E-08	5.08144E-06	0.001143323	0.000297602	0.023352389
22.605	-3.15585E-05	2.32003E-07	4.65185E-05	0.010466656	0.000297602	0.023352389
22.61	-0.00011345	6.36098E-07	0.000128168	0.028837723	0.000297605	0.023352389
22.615	-0.000190017	1.01571E-06	0.000204867	0.046095086	0.000297614	0.023352389
22.62	-0.000233179	1.23089E-06	0.000248341	0.055876642	0.000297628	0.023352389
22.625	-0.000247068	1.30126E-06	0.000262559	0.059075778	0.000297644	0.023352389
22.63	-0.000238867	1.26203E-06	0.00025463	0.057291827	0.000297658	0.023352389
22.635	-0.00022505	1.19418E-06	0.000240921	0.05420729	0.000297671	0.023352389
22.64	-0.000236386	1.25031E-06	0.000252264	0.056759317	0.000297685	0.023352389
22.645	-0.000276888	1.45166E-06	0.000292945	0.065912571	0.000297704	0.023352389
22.65	-0.000313408	1.635E-06	0.000329984	0.074246312	0.000297729	0.023352389
22.655	-0.000305785	1.60123E-06	0.00032316	0.072711051	0.000297753	0.023352389
22.66	-0.000225452	1.20766E-06	0.000243636	0.054818004	0.000297766	0.023352389
22.665	-7.86373E-05	4.83014E-07	9.72246E-05	0.021875532	0.000297767	0.023352389
22.67	8.51598E-05	-3.29024E-07	-6.68228E-05	-0.015035135	0.000297769	0.023352389
22.675	0.000211832	-9.60287E-07	-0.000194332	-0.043724764	0.00029778	0.023352389
22.68	0.000267978	-1.24431E-06	-0.0002517	-0.05663256	0.000297799	0.023352389
22.685	0.000235856	-1.09172E-06	-0.000220868	-0.049695382	0.000297813	0.023352389
22.69	0.000125488	-5.50251E-07	-0.000111462	-0.025078839	0.000297817	0.023352389
22.695	-2.53002E-05	1.9393E-07	3.88928E-05	0.008750881	0.000297817	0.023352389
22.7	-0.000184397	9.8188E-07	0.000198078	0.044567593	0.000297825	0.023352389
22.705	-0.000330767	1.70952E-06	0.000345069	0.077640617	0.000297853	0.023352389
22.71	-0.00043235	2.2181E-06	0.000447803	0.100755703	0.0002979	0.023352389
22.715	-0.000456832	2.34672E-06	0.000473783	0.106601216	0.000297953	0.023352389
22.72	-0.000390851	2.02781E-06	0.000409344	0.092102357	0.000297992	0.023352389
22.725	-0.000232127	1.2485E-06	0.000251887	0.056674599	0.000298005	0.023352389
22.73	2.54766E-06	8.98703E-08	1.78109E-05	0.004007462	0.000298005	0.023352389
22.735	0.000257115	-1.17226E-06	-0.000237147	-0.053358067	0.000298022	0.023352389
22.74	0.000454733	-2.15754E-06	-0.000436148	-0.098133233	0.000298074	0.023352389
22.745	0.000531199	-2.54644E-06	-0.000514666	-0.115799852	0.000298145	0.023352389
22.75	0.000455525	-2.18263E-06	-0.000441155	-0.099259845	0.000298198	0.023352389
22.755	0.000246859	-1.15758E-06	-0.000234049	-0.052660959	0.000298213	0.023352389
22.76	-3.30121E-05	2.25193E-07	4.52996E-05	0.010192413	0.000298214	0.023352389
22.765	-0.000304375	1.57187E-06	0.000317324	0.071397845	0.000298237	0.023352389
22.77	-0.000485898	2.47894E-06	0.00050053	0.112619352	0.000298297	0.023352389
22.775	-0.00052391	2.67801E-06	0.000540735	0.121665376	0.000298366	0.023352389
22.78	-0.000417351	2.16043E-06	0.000436155	0.098134837	0.0002984	0.023352389
22.785	-0.000210258	1.14138E-06	0.000230265	0.051809625	0.000298421	0.023352389
22.79	1.74007E-05	1.51131E-08	2.73662E-06	0.000615741	0.000298421	0.023352389
22.795	0.000175194	-7.69967E-07	-0.000155852	-0.035066623	0.000298429	0.023352389
22.8	0.000217352	-9.84382E-07	-0.000199162	-0.044811522	0.000298441	0.023352389
22.805	0.000161607	-7.12891E-07	-0.000144304	-0.032468493	0.000298448	0.023352389
22.81	6.55759E-05	-2.38914E-07	-4.85365E-05	-0.010920723	0.000298449	0.023352389
22.815	-2.11991E-06	9.78342E-08	1.95011E-05	0.004387748	0.000298449	0.023352389
22.82	-3.8612E-06	1.09376E-07	2.18321E-05	0.004912218	0.000298449	0.023352389
22.825	4.77162E-05	-1.43613E-07	-2.92869E-05	-0.006589543	0.000298449	0.023352389
22.83	0.000121979	-5.10245E-07	-0.000103366	-0.023257343	0.000298453	0.023352389
22.835	0.000193959	-8.67043E-07	-0.000175455	-0.039477392	0.000298463	0.023352389
22.84	0.000242026	-1.10666E-06	-0.000223861	-0.050368628	0.000298477	0.023352389
22.845	0.000255914	-1.17757E-06	-0.000238184	-0.053591488	0.000298494	0.023352389
22.85	0.000239385	-1.09777E-06	-0.000222059	-0.049963363	0.000298508	0.023352389
22.855	0.000197769	-8.93146E-07	-0.000180713	-0.040660507	0.000298518	0.023352389
22.86	0.000145253	-6.33242E-07	-0.000128199	-0.028844721	0.000298524	0.023352389
22.865	0.000115968	-4.86915E-07	-9.86335E-05	-0.022192533	0.000298527	0.023352389
22.87	0.000130813	-5.59006E-07	-0.000113201	-0.025470114	0.000298531	0.023352389
22.875	0.000163402	-7.20329E-07	-0.000145797	-0.032804435	0.000298538	0.023352389

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
27.30102539	0.003062315	7.208723173
27.30712891	0.0033035	7.973072626
27.31323242	0.003599377	8.926954169
27.31933594	0.003744664	8.791327866
27.32543945	0.003574137	7.397043484
27.33154297	0.003059252	6.138436663
27.33764648	0.002612148	5.327338374
27.34375	0.002645978	4.837579145
27.34985352	0.002823905	4.904266743
27.35595703	0.00272173	5.194036932
27.36206055	0.002514783	4.814173282
27.36816406	0.003890025	6.927602547
27.37426758	0.004677926	8.089093585
27.38037109	0.003647464	6.12502514
27.38647461	0.002087213	3.401134099
27.39257813	0.001651553	2.654836004
27.39868164	0.001477323	2.31676397
27.40478516	0.001103904	1.865149483
27.41088867	0.000739258	1.35386339
27.41699219	0.000470873	0.764435097
27.4230957	0.000746577	1.124366487
27.42919922	0.001626201	2.593065646
27.43530273	0.002256332	3.385148739
27.44140625	0.002792713	3.861312711
27.44750977	0.003179649	4.46849072
27.45361328	0.002798265	3.765476125
27.4597168	0.002456973	3.219373107
27.46582031	0.0035265	4.791440295
27.47192383	0.003820844	4.866800375
27.47802734	0.002902522	3.398136885
27.48413086	0.00176339	2.054405346
27.49023438	0.001259591	1.469996913
27.49633789	0.001904657	2.311277871
27.50244141	0.002192675	2.741427965
27.50854492	0.001936728	2.153333459
27.51464844	0.002012721	2.005194513
27.52075195	0.001952648	1.983420457
27.52685547	0.001356075	1.448652676
27.53295898	0.000953724	1.033745484
27.5390625	0.001100579	1.212524528
27.54516602	0.001337541	1.509734637
27.55126953	0.003176287	3.600238406
27.55737305	0.005216927	5.767492907
27.56347656	0.005463798	5.935873375
27.56958008	0.004617535	5.001689432
27.57568359	0.00413588	4.479295623
27.58178711	0.004608799	5.042842706
27.58789063	0.005611936	6.088978
27.59399414	0.006012633	6.340366274
27.60009766	0.006094936	6.39001565
27.60620117	0.006091412	6.421742694
27.61230469	0.005947469	6.136827346
27.6184082	0.006005057	6.09766645
27.62451172	0.006426341	6.482515102
27.63061523	0.006793339	6.86085847
27.63671875	0.006707834	7.092174532
27.64282227	0.006388602	6.927219042
27.64892578	0.006328528	6.401378537
27.6550293	0.0066145	6.385194338
27.66113281	0.006574401	6.577594963
27.66723633	0.005522915	5.639080618
27.67333984	0.00408859	4.129236319
27.67944336	0.003633024	3.663813012
27.68554688	0.004297967	4.227800818
27.69165039	0.00480153	4.606977076
27.69775391	0.00434982	4.094567295
27.70385742	0.003740869	3.315973528
27.70996094	0.00329558	2.829735732
27.71606445	0.00279141	2.445753236
27.72216797	0.002609265	2.252846054
27.72827148	0.002677293	2.241052626
27.734375	0.002377187	1.977663524
27.74047852	0.001826798	1.471180543
27.74658203	0.002016996	1.560921922
27.75268555	0.002309395	1.795321551
27.75878906	0.00264703	2.077825185
27.76489258	0.003401702	2.625710341
27.77099609	0.003947381	3.053711733
27.77709961	0.003750772	2.938540003
27.78320313	0.003180746	2.387805821
27.78930664	0.003048148	2.169187822
27.79541016	0.00330524	2.381915078
27.80151367	0.00313661	2.315961228
27.80761719	0.002375356	1.722168706
27.8137207	0.001495733	1.069650821
27.81982422	0.000825847	0.588369745
27.82592773	0.000790218	0.545589562
27.83203125	0.001236629	0.82372785
27.83813477	0.001565273	1.054951233
27.84423828	0.002066435	1.441631681
27.8503418	0.00216725	1.486348701
27.85644531	0.002273494	1.49835538
27.86254883	0.002114921	1.372598166
27.86865234	0.001333781	0.832456709
27.87475586	0.000843861	0.510304319
27.88085938	0.001001171	0.632950108
27.88696289	0.00169046	1.098548946
27.89306641	0.002386425	1.493683043
27.89916992	0.002997679	1.852573723
27.90527344	0.003560361	2.202321712
27.91137695	0.004249558	2.604875134
27.91748047	0.004913231	3.047895293
27.92358398	0.005437015	3.346186764
27.9296875	0.006162929	3.727872021

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
22.88	0.00017033	-7.55837E-07	-0.000152972	-0.034418713	0.000298545	0.023352389
22.885	0.000133748	-5.75909E-07	-0.000116615	-0.026238461	0.00029855	0.023352389
22.89	6.1785E-05	-2.19458E-07	-4.45951E-05	-0.010033908	0.000298551	0.023352389
22.895	-1.51674E-05	1.64211E-07	3.29207E-05	0.007407148	0.000298551	0.023352389
22.9	-4.62908E-05	3.23728E-07	6.51483E-05	0.014658364	0.000298551	0.023352389
22.905	1.39046E-05	3.25273E-08	6.30802E-06	0.001419305	0.000298552	0.023352389
22.91	0.000175222	-7.60426E-07	-0.000153907	-0.034628981	0.000298559	0.023352389
22.915	0.000397476	-1.85862E-06	-0.000375746	-0.084542814	0.000298599	0.023352389
22.92	0.00061005	-2.91332E-06	-0.00058873	-0.132464278	0.000298693	0.023352389
22.925	0.000756214	-3.64281E-06	-0.00073599	-0.165597754	0.000298838	0.023352389
22.93	0.000804077	-3.88772E-06	-0.000785429	-0.176721502	0.000299001	0.023352389
22.935	0.00073829	-3.57008E-06	-0.000721246	-0.162280352	0.000299139	0.023352389
22.94	0.000581821	-2.80109E-06	-0.000565873	-0.127321504	0.000299225	0.023352389
22.945	0.000396462	-1.88538E-06	-0.000380872	-0.085696122	0.000299264	0.023352389
22.95	0.00023563	-1.08796E-06	-0.000219781	-0.049450685	0.000299278	0.023352389
22.955	0.000120269	-5.13589E-07	-0.000103757	-0.023345387	0.000299282	0.023352389
22.96	5.84961E-05	-2.03164E-07	-4.10532E-05	-0.009236977	0.000299283	0.023352389
22.965	5.95249E-05	-2.03132E-07	-4.10497E-05	-0.009236188	0.000299284	0.023352389
22.97	0.0001206	-5.01112E-07	-0.000101259	-0.022783356	0.000299287	0.023352389
22.975	0.000215514	-9.68417E-07	-0.000195679	-0.044027694	0.000299299	0.023352389
22.98	0.000308049	-1.42594E-06	-0.000288117	-0.064826356	0.000299323	0.023352389
22.985	0.000370534	-1.73614E-06	-0.000350787	-0.078927079	0.000299358	0.023352389
22.99	0.000390261	-1.83515E-06	-0.000370791	-0.083427966	0.000299396	0.023352389
22.995	0.00037089	-1.74004E-06	-0.000351571	-0.079103503	0.000299431	0.023352389
23	0.000335068	-1.56199E-06	-0.000315594	-0.071008753	0.000299459	0.023352389
23.005	0.000322717	-1.49861E-06	-0.00030279	-0.068127727	0.000299486	0.023352389
23.01	0.000356324	-1.66277E-06	-0.00033596	-0.075590986	0.000299518	0.023352389
23.015	0.00040496	-1.90281E-06	-0.00038446	-0.086503544	0.000299559	0.023352389
23.02	0.000430642	-2.03009E-06	-0.000410173	-0.092288844	0.000299606	0.023352389
23.025	0.000440148	-2.07713E-06	-0.000419677	-0.094427239	0.000299655	0.023352389
23.03	0.000439581	-2.07434E-06	-0.000419112	-0.094300231	0.000299704	0.023352389
23.035	0.000412818	-1.94141E-06	-0.000392252	-0.088256623	0.000299747	0.023352389
23.04	0.000375759	-1.75564E-06	-0.000354716	-0.079811014	0.000299783	0.023352389
23.045	0.000374351	-1.74433E-06	-0.000352431	-0.079297032	0.000299818	0.023352389
23.05	0.00043967	-2.06249E-06	-0.000416719	-0.093761713	0.000299867	0.023352389
23.055	0.000580122	-2.75334E-06	-0.000556282	-0.12516346	0.000299952	0.023352389
23.06	0.000780084	-3.74121E-06	-0.000755833	-0.170062503	0.000300106	0.023352389
23.065	0.001004434	-4.85344E-06	-0.000980361	-0.22058129	0.000300361	0.023352389
23.07	0.001204781	-5.85125E-06	-0.001181757	-0.265895318	0.000300728	0.023352389
23.075	0.001308134	-6.37288E-06	-0.001287038	-0.289583537	0.00030116	0.023352389
23.08	0.001260505	-6.14809E-06	-0.001241617	-0.279363743	0.000301562	0.023352389
23.085	0.001091242	-5.31852E-06	-0.001074002	-0.24165041	0.000301863	0.023352389
23.09	0.000866035	-4.20812E-06	-0.000849669	-0.191175553	0.000302052	0.023352389
23.095	0.000620628	-2.9937E-06	-0.000604346	-0.13597789	0.00030215	0.023352389
23.1	0.000399716	-1.89585E-06	-0.000382594	-0.086083594	0.00030219	0.023352389
23.105	0.00027461	-1.26847E-06	-0.000255881	-0.057573296	0.000302209	0.023352389
23.11	0.000274025	-1.25668E-06	-0.000253506	-0.057038947	0.000302228	0.023352389
23.115	0.000367684	-1.71287E-06	-0.000345683	-0.077778622	0.000302262	0.023352389
23.12	0.000520983	-2.46654E-06	-0.000497956	-0.11204014	0.000302331	0.023352389
23.125	0.000707444	-3.38723E-06	-0.000683961	-0.153891191	0.000302457	0.023352389
23.13	0.000887539	-4.27965E-06	-0.000864238	-0.194453546	0.000302656	0.023352389
23.135	0.00101942	-4.9359E-06	-0.000996799	-0.224279674	0.000302919	0.023352389
23.14	0.001087425	-5.27679E-06	-0.001065653	-0.239771826	0.000303218	0.023352389
23.145	0.001112318	-5.40364E-06	-0.001091276	-0.245537102	0.000303531	0.023352389
23.15	0.001122481	-5.45692E-06	-0.001102036	-0.247958102	0.000303849	0.023352389
23.155	0.00111666	-5.43085E-06	-0.001096768	-0.246772824	0.000304164	0.023352389
23.16	0.001087481	-5.28842E-06	-0.00106799	-0.240297761	0.000304463	0.023352389
23.165	0.001054484	-5.12609E-06	-0.001035189	-0.232917452	0.000304744	0.023352389
23.17	0.00102395	-4.97583E-06	-0.001004828	-0.226086323	0.000305009	0.023352389
23.175	0.000972413	-4.7215E-06	-0.000953441	-0.214524129	0.000305248	0.023352389
23.18	0.000909643	-4.41009E-06	-0.000890523	-0.20036777	0.000305457	0.023352389
23.185	0.00088598	-4.29072E-06	-0.000866405	-0.194941194	0.000305656	0.023352389
23.19	0.000923018	-4.47201E-06	-0.000903038	-0.203183582	0.000305871	0.023352389
23.195	0.000996235	-4.83396E-06	-0.000976171	-0.219638492	0.000306122	0.023352389
23.2	0.001073941	-5.21995E-06	-0.00105416	-0.237185901	0.000306413	0.023352389
23.205	0.001131261	-5.5068E-06	-0.001112111	-0.250224923	0.000306737	0.023352389
23.21	0.001136632	-5.53805E-06	-0.001118422	-0.251644942	0.000307063	0.023352389
23.215	0.00105493	-5.13862E-06	-0.001037712	-0.233485242	0.000307345	0.023352389
23.22	0.0008849	-4.29976E-06	-0.000868225	-0.195350717	0.000307543	0.023352389
23.225	0.000686381	-3.31571E-06	-0.000669422	-0.150619992	0.000307662	0.023352389
23.23	0.000536478	-2.56868E-06	-0.000518513	-0.116665436	0.000307734	0.023352389
23.235	0.000467282	-2.21947E-06	-0.000447974	-0.100794173	0.00030779	0.023354534
23.24	0.000483687	-2.29365E-06	-0.000462964	-0.104166904	0.000307849	0.023357398
23.245	0.00059669	-2.84715E-06	-0.000574801	-0.129330225	0.000307939	0.023359769
23.25	0.000777274	-3.73876E-06	-0.000754942	-0.16986197	0.000308091	0.023361679
23.255	0.000941457	-4.55336E-06	-0.00091951	-0.206889684	0.000308315	0.023363179
23.26	0.001037561	-5.03287E-06	-0.001016375	-0.228684287	0.000308587	0.023368232
23.265	0.001079363	-5.24352E-06	-0.001058927	-0.238258682	0.000308882	0.023375716
23.27	0.001082164	-5.26066E-06	-0.00106239	-0.23903779	0.000309178	0.023382663
23.275	0.001045927	-5.08353E-06	-0.001026598	-0.230984522	0.000309454	0.023389065
23.28	0.000991303	-4.81343E-06	-0.000972023	-0.218705073	0.000309703	0.023395043
23.285	0.000956533	-4.63969E-06	-0.000936918	-0.210806463	0.000309934	0.023400744
23.29	0.000963513	-4.67177E-06	-0.0009434	-0.212264947	0.000310169	0.02340615
23.295	0.001006238	-4.88083E-06	-0.000985644	-0.221769833	0.000310424	0.023411253
23.3	0.001083804	-5.26241E-06	-0.001062742	-0.239117056	0.000310721	0.023416059
23.305	0.001218539	-5.92781E-06	-0.001197146	-0.269357955	0.000311097	0.023420585
23.31	0.001394634	-6.80132E-06	-0.001373506	-0.309038759	0.000311588	0.023424866
23.315	0.001523787	-7.44708E-06	-0.001503829	-0.338361589	0.000312175	0.023428946
23.32	0.001527486	-7.47425E-06	-0.001509293	-0.33959097	0.000312765	0.023432858
23.325	0.001403078	-6.86625E-06	-0.001386444	-0.311949908	0.000313262	0.023440679
23.33	0.001194873	-5.83998E-06	-0.001179099	-0.265297355	0.000313623	0.023451019
23.335	0.000969218	-4.72235E-06	-0.000953318	-0.214496614	0.000313861	0.023460919
23.34	0.00081782	-3.96729E-06	-0.000800797	-0.180179281	0.00031403	0.023470708
23.345	0.000818006	-3.96044E-06	-0.00079942	-0.179869505	0.000314199	0.023480027
23.35	0.00096222	-4.66902E-06	-0.000942591	-0.212083034	0.000314433	0.023488251
23.355	0.001154543	-5.62101E-06	-0.001134928	-0.255358754	0.000314777	0.023495551
23.36	0.001298776	-6.33946E-06	-0.001280069	-0.288015444	0.000315196	0.023502308
23.365	0.001360851	-6.65365E-06	-0.001343538	-0.302295942	0.000315664	0.023508618
23.37	0.001332689	-6.52233E-06	-0.001317002	-0.296325548	0.000316113	0.02351451
23.375	0.001195101	-5.84913E-06	-0.00118098	-0.265720451	0.000316474	0.023519957
23.38	0.000952012	-4.65094E-06	-0.000938906	-0.211253919	0.000316703	0.023524867
23.385	0.000657888	-3.19529E-06	-0.000644863	-0.145094254	0.000316812	0.023529193
23.39	0.000378512	-1.80765E-06	-0.000364602	-0.08203541	0.000316849	0.023533112
23.395	0.000156559	-6.99909E-07	-0.000140895	-0.031701371	0.000316855	0.023536532

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
27.93579102	0.006783961	4.186486485
27.94189453	0.006375564	3.938580033
27.94799805	0.005278346	3.236329871
27.95410156	0.004606497	2.910243869
27.96020508	0.004310056	2.738961085
27.96630859	0.004535393	2.856147788
27.97241211	0.004439756	2.822630252
27.97851563	0.003472148	2.172019807
27.98461914	0.003248553	2.012051932
27.99072266	0.002531193	1.597494554
27.99682617	0.001098677	0.688600671
28.00292969	0.000927145	0.585049588
28.0090332	0.002765945	1.809871263
28.01513672	0.004288063	2.801103641
28.02124023	0.004439683	2.82101221
28.02734375	0.003698776	2.260053842
28.03344727	0.002197358	1.282364083
28.03955078	0.001195424	0.689717676
28.0456543	0.002260004	1.298440425
28.05175781	0.002860083	1.603726191
28.05786133	0.002494943	1.393397422
28.06396484	0.002093853	1.171436417
28.07006836	0.002459344	1.358751299
28.07617188	0.002967574	1.643059737
28.08227539	0.003442545	1.932158848
28.08837891	0.003252973	1.851476239
28.09448242	0.001853843	1.065334579
28.10058594	0.000184464	0.10446239
28.10668945	0.000646318	0.364700709
28.11279297	0.001021468	0.589845178
28.11889648	0.001834212	1.047491477
28.125	0.002236112	1.230415854
28.13110352	0.001599553	0.875137433
28.13720703	0.000723616	0.399378096
28.14331055	0.001528004	0.830954792
28.14941406	0.00256294	1.365129392
28.15551758	0.002734237	1.427785362
28.16162109	0.002265935	1.156845019
28.16772461	0.00177078	0.891007432
28.17382813	0.001961795	0.980084285
28.17993164	0.002469757	1.228187731
28.18603516	0.001722237	0.846809567
28.19213867	0.000805469	0.384236293
28.19824219	0.000388187	0.181956583
28.2043457	0.001386672	0.661971132
28.21044922	0.003424307	1.642718012
28.21655273	0.005603807	2.638429674
28.22265625	0.006810475	3.220894644
28.22875977	0.006105292	2.926697585
28.23486328	0.004370325	2.091705777
28.2409668	0.003161632	1.511800643
28.24707031	0.003023348	1.433376002
28.25317383	0.003905186	1.819501522
28.25927734	0.004867507	2.262259444
28.26538086	0.005210635	2.460990942
28.27148438	0.005376306	2.607710921
28.27758789	0.004599511	2.251588467
28.28369141	0.002740871	1.317055335
28.28979492	0.001875314	0.902118134
28.29589844	0.002958576	1.455157408
28.30200195	0.004657968	2.271138273
28.30810547	0.005293795	2.533455837
28.31420898	0.004620758	2.229239324
28.3203125	0.003668146	1.776049063
28.32641602	0.002769	1.317299911
28.33251953	0.0019366	0.905511743
28.33862305	0.001934147	0.900357713
28.34472656	0.002789238	1.308299364
28.35083008	0.003273039	1.52248517
28.35693359	0.003265785	1.478227012
28.36303711	0.003491522	1.591934755
28.36914063	0.003021403	1.415117281
28.37524414	0.001891218	0.871166813
28.38134766	0.001923775	0.867330842
28.38745117	0.002225788	1.007846707
28.39355469	0.00234014	1.047621069
28.3996582	0.002387259	1.06756214
28.40576172	0.002043844	0.943185377
28.41186523	0.001769703	0.819079419
28.41796875	0.001591017	0.72056926
28.42407227	0.001144737	0.519418104
28.43017578	0.001408404	0.641714173
28.4362793	0.00208937	0.940074641
28.44238281	0.002439085	1.076319646
28.44848633	0.002373182	1.030306504
28.45458984	0.001924502	0.841084792
28.46069336	0.001481993	0.655035522
28.46679688	0.001844692	0.804902643
28.47290039	0.002306422	0.996960859
28.47900391	0.002160971	0.929099438
28.48510742	0.001596406	0.66945178
28.49121094	0.001067941	0.446477626
28.49731445	0.00069102	0.298947001
28.50341797	5.90411E-05	0.025539141
28.50952148	0.000882097	0.364843273
28.515625	0.001235064	0.501228632
28.52172852	0.000707083	0.289687918
28.52783203	0.00140631	0.572989294
28.53393555	0.002100756	0.85097778
28.54003906	0.002283891	0.938341396
28.54614258	0.002475677	1.018030554
28.55224609	0.003084712	1.250100757
28.55834961	0.003699635	1.505395363
28.56445313	0.004209029	1.719367683

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
23.4	3.70902E-05	-9.58326E-08	-1.89103E-05	-0.004254814	0.000316855	0.023539381
23.405	7.07384E-05	-2.48246E-07	-4.97109E-05	-0.011184942	0.000316856	0.023541621
23.41	0.000253694	-1.14201E-06	-0.000230295	-0.051816397	0.000316873	0.023547807
23.415	0.000515761	-2.43216E-06	-0.00049094	-0.110461426	0.00031694	0.023553035
23.42	0.000782719	-3.75145E-06	-0.000757442	-0.17042442	0.000317095	0.023557429
23.425	0.001004927	-4.85331E-06	-0.000979997	-0.220499404	0.00031735	0.023561152
23.43	0.001146471	-5.55852E-06	-0.001122427	-0.252546075	0.000317682	0.023564404
23.435	0.001197443	-5.8159E-06	-0.001174407	-0.264241627	0.000318045	0.023571571
23.44	0.001189025	-5.77784E-06	-0.001166717	-0.262511302	0.000318402	0.023581348
23.445	0.001175288	-5.71152E-06	-0.001153317	-0.259496433	0.000318751	0.02359585
23.45	0.001191455	-5.79248E-06	-0.001169676	-0.263177146	0.00031911	0.023610054
23.455	0.001229382	-5.98193E-06	-0.001207938	-0.271786095	0.000319492	0.023623961
23.46	0.001258073	-6.12701E-06	-0.001237238	-0.2783786	0.000319892	0.023637595
23.465	0.001245562	-6.0693E-06	-0.001225576	-0.275754524	0.000320284	0.023650971
23.47	0.001158502	-5.64269E-06	-0.001139377	-0.256359917	0.000320623	0.023664064
23.475	0.000991823	-4.81975E-06	-0.000973106	-0.21894896	0.000320872	0.023676782
23.48	0.000806012	-3.89772E-06	-0.000786833	-0.177037357	0.000321036	0.023688966
23.485	0.000691116	-3.32282E-06	-0.000670697	-0.150906889	0.000321157	0.023705195
23.49	0.000691239	-3.31629E-06	-0.000669382	-0.150610857	0.000321277	0.023721612
23.495	0.000777849	-3.73977E-06	-0.000754949	-0.169863484	0.00032143	0.023735768
23.5	0.000884043	-4.26303E-06	-0.000860671	-0.193651072	0.000321628	0.023753767
23.505	0.000959353	-4.63515E-06	-0.000935853	-0.210566919	0.00032186	0.023771768
23.51	0.000995607	-4.81398E-06	-0.000971983	-0.218696173	0.000322111	0.023789523
23.515	0.001012784	-4.89721E-06	-0.000988797	-0.222479291	0.00032237	0.023806593
23.52	0.001048233	-5.06916E-06	-0.001023537	-0.230295777	0.000322648	0.023827442
23.525	0.001149281	-5.56485E-06	-0.001123675	-0.252826853	0.000322982	0.023850104
23.53	0.001334432	-6.47806E-06	-0.001308134	-0.294330054	0.000323432	0.023878275
23.535	0.001571707	-7.65254E-06	-0.001545288	-0.347689901	0.000324056	0.023908089
23.54	0.001812275	-8.84724E-06	-0.00178638	-0.401935419	0.000324886	0.023938066
23.545	0.002009607	-9.83179E-06	-0.001985031	-0.446632031	0.000325907	0.023968636
23.55	0.002111455	-1.03466E-05	-0.0020889	-0.470002485	0.000327034	0.024000144
23.555	0.002086833	-1.02361E-05	-0.002066552	-0.464974186	0.000328134	0.024032758
23.56	0.001952726	-9.58171E-06	-0.001934337	-0.435225827	0.000329098	0.024066417
23.565	0.001752279	-8.59575E-06	-0.001735139	-0.390406197	0.000329874	0.024101395
23.57	0.001531436	-7.50525E-06	-0.001514841	-0.340839246	0.000330467	0.024136906
23.575	0.001330981	-6.51259E-06	-0.001314327	-0.295723574	0.000330915	0.024175824
23.58	0.001173501	-5.73063E-06	-0.001156384	-0.260186331	0.000331263	0.024216571
23.585	0.001063404	-5.18213E-06	-0.001045603	-0.235260704	0.000331548	0.024256772
23.59	0.000997904	-4.85396E-06	-0.000979324	-0.220347952	0.0003318	0.024307547
23.595	0.000970046	-4.71216E-06	-0.000950688	-0.213904741	0.000332038	0.02436262
23.6	0.000970933	-4.71305E-06	-0.000950868	-0.213945362	0.000332276	0.024415225
23.605	0.000988978	-4.79949E-06	-0.000968334	-0.217875071	0.000332523	0.024465431
23.61	0.001010019	-4.90133E-06	-0.000988913	-0.222505377	0.000332781	0.024517869
23.615	0.001027125	-4.984E-06	-0.001005617	-0.226263873	0.000333048	0.024567163
23.62	0.001040062	-5.04619E-06	-0.001018183	-0.229091163	0.000333321	0.024614658
23.625	0.001047682	-5.08211E-06	-0.001025441	-0.230724199	0.000333599	0.024668542
23.63	0.001052543	-5.10422E-06	-0.001029908	-0.231729233	0.000333879	0.024728233
23.635	0.001063284	-5.15513E-06	-0.001040194	-0.234043625	0.000334164	0.024786906
23.64	0.001091784	-5.29372E-06	-0.001068196	-0.240344104	0.000334466	0.024844985
23.645	0.001148649	-5.57294E-06	-0.001124612	-0.253037769	0.000334799	0.02490107
23.65	0.001230199	-5.97534E-06	-0.001205912	-0.27133029	0.000335182	0.024955386
23.655	0.001318744	-6.41385E-06	-0.001294505	-0.291263706	0.000335621	0.025014564
23.66	0.001390074	-6.76882E-06	-0.001366218	-0.307399126	0.00033611	0.025080945
23.665	0.001409274	-6.86688E-06	-0.001386028	-0.311856313	0.000336612	0.02514783
23.67	0.001362005	-6.63502E-06	-0.001339177	-0.301314822	0.00033708	0.025226669
23.675	0.001293464	-6.29516E-06	-0.001270506	-0.285863953	0.000337503	0.025304478
23.68	0.001260084	-6.12721E-06	-0.001236574	-0.278229097	0.000337905	0.025380983
23.685	0.001271922	-6.18242E-06	-0.001247728	-0.280738907	0.000338313	0.025456163
23.69	0.001325173	-6.44247E-06	-0.001300275	-0.292561876	0.000338757	0.025531613
23.695	0.001429131	-6.95409E-06	-0.001403645	-0.315820046	0.000339274	0.02562386
23.7	0.001576783	-7.68387E-06	-0.001551069	-0.348990517	0.000339902	0.025717218
23.705	0.001735935	-8.47342E-06	-0.001710556	-0.384875022	0.000340664	0.025810355
23.71	0.001863875	-9.11146E-06	-0.001839429	-0.413871556	0.000341542	0.025903963
23.715	0.00191785	-9.38558E-06	-0.001894795	-0.426328843	0.000342471	0.025998587
23.72	0.001870654	-9.15943E-06	-0.001849099	-0.416047371	0.000343356	0.026095038
23.725	0.001720324	-8.42104E-06	-0.001699908	-0.382479336	0.000344104	0.02619399
23.73	0.001505191	-7.35762E-06	-0.001485064	-0.334139375	0.000344676	0.026294577
23.735	0.001314145	-6.40803E-06	-0.001293236	-0.29097801	0.000345113	0.026393924
23.74	0.001231459	-5.99126E-06	-0.001209047	-0.272035592	0.000345496	0.026490881
23.745	0.001274416	-6.19599E-06	-0.001250416	-0.281343533	0.000345906	0.026585738
23.75	0.001416903	-6.89516E-06	-0.001391683	-0.313128771	0.000346414	0.026678101
23.755	0.001622065	-7.9079E-06	-0.001596289	-0.359165017	0.000347079	0.026769806
23.76	0.001829217	-8.93476E-06	-0.001803729	-0.405839052	0.000347925	0.026861105
23.765	0.001974685	-9.65965E-06	-0.001950149	-0.438783488	0.00034891	0.026952328
23.77	0.002037829	-9.9783E-06	-0.002014507	-0.453264071	0.00034996	0.027051339
23.775	0.002035748	-9.97386E-06	-0.002013607	-0.453061637	0.000351007	0.027154782
23.78	0.001990478	-9.75489E-06	-0.001969362	-0.443106487	0.000352008	0.027260211
23.785	0.001913654	-9.37885E-06	-0.00189338	-0.426010611	0.000352934	0.027367162
23.79	0.001809707	-8.86733E-06	-0.001790032	-0.402757119	0.000353762	0.027479325
23.795	0.001693165	-8.29176E-06	-0.001673748	-0.37659321	0.000354486	0.027591357
23.8	0.001586695	-7.76453E-06	-0.001567236	-0.352628086	0.000355123	0.027702247
23.805	0.001492901	-7.29915E-06	-0.001473224	-0.331475446	0.000355686	0.027811674
23.81	0.001405488	-6.86426E-06	-0.001385373	-0.31170888	0.000356185	0.02792117
23.815	0.001347651	-6.57425E-06	-0.001326792	-0.298528281	0.000356644	0.028031697
23.82	0.00134848	-6.57418E-06	-0.00132678	-0.298525484	0.000357104	0.028140004
23.825	0.001399452	-6.82341E-06	-0.001377139	-0.309856387	0.000357599	0.028245517
23.83	0.001475466	-7.19836E-06	-0.0014529	-0.32690259	0.000358149	0.028348414
23.835	0.00155289	-7.58257E-06	-0.001530527	-0.344368467	0.000358758	0.028449436
23.84	0.001585538	-7.74748E-06	-0.001563846	-0.351865308	0.000359394	0.028556105
23.845	0.001530775	-7.48015E-06	-0.001509828	-0.339711275	0.000359986	0.028663084
23.85	0.001411215	-6.88957E-06	-0.001390502	-0.312862876	0.000360489	0.028769864
23.855	0.001301026	-6.34181E-06	-0.001279841	-0.287964311	0.000360917	0.028874285
23.86	0.001257611	-6.12235E-06	-0.001235512	-0.277990214	0.000361317	0.028975264
23.865	0.001289123	-6.27359E-06	-0.001266072	-0.284866161	0.000361737	0.029073429
23.87	0.001372565	-6.68293E-06	-0.001348782	-0.303475964	0.000362213	0.029169697
23.875	0.00148645	-7.24437E-06	-0.001462217	-0.328998893	0.000362772	0.029263174
23.88	0.001616019	-7.88513E-06	-0.00159167	-0.358125791	0.000363432	0.029354886
23.885	0.001737719	-8.48867E-06	-0.001713599	-0.385559871	0.000364195	0.029445479
23.89	0.001834504	-8.96984E-06	-0.001810799	-0.407429819	0.000365045	0.029535428
23.895	0.001918052	-9.38575E-06	-0.001894815	-0.426333279	0.000365975	0.029625115
23.9	0.001998899	-9.78906E-06	-0.001976281	-0.444663245	0.000366985	0.029714865
23.905	0.002057757	-1.00847E-05	-0.002036	-0.458100031	0.000368055	0.029804977
23.91	0.00207818	-1.01906E-05	-0.00205739	-0.462912724	0.000369147	0.029895658
23.915	0.002070377	-1.01566E-05	-0.002050519	-0.461366726	0.00037023	0.029986966

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
28.57055664	0.004492624	1.81319675
28.57666016	0.004281718	1.746419579
28.58276367	0.004178076	1.735289962
28.58886719	0.004612955	1.881836955
28.5949707	0.005106314	2.049495039
28.60107422	0.005142653	2.092928735
28.60717773	0.004873925	1.99341235
28.61328125	0.004633044	1.873848388
28.61938477	0.004350783	1.751495779
28.62548828	0.003775781	1.522418203
28.6315918	0.002888602	1.173962685
28.63769531	0.002338602	0.958426866
28.64379883	0.003632491	1.487970922
28.64990234	0.005229414	2.154282915
28.65600586	0.005533609	2.30252158
28.66210938	0.004888159	2.038719884
28.66821289	0.004301432	1.821041975
28.67431641	0.004131359	1.786602937
28.68041992	0.004721149	2.02964033
28.68652344	0.005969983	2.54797405
28.69262695	0.006880554	2.980604626
28.69873047	0.007001066	3.037208908
28.70483398	0.006384822	2.709704859
28.7109375	0.004837336	2.023006161
28.71704102	0.003137666	1.313190916
28.72314453	0.002642076	1.11585809
28.72924805	0.003626015	1.535336641
28.73535156	0.004939263	2.053585337
28.74145508	0.005465789	2.241380679
28.74755859	0.005493745	2.265041375
28.75366211	0.005410844	2.212894349
28.75976563	0.004929413	1.98377706
28.76586914	0.004647694	1.889537372
28.77197266	0.004827757	1.990216711
28.77807617	0.005050662	2.068281776
28.78417969	0.005100915	2.06565639
28.7902832	0.004746031	1.895376825
28.79638672	0.004000275	1.579504881
28.80249023	0.003472477	1.377159798
28.80859375	0.003251722	1.294023094
28.81469727	0.003125985	1.231919899
28.82080078	0.002766915	1.073301688
28.8269043	0.001640075	0.626477028
28.83300781	0.001383924	0.53003943
28.83911133	0.002351518	0.917258044
28.84521484	0.002620133	1.02103309
28.85131836	0.002328516	0.890904915
28.85742188	0.00191152	0.731497085
28.86352539	0.001701979	0.66006532
28.86962891	0.001894562	0.733388292
28.87573242	0.002491198	0.952244926
28.88183594	0.003213069	1.219827147
28.88793945	0.003593974	1.361838829
28.89404297	0.003327812	1.262975083
28.90014648	0.002806802	1.065779161
28.90625	0.002974567	1.116239406
28.91235352	0.003362779	1.245537761
28.91845703	0.003084352	1.139415622
28.92456055	0.002439218	0.899605157
28.93066406	0.002719534	1.006379519
28.93676758	0.003970423	1.488568492
28.94287109	0.004661646	1.758841901
28.94897461	0.004250453	1.605100421
28.95507813	0.004272318	1.624672228
28.96118164	0.004960771	1.901123191
28.96728516	0.00532535	2.052601134
28.97338867	0.005684986	2.195819247
28.97949219	0.006220079	2.416660946
28.9855957	0.006562696	2.601518813
28.99169922	0.005966866	2.396455259
28.99780273	0.004578529	1.832432995
29.00390625	0.003562286	1.431641694
29.01000977	0.003339138	1.354059362
29.01611328	0.003688722	1.504666859
29.0222168	0.004799494	1.968300227
29.02832031	0.005538891	2.264215914
29.03442383	0.00497165	2.038609151
29.04052734	0.004238685	1.752738108
29.04663086	0.004595118	1.885650808
29.05273438	0.005845967	2.400295758
29.05883789	0.007053713	2.924429139
29.06494141	0.00735725	3.012252629
29.07104492	0.006887364	2.806410888
29.07714844	0.006413488	2.661280458
29.08325195	0.006085676	2.529650989
29.08935547	0.005573762	2.293007579
29.09545898	0.004995059	2.059787056
29.1015625	0.004678492	1.944994274
29.10766602	0.004781814	1.99126646
29.11376953	0.004895414	2.019265214
29.11987305	0.004416729	1.799904536
29.12597656	0.003981894	1.620034502
29.13208008	0.004454529	1.831711211
29.13818359	0.005003538	2.082604438
29.14428711	0.004872109	2.010388197
29.15039063	0.004392427	1.771487249
29.15649414	0.004080458	1.631037764
29.16259766	0.003440517	1.376873484
29.16870117	0.002427978	0.975150912
29.17480469	0.001646704	0.659183683
29.1809082	0.0012978	0.506330964
29.18701172	0.001294146	0.498278921
29.19311523	0.00138958	0.540710972
29.19921875	0.001441137	0.553391482

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
23.92	0.002038308	-1.00024E-05	-0.002019359	-0.454355763	0.00037128	0.030079411
23.925	0.001968532	-9.66103E-06	-0.001950379	-0.438835326	0.00037226	0.030172501
23.93	0.001872022	-9.18545E-06	-0.00185429	-0.417215317	0.000373145	0.030265943
23.935	0.001794401	-8.80118E-06	-0.001776655	-0.399747372	0.000373959	0.030360484
23.94	0.001764992	-8.65488E-06	-0.001747097	-0.393096881	0.000374746	0.030455204
23.945	0.001765139	-8.65577E-06	-0.001747277	-0.393137306	0.000375534	0.030553795
23.95	0.001762633	-8.64454E-06	-0.001745008	-0.392626821	0.000376319	0.030658588
23.955	0.001750405	-8.58571E-06	-0.001733122	-0.389952466	0.000377093	0.030761408
23.96	0.001728103	-8.47763E-06	-0.001711287	-0.385039503	0.000377848	0.030864156
23.965	0.001678396	-8.23441E-06	-0.00166215	-0.373983768	0.00037856	0.030965585
23.97	0.001597037	-7.83394E-06	-0.001581248	-0.355780861	0.000379205	0.031064521
23.975	0.001509954	-7.40401E-06	-0.001494398	-0.336239574	0.000379781	0.031160652
23.98	0.001430601	-7.01191E-06	-0.001415192	-0.318418236	0.000380298	0.031254083
23.985	0.001341704	-6.57244E-06	-0.001326421	-0.298444639	0.000380753	0.031346712
23.99	0.001235271	-6.04524E-06	-0.001219932	-0.274484808	0.000381139	0.031436634
23.995	0.00113046	-5.52468E-06	-0.00111479	-0.250827787	0.000381462	0.031523282
24	0.001039817	-5.07343E-06	-0.001023651	-0.230321419	0.000381735	0.031606283
24.005	0.000950561	-4.62856E-06	-0.000933804	-0.210105835	0.000381964	0.031684717
24.01	0.000862708	-4.18941E-06	-0.000845115	-0.190150875	0.000382152	0.031758338
24.015	0.00081254	-3.93539E-06	-0.000793816	-0.178608576	0.000382319	0.031827146
24.02	0.000819812	-3.96578E-06	-0.000799959	-0.179990796	0.000382488	0.031895678
24.025	0.000857934	-4.14998E-06	-0.000837177	-0.188364901	0.000382674	0.0319596
24.03	0.000911652	-4.41181E-06	-0.000890081	-0.20026831	0.000382885	0.032018656
24.035	0.001001944	-4.85494E-06	-0.000979615	-0.220413352	0.000383138	0.032073441
24.04	0.001135256	-5.51256E-06	-0.001112478	-0.250307594	0.000383464	0.032124424
24.045	0.001277282	-6.21611E-06	-0.001254612	-0.282287697	0.000383876	0.032172612
24.05	0.001373453	-6.69547E-06	-0.001351447	-0.304075471	0.000384353	0.032218909
24.055	0.001381399	-6.73933E-06	-0.001360306	-0.306068767	0.000384835	0.032263634
24.06	0.001297135	-6.32568E-06	-0.001276724	-0.287262997	0.000385261	0.032306792
24.065	0.001154716	-5.62102E-06	-0.001134351	-0.255228895	0.000385598	0.032348231
24.07	0.001022215	-4.96113E-06	-0.001001032	-0.225232284	0.000385862	0.032387817
24.075	0.000984978	-4.76959E-06	-0.000962337	-0.216525831	0.000386107	0.03242532
24.08	0.001072346	-5.1953E-06	-0.001048355	-0.235879817	0.000386398	0.032460865
24.085	0.001223816	-5.94166E-06	-0.001199154	-0.269809637	0.000386776	0.03249463
24.09	0.001366587	-6.64827E-06	-0.00134191	-0.301929731	0.000387248	0.03252686
24.095	0.001468753	-7.15605E-06	-0.001444487	-0.325009486	0.000387793	0.032557791
24.1	0.0015132	-7.37926E-06	-0.001489573	-0.335153947	0.000388372	0.032587747
24.105	0.001497575	-7.30467E-06	-0.001474501	-0.331762797	0.000388939	0.032616859
24.11	0.001453078	-7.08542E-06	-0.001430201	-0.321795197	0.000389473	0.032645105
24.115	0.001417812	-6.91015E-06	-0.001394786	-0.313826905	0.000389981	0.032672425
24.12	0.00140862	-6.86296E-06	-0.001385252	-0.311681798	0.000390482	0.032698766
24.125	0.001427453	-6.95418E-06	-0.001403684	-0.315828885	0.000390997	0.032724424
24.13	0.001472542	-7.17553E-06	-0.001448409	-0.325892102	0.000391545	0.032748848
24.135	0.00154257	-7.52089E-06	-0.001518183	-0.341591232	0.000392147	0.032772313
24.14	0.001635374	-7.98011E-06	-0.00161094	-0.362461419	0.000392822	0.032795291
24.145	0.001738671	-8.49299E-06	-0.001714531	-0.385769561	0.000393587	0.032817368
24.15	0.001830307	-8.95006E-06	-0.001806848	-0.40654075	0.000394433	0.032839179
24.155	0.001888442	-9.24299E-06	-0.00186601	-0.419852181	0.000395335	0.032860852
24.16	0.001886907	-9.24176E-06	-0.001865757	-0.41979535	0.000396234	0.032881744
24.165	0.001799092	-8.81326E-06	-0.001779174	-0.400314224	0.000397052	0.03290381
24.17	0.001635746	-8.00838E-06	-0.001616554	-0.36372467	0.000397729	0.032925345
24.175	0.001454083	-7.10902E-06	-0.001434858	-0.322843114	0.000398263	0.032945734
24.18	0.00130901	-6.38754E-06	-0.001289112	-0.290050249	0.000398696	0.032964715
24.185	0.001226117	-5.97191E-06	-0.001205155	-0.271159854	0.000399076	0.032983471
24.19	0.00121853	-5.92841E-06	-0.001196369	-0.269182991	0.000399451	0.033003
24.195	0.001285194	-6.25349E-06	-0.001262054	-0.283962196	0.000399869	0.033020706
24.2	0.001393088	-6.78523E-06	-0.001369492	-0.308135796	0.000400359	0.033036651
24.205	0.001489728	-7.26402E-06	-0.001466227	-0.32990109	0.00040092	0.033052201
24.21	0.001539774	-7.51363E-06	-0.001516655	-0.341247333	0.000401519	0.033069752
24.215	0.001548293	-7.55742E-06	-0.001525501	-0.343237712	0.000402125	0.03308639
24.22	0.001546587	-7.54964E-06	-0.00152393	-0.342884157	0.00040273	0.03310192
24.225	0.001555564	-7.5943E-06	-0.001532952	-0.344914274	0.000403341	0.033118266
24.23	0.00157292	-7.68063E-06	-0.001550394	-0.348838582	0.000403967	0.033133941
24.235	0.001589668	-7.76435E-06	-0.001567308	-0.352644276	0.000404605	0.033148319
24.24	0.001595112	-7.79257E-06	-0.001573008	-0.353926733	0.000405249	0.033161419
24.245	0.001575196	-7.6953E-06	-0.001553354	-0.349504724	0.000405876	0.033173434
24.25	0.00153304	-7.48707E-06	-0.001511279	-0.340037816	0.00040647	0.03318449
24.255	0.001493601	-7.29094E-06	-0.001471651	-0.33112139	0.000407033	0.033197003
24.26	0.001476423	-7.20396E-06	-0.001454077	-0.327167227	0.000407584	0.033208428
24.265	0.00149487	-7.29271E-06	-0.001472008	-0.331201766	0.000408149	0.033218696
24.27	0.001562785	-7.62674E-06	-0.001539501	-0.346387749	0.000408766	0.033227945
24.275	0.001660569	-8.11068E-06	-0.001637274	-0.368386592	0.000409463	0.033236252
24.28	0.00173301	-8.47165E-06	-0.001710194	-0.384793714	0.000410222	0.033244116
24.285	0.001741259	-8.51599E-06	-0.001719149	-0.386808557	0.000410989	0.033253176
24.29	0.001681755	-8.22424E-06	-0.001660199	-0.373544664	0.000411704	0.03326159
24.295	0.001580365	-7.72269E-06	-0.001558861	-0.350743777	0.000412335	0.033269257
24.3	0.001496745	-7.30576E-06	-0.001474624	-0.331790435	0.000412901	0.033278581
24.305	0.001492953	-7.2818E-06	-0.001469784	-0.330701462	0.000413464	0.033288169
24.31	0.001585166	-7.73343E-06	-0.001561039	-0.351233812	0.000414099	0.033296564
24.315	0.001740741	-8.50114E-06	-0.00171615	-0.386133856	0.000414865	0.033304096
24.32	0.00190807	-9.33021E-06	-0.001883626	-0.423815782	0.000415785	0.033311001
24.325	0.002045409	-1.00137E-05	-0.002021651	-0.454871428	0.000416843	0.033318515
24.33	0.002127113	-1.04238E-05	-0.002104473	-0.473506502	0.000417986	0.033326646
24.335	0.002132933	-1.04596E-05	-0.002111679	-0.475127699	0.000419136	0.033334786
24.34	0.002055556	-1.00833E-05	-0.00203565	-0.458021281	0.000420204	0.033342911
24.345	0.001910506	-9.37046E-06	-0.00189162	-0.42561441	0.000421127	0.033350856
24.35	0.001721838	-8.43916E-06	-0.001703469	-0.38328043	0.000421876	0.033358346
24.355	0.001518377	-7.43122E-06	-0.001499854	-0.337467103	0.000422459	0.033366667
24.36	0.001349382	-6.58992E-06	-0.001329915	-0.299230912	0.000422919	0.033375671
24.365	0.001276202	-6.21998E-06	-0.001255193	-0.282418374	0.00042333	0.033383658
24.37	0.001323933	-6.44862E-06	-0.001301393	-0.292813326	0.000423773	0.033390588
24.375	0.001443176	-7.03428E-06	-0.001419726	-0.319438263	0.0004243	0.033395953
24.38	0.001551558	-7.56954E-06	-0.001527869	-0.343770582	0.000424908	0.033400108
24.385	0.001609134	-7.85502E-06	-0.001585546	-0.356747935	0.000425563	0.033403396
24.39	0.001614364	-7.88185E-06	-0.001590965	-0.357967234	0.000426221	0.033406092
24.395	0.00156609	-7.64319E-06	-0.001542741	-0.347116746	0.000426841	0.03340823
24.4	0.001489079	-7.26001E-06	-0.001465319	-0.32969674	0.000427402	0.03341236
24.405	0.0014459	-7.04179E-06	-0.001421229	-0.319776546	0.00042793	0.033417233
24.41	0.001471843	-7.1652E-06	-0.001446165	-0.325387189	0.000428478	0.033421501
24.415	0.001542719	-7.51229E-06	-0.001516297	-0.341166874	0.000429079	0.03342538
24.42	0.001624215	-7.9134E-06	-0.00159734	-0.359401414	0.000429746	0.033428892
24.425	0.001700687	-8.29091E-06	-0.001673606	-0.376561371	0.000430477	0.033432066
24.43	0.001750683	-8.53867E-06	-0.001723658	-0.387823012	0.000431252	0.033434929
24.435	0.001748678	-8.52944E-06	-0.001721792	-0.387403094	0.000432024	0.033437494

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
29.20532227	0.001631227	0.61804387
29.21142578	0.001639605	0.633640289
29.2175293	0.001470125	0.5708425
29.22363281	0.001130724	0.433798817
29.22973633	0.001172319	0.452251706
29.23583984	0.002044717	0.793142072
29.24194336	0.002274727	0.884347947
29.24804688	0.002074679	0.809393526
29.25415039	0.002290748	0.889807856
29.26025391	0.003006924	1.173266666
29.26635742	0.003261177	1.279325575
29.27246094	0.003112289	1.204658443
29.27856445	0.003309994	1.278480081
29.28466797	0.003226407	1.27016648
29.29077148	0.002964471	1.174701431
29.296875	0.003193153	1.24996304
29.30297852	0.003447905	1.344231573
29.30908203	0.003227353	1.273173862
29.31518555	0.003666124	1.453815364
29.32128906	0.004306346	1.715764314
29.32739258	0.004072926	1.666526505
29.33349609	0.003672394	1.523989555
29.33959961	0.003657689	1.507190218
29.34570313	0.003568504	1.494489283
29.35180664	0.003472097	1.471623225
29.35791016	0.003954837	1.657027743
29.36401367	0.0045023	1.895448177
29.37011719	0.004561421	1.931212068
29.3762207	0.004215375	1.784963044
29.38232422	0.003940365	1.708191135
29.38842773	0.004190675	1.832794664
29.39453125	0.004935479	2.132356885
29.40063477	0.005761283	2.517232665
29.40673828	0.006316261	2.787008972
29.4128418	0.006102961	2.686816468
29.41894531	0.005049193	2.241849666
29.42504883	0.004083227	1.806857221
29.43115234	0.003825035	1.691726472
29.43725586	0.003798569	1.716330685
29.44335938	0.004160035	1.864643312
29.44946289	0.005562131	2.421042429
29.45556641	0.00624125	2.717427632
29.46166992	0.005514889	2.403738836
29.46777344	0.004548052	1.94997011
29.47387695	0.00436138	1.863907036
29.47998047	0.004608425	1.965563512
29.48608398	0.004842644	2.049812723
29.4921875	0.00468287	1.999646288
29.49829102	0.003838301	1.654979506
29.50439453	0.002714666	1.167540163
29.51049805	0.001943975	0.843649494
29.51660156	0.00175569	0.768278015
29.52270508	0.002489202	1.07224823
29.52880859	0.00291013	1.244115035
29.53491211	0.002184695	0.951495987
29.54101563	0.001442576	0.63290014
29.54711914	0.001151842	0.498741519
29.55322266	0.002488751	1.079692774
29.55932617	0.003275863	1.436485413
29.56542969	0.002774129	1.195593581
29.5715332	0.002188603	0.921136142
29.57763672	0.001575838	0.667908897
29.58374023	0.001487499	0.641423961
29.58984375	0.002586557	1.118465249
29.59594727	0.003946897	1.69794152
29.60205078	0.00411927	1.763260957
29.6081543	0.003601335	1.549357521
29.61425781	0.00331401	1.434776666
29.62036133	0.003127285	1.345153399
29.62646484	0.003177426	1.37826617
29.63256836	0.003753717	1.675228865
29.63867188	0.003744418	1.691403451
29.64477539	0.002895071	1.317802252
29.65087891	0.002055737	0.954055116
29.65698242	0.002742477	1.276456032
29.66308594	0.003899407	1.813003251
29.66918945	0.003940819	1.876337018
29.67529297	0.003051805	1.484085397
29.68139648	0.002380039	1.161430892
29.6875	0.002382036	1.170119679
29.69360352	0.002808185	1.392838063
29.69970703	0.003414511	1.717580746
29.70581055	0.003197266	1.655207002
29.71191406	0.001805769	0.950207466
29.71801758	0.001077929	0.558179342
29.72412109	0.001851749	0.948094619
29.73022461	0.002192896	1.137122054
29.73632813	0.002464541	1.28848267
29.74243164	0.003588825	1.856817629
29.74853516	0.004524152	2.322673067
29.75463867	0.004474335	2.316198358
29.76074219	0.004005519	2.087570514
29.7668457	0.00418941	2.153897457
29.77294922	0.004211357	2.134714344
29.77905273	0.003702522	1.893056932
29.78515625	0.003001685	1.554964262
29.79125977	0.001920923	0.995433382
29.79736328	0.001247027	0.648413827
29.8034668	0.002334673	1.219118096
29.80957031	0.002820075	1.452521898
29.81567383	0.002086566	1.061771565
29.82177734	0.000996063	0.511571863
29.82788086	0.000766287	0.395262523
29.83398438	0.001342052	0.687179049

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
24.44	0.001704943	-8.31242E-06	-0.00167794	-0.377536449	0.000432759	0.033439756
24.445	0.001667283	-8.12364E-06	-0.001639797	-0.36895426	0.000433462	0.03344169
24.45	0.001667937	-8.1239E-06	-0.001639848	-0.368965886	0.000434165	0.033443277
24.455	0.001695801	-8.25932E-06	-0.001667212	-0.375122721	0.000434892	0.033444523
24.46	0.001739122	-8.47143E-06	-0.00171007	-0.384765649	0.000435656	0.033445496
24.465	0.001818451	-8.86178E-06	-0.001788931	-0.402509371	0.000436492	0.033448084
24.47	0.001940767	-9.46633E-06	-0.001911051	-0.429986505	0.000437444	0.033452772
24.475	0.002061223	-1.00641E-05	-0.002031803	-0.457155754	0.000438518	0.033457109
24.48	0.002131182	-1.04135E-05	-0.00210237	-0.473033227	0.000439665	0.033461157
24.485	0.002144522	-1.04826E-05	-0.002116321	-0.476172113	0.000440828	0.033464958
24.49	0.002111177	-1.03198E-05	-0.002083429	-0.468771566	0.000441954	0.033468609
24.495	0.00203573	-9.94696E-06	-0.002008098	-0.45182212	0.000443002	0.033472116
24.5	0.001952018	-9.53014E-06	-0.001923882	-0.432873395	0.000443965	0.033476697
24.505	0.001933198	-9.4314E-06	-0.001903933	-0.42838499	0.000444909	0.033481059
24.51	0.002026596	-9.88746E-06	-0.001996082	-0.449118438	0.000445947	0.033484907
24.515	0.002209669	-1.07894E-05	-0.002178217	-0.490098905	0.000447181	0.033488579
24.52	0.002436892	-1.19127E-05	-0.002404811	-0.541082424	0.000448682	0.033492632
24.525	0.002678138	-1.31087E-05	-0.002646024	-0.59535534	0.000450495	0.033497349
24.53	0.002887889	-1.41525E-05	-0.002856508	-0.642714408	0.000452603	0.033503175
24.535	0.003008072	-1.47553E-05	-0.002978068	-0.67006522	0.00045489	0.033510927
24.54	0.003032912	-1.48858E-05	-0.003004381	-0.675985808	0.000457215	0.033521549
24.545	0.003017915	-1.48171E-05	-0.002990496	-0.6728615	0.000459517	0.033538581
24.55	0.003009243	-1.47784E-05	-0.002982668	-0.671100341	0.000461805	0.033564596
24.555	0.003008106	-1.47766E-05	-0.002982309	-0.67101955	0.000464092	0.033596027
24.56	0.003010203	-1.47905E-05	-0.002985115	-0.67165081	0.000466382	0.033636212
24.565	0.003031514	-1.48993E-05	-0.003007095	-0.676596356	0.000468705	0.033688894
24.57	0.00307569	-1.51223E-05	-0.003052064	-0.686714478	0.000471096	0.033742948
24.575	0.003108326	-1.52904E-05	-0.003085942	-0.694337053	0.000473538	0.033809595
24.58	0.003084819	-1.51822E-05	-0.003064079	-0.689417854	0.000475943	0.033887302
24.585	0.002986573	-1.47043E-05	-0.002967533	-0.667694901	0.000478197	0.033973167
24.59	0.002810122	-1.38387E-05	-0.002792634	-0.628342612	0.000480193	0.03406946
24.595	0.002549075	-1.25521E-05	-0.00253272	-0.569862085	0.000481835	0.034176131
24.6	0.002231956	-1.09835E-05	-0.002215878	-0.498572606	0.000483095	0.034297482
24.605	0.001940208	-9.53525E-06	-0.001923372	-0.432758634	0.000484046	0.034413346
24.61	0.001737497	-8.52427E-06	-0.001719207	-0.386821602	0.000484809	0.034522157
24.615	0.001629763	-7.98222E-06	-0.001609746	-0.362192854	0.00048548	0.034628074
24.62	0.001610113	-7.87614E-06	-0.001588325	-0.357373118	0.000486136	0.034728885
24.625	0.001674706	-8.18825E-06	-0.00165139	-0.37156273	0.000486844	0.034829262
24.63	0.001798483	-8.7959E-06	-0.001774166	-0.39918743	0.000487662	0.034928934
24.635	0.001934088	-9.46542E-06	-0.001909433	-0.429622344	0.000488607	0.035023562
24.64	0.00202746	-9.92867E-06	-0.002003019	-0.450679313	0.000489646	0.035117947
24.645	0.002048093	-1.00327E-05	-0.002024035	-0.455407791	0.000490706	0.035214085
24.65	0.002010607	-9.84779E-06	-0.001986673	-0.447001317	0.000491728	0.035306938
24.655	0.001957213	-9.58183E-06	-0.001932934	-0.434910056	0.000492696	0.035396289
24.66	0.001941076	-9.49811E-06	-0.001916018	-0.431104162	0.000493649	0.035481765
24.665	0.002002541	-9.79821E-06	-0.001976656	-0.444747664	0.000494662	0.035563309
24.67	0.002121419	-1.03849E-05	-0.002095178	-0.471415041	0.0004958	0.035648609
24.675	0.002228302	-1.09154E-05	-0.002202358	-0.49553066	0.000497054	0.035735385
24.68	0.002270416	-1.11274E-05	-0.002245173	-0.505163837	0.000498357	0.035820156
24.685	0.002236545	-1.09631E-05	-0.002211984	-0.497696418	0.000499622	0.035903582
24.69	0.002150057	-1.05365E-05	-0.002125786	-0.478301858	0.00050079	0.035985735
24.695	0.002061045	-1.00947E-05	-0.002036509	-0.4582146	0.000501863	0.036066417
24.7	0.002018607	-9.8813E-06	-0.0019934	-0.448515016	0.000502893	0.036145292
24.705	0.002040478	-9.98593E-06	-0.002014542	-0.45327201	0.000503946	0.036222153
24.71	0.002108606	-1.03207E-05	-0.002082195	-0.468493958	0.000505069	0.036297205
24.715	0.002186627	-1.07064E-05	-0.002160108	-0.486024393	0.000506278	0.036370641
24.72	0.002241603	-1.09793E-05	-0.002215254	-0.49843224	0.000507548	0.036449095
24.725	0.002260472	-1.10737E-05	-0.002234329	-0.502724102	0.000508839	0.036528829
24.73	0.002261513	-1.10789E-05	-0.00223537	-0.502958301	0.000510132	0.036607798
24.735	0.002281316	-1.11758E-05	-0.002254945	-0.507362532	0.000511447	0.036685663
24.74	0.002341274	-1.14713E-05	-0.002314631	-0.520792048	0.000512833	0.036761851
24.745	0.002440412	-1.19616E-05	-0.002413678	-0.543077582	0.000514338	0.0368371
24.75	0.002563349	-1.25717E-05	-0.002536911	-0.570805054	0.000515999	0.036919535
24.755	0.002673197	-1.31197E-05	-0.002647587	-0.595707091	0.000517805	0.037006511
24.76	0.002722496	-1.33701E-05	-0.002698161	-0.607086161	0.000519678	0.03709409
24.765	0.002683182	-1.31824E-05	-0.002660222	-0.598549871	0.000521498	0.0371814
24.77	0.00256064	-1.2581E-05	-0.002538708	-0.571209232	0.000523155	0.037268174
24.775	0.002397045	-1.17729E-05	-0.002375454	-0.534477048	0.000524607	0.037354231
24.78	0.002257315	-1.10793E-05	-0.002235326	-0.502948286	0.000525895	0.0374392
24.785	0.002189408	-1.0739E-05	-0.002166573	-0.487478889	0.000527106	0.037522762
24.79	0.002203044	-1.0802E-05	-0.002179314	-0.490345586	0.000528333	0.037604679
24.795	0.002283396	-1.11967E-05	-0.002259064	-0.508289506	0.000529651	0.037691857
24.8	0.002399435	-1.17707E-05	-0.002375045	-0.534385201	0.000531106	0.037781301
24.805	0.00250451	-1.22936E-05	-0.002480683	-0.55815364	0.000532691	0.037869735
24.81	0.002559645	-1.25716E-05	-0.002536847	-0.570790647	0.000534347	0.037957494
24.815	0.002548741	-1.2524E-05	-0.002527227	-0.568626111	0.000535989	0.038053822
24.82	0.002456704	-1.20751E-05	-0.002436531	-0.548219517	0.000537514	0.038153433
24.825	0.002274682	-1.11794E-05	-0.002255545	-0.5074977	0.000538822	0.038254529
24.83	0.002042062	-1.00294E-05	-0.002023247	-0.455230568	0.000539876	0.038352866
24.835	0.001831994	-8.98712E-06	-0.001812709	-0.407859635	0.000540724	0.038447365
24.84	0.001690157	-8.2801E-06	-0.001669911	-0.375729925	0.000541446	0.038538808
24.845	0.001616775	-7.91121E-06	-0.001595409	-0.358966958	0.000542107	0.038625453
24.85	0.001595681	-7.8012E-06	-0.001573192	-0.353968266	0.00054275	0.038707432
24.855	0.001623462	-7.93357E-06	-0.001599939	-0.35998623	0.000543417	0.038785425
24.86	0.001692792	-8.27324E-06	-0.001668573	-0.375428904	0.000544141	0.038860106
24.865	0.001755853	-8.58432E-06	-0.001731424	-0.389570484	0.00054492	0.038931685
24.87	0.00176866	-8.64751E-06	-0.001744192	-0.392443115	0.000545711	0.039000322
24.875	0.001755109	-8.57914E-06	-0.001730377	-0.389334766	0.000546489	0.039069417
24.88	0.001754407	-8.57348E-06	-0.001729235	-0.38907778	0.000547267	0.039142764
24.885	0.001762478	-8.61098E-06	-0.001736812	-0.390782693	0.000548052	0.039213045
24.89	0.001780459	-8.69666E-06	-0.001754123	-0.394677576	0.000548853	0.039280765
24.895	0.001839938	-8.98696E-06	-0.001812776	-0.407874577	0.000549709	0.039346265
24.9	0.00195105	-9.53355E-06	-0.001923203	-0.432720724	0.000550671	0.039409844
24.905	0.002087	-1.02048E-05	-0.002058807	-0.463231563	0.000551772	0.039471918
24.91	0.002227583	-1.09004E-05	-0.002199329	-0.494849081	0.000553026	0.039532797
24.915	0.002380487	-1.16584E-05	-0.002352442	-0.529299489	0.000554458	0.039592811
24.92	0.002541544	-1.24592E-05	-0.002514191	-0.565693036	0.000556091	0.039652317
24.925	0.002663914	-1.30715E-05	-0.002637849	-0.593515993	0.000557884	0.039711682
24.93	0.002711292	-1.33138E-05	-0.002686784	-0.604526447	0.000559742	0.039771174
24.935	0.002705687	-1.32933E-05	-0.002682639	-0.603593885	0.000561593	0.039830894
24.94	0.002675424	-1.31502E-05	-0.002653736	-0.597090588	0.000563402	0.039890985
24.945	0.00261168	-1.28412E-05	-0.002591301	-0.583042794	0.000565126	0.039952217
24.95	0.002509273	-1.23398E-05	-0.002489978	-0.560245087	0.000566717	0.040012853
24.955	0.002391184	-1.17588E-05	-0.002372603	-0.533835667	0.000568162	0.040072548

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
29.84008789	0.001740325	0.890952415
29.84619141	0.001736624	0.88877738
29.85229492	0.001902227	0.972885733
29.85839844	0.001732668	0.891653124
29.86450195	0.001312211	0.666172665
29.87060547	0.001663484	0.827662374
29.87670898	0.002488316	1.24676185
29.8828125	0.002936684	1.480909581
29.88891602	0.002932544	1.469874976
29.89501953	0.002842854	1.42737212
29.90112305	0.002930418	1.458150694
29.90722656	0.003448105	1.696857539
29.91333008	0.004231222	2.090370483
29.91943359	0.004719887	2.313102782
29.92553711	0.004854294	2.366754866
29.93164063	0.004816022	2.382502104
29.93774414	0.004315619	2.14162512
29.94384766	0.003394878	1.689618175
29.94995117	0.003487679	1.760767903
29.95605469	0.004046434	2.03967887
29.9621582	0.003473046	1.748871557
29.96826172	0.002386608	1.219067471
29.97436523	0.002005808	1.032152224
29.98046875	0.002379741	1.240308764
29.98657227	0.002465189	1.333318067
29.99267578	0.00192727	1.074249906
29.9987793	0.001275995	0.701749052
30.00488281	0.000587628	0.314870361
30.01098633	0.000933418	0.506378971
30.01708984	0.002412573	1.335165291
30.02319336	0.003135196	1.717507309
30.02929688	0.002907239	1.608879766
30.03540039	0.002500205	1.419619236
30.04150391	0.002500182	1.394618691
30.04760742	0.002751652	1.514466146
30.05371094	0.003000176	1.691472243
30.05981445	0.003437608	1.966149288
30.06591797	0.003252074	1.899881079
30.07202148	0.002617185	1.594139417
30.078125	0.002157368	1.322525475
30.08422852	0.002888103	1.76074435
30.09033203	0.004089752	2.570578211
30.09643555	0.004392693	2.842543619
30.10253906	0.003669709	2.394568766
30.10864258	0.002433105	1.593008153
30.11474609	0.001677747	1.097347336
30.12084961	0.001824114	1.200167766
30.12695313	0.002128181	1.404522327
30.13305664	0.002063964	1.346613442
30.13916016	0.001411028	0.924922071
30.14526367	0.000665091	0.443463427
30.15136719	0.00086856	0.583982794
30.1574707	0.001265458	0.858976214
30.16357422	0.001725506	1.166811829
30.16967773	0.001838512	1.221042147
30.17578125	0.001416658	0.940553507
30.18188477	0.001496006	0.993815819
30.18798828	0.001955023	1.27407329
30.1940918	0.001833367	1.18273652
30.20019531	0.001666966	1.080971534
30.20629883	0.001701675	1.099031075
30.21240234	0.001483562	0.944376372
30.21850586	0.001445273	0.912043336
30.22460938	0.001929101	1.223554864
30.23071289	0.002062608	1.324692934
30.23681641	0.001493217	0.969943771
30.24291992	0.00160453	1.047759081
30.24902344	0.002155224	1.404721377
30.25512695	0.001785692	1.156196568
30.26123047	0.00105367	0.678047918
30.26733398	0.000698332	0.452572141
30.2734375	0.001234487	0.808381869
30.27954102	0.002320292	1.500122948
30.28564453	0.002514114	1.610293487
30.29174805	0.001882707	1.224956043
30.29785156	0.001103194	0.722515455
30.30395508	0.000397226	0.259357878
30.31005859	0.00023275	0.153721588
30.31616211	0.000631033	0.420867971
30.32226563	0.000610118	0.407379918
30.32836914	0.001051557	0.704483179
30.33447266	0.00193356	1.31295132
30.34057617	0.002545267	1.773839194
30.34667969	0.002988958	2.110089446
30.3527832	0.003365643	2.386818301
30.35888672	0.003271647	2.352411988
30.36499023	0.002819405	2.024068713
30.37109375	0.00279996	2.014530449
30.37719727	0.004099127	3.032324776
30.38330078	0.005607909	4.24578159
30.3894043	0.005622376	4.398704537
30.39550781	0.004386249	3.537774865
30.40161133	0.003353475	2.652824414
30.40771484	0.003306835	2.572708947
30.41381836	0.003957683	3.139788138
30.41992188	0.004754673	3.840848112
30.42602539	0.00517069	4.192904152
30.43212891	0.00498676	3.99157027
30.43823242	0.004422804	3.513615795
30.44433594	0.003874683	3.130476699
30.45043945	0.003322616	2.715697712
30.45654297	0.002726409	2.253167324
30.46264648	0.002737097	2.303962374
30.46875	0.003091628	2.577966491

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
24.96	0.002282021	-1.12203E-05	-0.002263821	-0.509359804	0.000569478	0.040133224
24.965	0.002192496	-1.0778E-05	-0.00217447	-0.489255695	0.000570693	0.040193381
24.97	0.002117032	-1.0405E-05	-0.00209911	-0.472299817	0.000571826	0.040253449
24.975	0.002036231	-1.00054E-05	-0.002018398	-0.454139468	0.000572874	0.040312826
24.98	0.001937525	-9.51655E-06	-0.001919651	-0.431921372	0.000573823	0.04037007
24.985	0.00183222	-8.99348E-06	-0.001813998	-0.408149564	0.000574671	0.040426298
24.99	0.001755722	-8.61107E-06	-0.00173676	-0.39077109	0.00057545	0.040480426
24.995	0.001749452	-8.57532E-06	-0.001729542	-0.3891469	0.000576224	0.040532215
25	0.001820138	-8.92173E-06	-0.001799537	-0.404895744	0.000577061	0.040582205
25.005	0.001924671	-9.43865E-06	-0.00190398	-0.428395472	0.000577997	0.040630536
25.01	0.002003215	-9.82998E-06	-0.001983043	-0.446184775	0.000579011	0.040677408
25.015	0.002008719	-9.8614E-06	-0.001989391	-0.447613011	0.000580031	0.040722966
25.02	0.001931948	-9.48468E-06	-0.001913272	-0.430486203	0.000580975	0.040767205
25.025	0.00182444	-8.95286E-06	-0.001805818	-0.406309117	0.000581816	0.040809952
25.03	0.00175821	-8.62281E-06	-0.001739136	-0.391305597	0.000582597	0.040850974
25.035	0.001760081	-8.62954E-06	-0.001740498	-0.391612026	0.00058338	0.040890121
25.04	0.001808991	-8.87082E-06	-0.00178925	-0.402581154	0.000584207	0.040927383
25.045	0.001858938	-9.11999E-06	-0.001839596	-0.413909203	0.000585081	0.040963141
25.05	0.00185324	-9.0962E-06	-0.001834788	-0.412827341	0.000585949	0.040997559
25.055	0.001758443	-8.63208E-06	-0.00174101	-0.391727189	0.00058673	0.041030612
25.06	0.001579299	-7.74929E-06	-0.00156271	-0.351609695	0.000587361	0.041062109
25.065	0.001334502	-6.53901E-06	-0.001318332	-0.296624629	0.000587811	0.041098055
25.07	0.001057367	-5.16482E-06	-0.001040881	-0.23419833	0.000588093	0.041135393
25.075	0.000811261	-3.9399E-06	-0.000793593	-0.178558395	0.00058826	0.041169504
25.08	0.000653723	-3.15054E-06	-0.000634249	-0.142705968	0.000588368	0.041199855
25.085	0.000593962	-2.84453E-06	-0.000572478	-0.128807499	0.000588457	0.04122641
25.09	0.00061491	-2.93858E-06	-0.000591482	-0.133083553	0.000588552	0.041249857
25.095	0.000705132	-3.3768E-06	-0.000680026	-0.153005916	0.000588678	0.041270309
25.1	0.000843889	-4.05729E-06	-0.000817515	-0.183940768	0.000588858	0.041287906
25.105	0.000998181	-4.81666E-06	-0.00097093	-0.218459235	0.00058911	0.041303017
25.11	0.001157556	-5.60224E-06	-0.001129627	-0.254166102	0.000589448	0.041316662
25.115	0.001341679	-6.51095E-06	-0.001313187	-0.295466965	0.000589903	0.041329117
25.12	0.001566945	-7.62484E-06	-0.001538173	-0.346088859	0.000590524	0.041340555
25.125	0.001815519	-8.85709E-06	-0.001787041	-0.402084215	0.000591357	0.041351186
25.13	0.002033472	-9.94134E-06	-0.002005999	-0.451349836	0.000592402	0.041361237
25.135	0.002168083	-1.06154E-05	-0.002142102	-0.481973028	0.00059359	0.041370904
25.14	0.00220924	-1.08268E-05	-0.002184794	-0.491578659	0.000594824	0.041380313
25.145	0.002186956	-1.07225E-05	-0.002163727	-0.486838529	0.000596033	0.041389501
25.15	0.002144031	-1.0514E-05	-0.00212159	-0.4773577	0.000597194	0.041398451
25.155	0.002111707	-1.03564E-05	-0.002089751	-0.470194076	0.000598321	0.041407122
25.16	0.002092892	-1.02651E-05	-0.002071295	-0.466041411	0.000599428	0.041416089
25.165	0.002079398	-1.01995E-05	-0.002058043	-0.463059641	0.000600521	0.041426982
25.17	0.002083754	-1.02214E-05	-0.002062472	-0.46405615	0.000601619	0.041436167
25.175	0.002125302	-1.04273E-05	-0.002104073	-0.473416518	0.00060276	0.041444152
25.18	0.002199946	-1.07981E-05	-0.002179	-0.490275076	0.000603983	0.041452942
25.185	0.002285616	-1.12255E-05	-0.002265296	-0.50969171	0.000605304	0.041460811
25.19	0.002350935	-1.15544E-05	-0.002331714	-0.524635568	0.000606701	0.041467934
25.195	0.002360638	-1.16098E-05	-0.00234289	-0.527150335	0.000608109	0.04147496
25.2	0.002305188	-1.13429E-05	-0.002288965	-0.515017203	0.000609452	0.041481964
25.205	0.002203193	-1.08451E-05	-0.002188383	-0.49238612	0.000610679	0.041488984
25.21	0.002062026	-1.01529E-05	-0.002048533	-0.460919884	0.000611754	0.041495914
25.215	0.001875997	-9.23785E-06	-0.001863675	-0.419326904	0.000612643	0.041505191
25.22	0.001648352	-8.11555E-06	-0.001636965	-0.368317177	0.00061333	0.041515017
25.225	0.001378527	-6.78285E-06	-0.001367783	-0.30775112	0.00061381	0.041523166
25.23	0.001063421	-5.22348E-06	-0.001052855	-0.236892305	0.000614096	0.041529425
25.235	0.00072448	-3.54236E-06	-0.000713381	-0.160510716	0.000614229	0.041536906
25.24	0.000404407	-1.95026E-06	-0.00039197	-0.088193246	0.00061427	0.04154244
25.245	0.000154436	-7.01013E-07	-0.000139827	-0.031461122	0.000614276	0.041546102
25.25	2.42162E-05	-4.18937E-08	-6.80269E-06	-0.001530605	0.000614276	0.041548328
25.255	2.5285E-05	-3.27196E-08	-4.9682E-06	-0.001117845	0.000614276	0.041549834
25.26	0.000117734	-4.78081E-07	-9.49562E-05	-0.021365151	0.00061428	0.041550621
25.265	0.000250619	-1.12626E-06	-0.000225916	-0.05083111	0.000614296	0.041550754
25.27	0.000395264	-1.83473E-06	-0.00036905	-0.083036159	0.000614335	0.041550754
25.275	0.000546384	-2.57671E-06	-0.000518942	-0.116762	0.000614411	0.041550754
25.28	0.000711489	-3.38917E-06	-0.00068306	-0.153688393	0.000614539	0.041550754
25.285	0.000895052	-4.29455E-06	-0.000865936	-0.194835687	0.000614741	0.041550754
25.29	0.001083772	-5.22759E-06	-0.001054385	-0.237236578	0.000615038	0.041550754
25.295	0.001245898	-6.03111E-06	-0.001216661	-0.273748768	0.00061543	0.041550754
25.3	0.001355268	-6.57449E-06	-0.001326396	-0.298439064	0.000615894	0.041550754
25.305	0.001415441	-6.87395E-06	-0.00138687	-0.312045762	0.000616401	0.041550754
25.31	0.001449669	-7.04382E-06	-0.001421172	-0.319763644	0.000616932	0.041550754
25.315	0.001485636	-7.22098E-06	-0.001456947	-0.327813071	0.00061749	0.041550754
25.32	0.001550531	-7.5407E-06	-0.001521508	-0.342339329	0.000618097	0.041550754
25.325	0.001647843	-8.02168E-06	-0.00161863	-0.364191655	0.000618784	0.041550754
25.33	0.001750451	-8.53058E-06	-0.001721387	-0.387312083	0.000619558	0.041550754
25.335	0.001829327	-8.9236E-06	-0.001800742	-0.405166878	0.000620404	0.041550754
25.34	0.001865365	-9.10542E-06	-0.001837452	-0.413426782	0.000621283	0.041552779
25.345	0.001856026	-9.06214E-06	-0.001828707	-0.41145899	0.000622154	0.041557078
25.35	0.00182994	-8.93437E-06	-0.001802889	-0.405649983	0.000623	0.041561656
25.355	0.001819689	-8.88354E-06	-0.001792617	-0.403338875	0.000623837	0.041567122
25.36	0.001835817	-8.96228E-06	-0.001808528	-0.406918718	0.000624689	0.041571268
25.365	0.001892387	-9.24041E-06	-0.001864706	-0.419558908	0.000625594	0.041576645
25.37	0.002007993	-9.81094E-06	-0.001979895	-0.44547641	0.000626613	0.041583646
25.375	0.002175027	-1.06377E-05	-0.00214681	-0.483032248	0.000627809	0.041591484
25.38	0.002368141	-1.15962E-05	-0.002340313	-0.526570467	0.000629226	0.041598341
25.385	0.002555572	-1.253E-05	-0.002528802	-0.568980499	0.000630877	0.041603774
25.39	0.002689479	-1.32022E-05	-0.002664479	-0.599507791	0.000632705	0.041612336
25.395	0.002731174	-1.34198E-05	-0.0027084	-0.609389992	0.00063459	0.041618676
25.4	0.002681077	-1.31829E-05	-0.002660535	-0.598620482	0.000636407	0.041623154
25.405	0.00256331	-1.26096E-05	-0.00254471	-0.572559849	0.000638068	0.041625799
25.41	0.002406219	-1.18398E-05	-0.002389174	-0.537564088	0.000639531	0.041627153
25.415	0.002231585	-1.09814E-05	-0.002215756	-0.498545087	0.00064079	0.041633538
25.42	0.002036494	-1.00204E-05	-0.002021638	-0.45486851	0.000641838	0.041639275
25.425	0.001803211	-8.86862E-06	-0.001788994	-0.402523548	0.00064266	0.041643562
25.43	0.00153775	-7.55424E-06	-0.001523534	-0.342795073	0.000643257	0.041651585
25.435	0.001287908	-6.31258E-06	-0.001272786	-0.286376794	0.000643676	0.04165769
25.44	0.001125905	-5.50145E-06	-0.001108994	-0.249523603	0.000643997	0.041661563
25.445	0.001107257	-5.39807E-06	-0.001088127	-0.24482854	0.000644307	0.041666925
25.45	0.001232823	-6.01026E-06	-0.001211822	-0.272659881	0.000644691	0.041671052
25.455	0.001446017	-7.06078E-06	-0.001424066	-0.320414768	0.000645219	0.041673148
25.46	0.001660845	-8.12495E-06	-0.001639047	-0.36878549	0.000645917	0.041674861
25.465	0.001801755	-8.82767E-06	-0.001780996	-0.400724198	0.000646737	0.041675957
25.47	0.001833683	-8.99307E-06	-0.001814406	-0.408241312	0.000647587	0.04167655
25.475	0.001756794	-8.6198E-06	-0.001738983	-0.391271255	0.000648367	0.041677609

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
30.47485352	0.002573018	2.099151372
30.48095703	0.001205804	0.975522892
30.48706055	0.000601078	0.488919376
30.49316406	0.000729887	0.605256915
30.49926758	0.001027822	0.862363399
30.50537109	0.001952593	1.639591796
30.51147461	0.002953404	2.48343762
30.51757813	0.003130161	2.622744957
30.52368164	0.002394904	2.013377171
30.52978516	0.00165552	1.405304796
30.53588867	0.001288404	1.096778688
30.54199219	0.000816761	0.709158107
30.5480957	0.000817712	0.729382625
30.55419922	0.001085281	0.968805874
30.56030273	0.001275899	1.125941173
30.56640625	0.002399	2.094019545
30.57250977	0.003153806	2.714130154
30.57861328	0.003098021	2.648653647
30.5847168	0.002627185	2.260162791
30.59082031	0.001915216	1.636298853
30.59692383	0.001361688	1.121069119
30.60302734	0.000949571	0.764801181
30.60913086	0.000620223	0.506856041
30.61523438	0.000751383	0.608775541
30.62133789	0.001605157	1.258275587
30.62744141	0.002884848	2.303712484
30.63354492	0.003544237	2.959226554
30.63964844	0.003805443	3.149315924
30.64575195	0.004191335	3.391711374
30.65185547	0.004488713	3.754866528
30.65795898	0.004562243	4.018119772
30.6640625	0.004283369	3.792072077
30.67016602	0.004269832	3.726935281
30.67626953	0.004537974	3.993501561
30.68237305	0.004159084	3.693353193
30.68847656	0.003481802	3.10623682
30.69458008	0.003434435	3.166747395
30.70068359	0.004174401	4.060323642
30.70678711	0.004731085	4.769378078
30.71289063	0.004879491	4.957818504
30.71899414	0.004840735	4.905640935
30.72509766	0.004394633	4.535949073
30.73120117	0.003976385	4.272920801
30.73730469	0.004207987	4.660393584
30.7434082	0.004579439	5.161551974
30.74951172	0.004333589	4.943424916
30.75561523	0.004217998	4.812125722
30.76171875	0.00478861	5.520644219
30.76782227	0.004939764	5.866635232
30.77392578	0.004125215	4.953211386
30.7800293	0.003361608	3.997458412
30.78613281	0.002805345	3.405832381
30.79223633	0.002102097	2.643032248
30.79833984	0.001744087	2.150343649
30.80444336	0.002097929	2.491032324
30.81054688	0.002445178	3.008517447
30.81665039	0.002038102	2.660754405
30.82275391	0.001085269	1.432593651
30.82885742	0.000396749	0.525480855
30.83496094	0.000547932	0.727620401
30.84106445	0.00119195	1.57680405
30.84716797	0.001435326	1.925422153
30.85327148	0.001233295	1.615990212
30.859375	0.001757551	2.218484262
30.86547852	0.00173442	2.297221205
30.87158203	0.000759554	1.052947573
30.87768555	0.000516219	0.684325154
30.88378906	0.001272291	1.639763499
30.88989258	0.00164453	2.11749042
30.89599609	0.001528534	1.96500266
30.90209961	0.001680853	2.20089946
30.90820313	0.001965657	2.504698408
30.91430664	0.002039453	2.489515429
30.92041016	0.001978175	2.452332055
30.92651367	0.001956478	2.367404075
30.93261719	0.00194458	2.21810204
30.9387207	0.001556363	1.808322775
30.94482422	0.001853457	2.198302362
30.95092773	0.002891537	3.291323368
30.95703125	0.003167099	3.544290588
30.96313477	0.002903662	3.231014807
30.96923828	0.00250696	2.715465556
30.9753418	0.002352873	2.575705776
30.98144531	0.002768947	3.124330589
30.98754883	0.002556405	2.837936434
30.99365234	0.00252154	2.726439306
30.99975586	0.003239307	3.487070325
31.00585938	0.003294675	3.49072856
31.01196289	0.002702195	2.868935717
31.01806641	0.002647227	2.94962127
31.02416992	0.0035344	4.006307302
31.03027344	0.004419725	4.850903383
31.03637695	0.004332619	4.773067954
31.04248047	0.00381533	4.312693721
31.04858398	0.004064082	4.656636978
31.0546875	0.004862177	5.768193996
31.06079102	0.005322257	6.358557261
31.06689453	0.005026539	5.859321664
31.07299805	0.004469234	5.394368851
31.07910156	0.00462541	5.853385201
31.08520508	0.005031322	6.427471309
31.09130859	0.004644675	6.210390429
31.09741211	0.003371685	4.669479486
31.10351563	0.001956753	2.713199031

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
25.48	0.001586649	-7.78314E-06	-0.00156994	-0.353236493	0.000649003	0.041678092
25.485	0.001352473	-6.62628E-06	-0.001336226	-0.300650895	0.000649465	0.041678102
25.49	0.00109823	-5.36595E-06	-0.001081635	-0.243367889	0.00064977	0.041678102
25.495	0.00087427	-4.25128E-06	-0.000856569	-0.19272795	0.000649963	0.041678102
25.5	0.00072852	-3.52035E-06	-0.000708994	-0.159523683	0.000650098	0.041678102
25.505	0.000696042	-3.34842E-06	-0.000674283	-0.151713629	0.00065022	0.041678102
25.51	0.000785075	-3.77872E-06	-0.000761228	-0.171276268	0.000650376	0.041678102
25.515	0.000964216	-4.65821E-06	-0.000938925	-0.211258016	0.000650611	0.041678102
25.52	0.001169566	-5.67184E-06	-0.001143702	-0.257332955	0.000650957	0.041678102
25.525	0.00133914	-6.51225E-06	-0.001313471	-0.295530958	0.00065141	0.041678102
25.53	0.001437641	-7.00316E-06	-0.001412632	-0.317842284	0.000651932	0.041678102
25.535	0.001459428	-7.11471E-06	-0.001435164	-0.322911957	0.00065247	0.041678102
25.54	0.001430764	-6.97522E-06	-0.001406979	-0.31657023	0.000652988	0.041678102
25.545	0.001394051	-6.79408E-06	-0.001370379	-0.30833523	0.000653479	0.041678102
25.55	0.001375449	-6.70133E-06	-0.001351637	-0.304118421	0.000653957	0.041678102
25.555	0.001378825	-6.7167E-06	-0.001354744	-0.304817397	0.000654438	0.041678102
25.56	0.001402412	-6.83169E-06	-0.001377978	-0.310044962	0.000654935	0.041678102
25.565	0.001449131	-7.06087E-06	-0.001424286	-0.320464239	0.000655465	0.041678102
25.57	0.001525317	-7.43593E-06	-0.001500046	-0.337510305	0.000656053	0.041678102
25.575	0.001633566	-7.97026E-06	-0.001607971	-0.361793525	0.000656728	0.041678102
25.58	0.001772082	-8.65561E-06	-0.00174639	-0.392937756	0.000657522	0.041678102
25.585	0.001932173	-9.44967E-06	-0.001906757	-0.429020435	0.000658465	0.041678102
25.59	0.002087911	-1.02247E-05	-0.002063275	-0.464236986	0.000659567	0.041678102
25.595	0.002204945	-1.08105E-05	-0.002181571	-0.490853482	0.000660796	0.041678102
25.6	0.002256653	-1.10745E-05	-0.002234869	-0.502845487	0.000662083	0.041678102
25.605	0.002226493	-1.09333E-05	-0.002206351	-0.496428904	0.000663336	0.041678102
25.61	0.002122695	-1.04261E-05	-0.002103854	-0.47336707	0.000664475	0.041678102
25.615	0.001985863	-9.75244E-06	-0.001967754	-0.442744714	0.000665471	0.041678102
25.62	0.001861366	-9.13716E-06	-0.001843449	-0.414776035	0.000666347	0.041678102
25.625	0.001778885	-8.72808E-06	-0.001760807	-0.396181629	0.000667147	0.041678102
25.63	0.001746638	-8.56728E-06	-0.001728325	-0.388873166	0.000667918	0.041678102
25.635	0.001746777	-8.5676E-06	-0.00172839	-0.388887659	0.000668689	0.041678102
25.64	0.001756453	-8.61622E-06	-0.001738213	-0.391097914	0.000669469	0.041678102
25.645	0.001765089	-8.6608E-06	-0.001747222	-0.393125012	0.000670256	0.041678102
25.65	0.001760914	-8.64323E-06	-0.001743672	-0.392326214	0.00067104	0.041678102
25.655	0.001729008	-8.4895E-06	-0.001712611	-0.385337528	0.000671795	0.041678102
25.66	0.001658237	-8.1441E-06	-0.001642839	-0.369638829	0.00067249	0.041678102
25.665	0.001537707	-7.55259E-06	-0.001523354	-0.342754584	0.000673088	0.041678102
25.67	0.001361539	-6.68502E-06	-0.001348117	-0.303326421	0.000673556	0.041678835
25.675	0.001130752	-5.54548E-06	-0.001117965	-0.25154202	0.00067388	0.041679324
25.68	0.00085662	-4.18855E-06	-0.000843933	-0.189884857	0.000674065	0.041679324
25.685	0.000577862	-2.80482E-06	-0.000564537	-0.127020901	0.000674149	0.041680444
25.69	0.000346877	-1.65382E-06	-0.00033218	-0.074740536	0.00067418	0.041681137
25.695	0.000200214	-9.17555E-07	-0.000183557	-0.041300216	0.00067419	0.041681137
25.7	0.000163309	-7.23306E-07	-0.000144347	-0.032477969	0.000674197	0.041681137
25.705	0.00024576	-1.12065E-06	-0.000224633	-0.050542362	0.000674212	0.041681137
25.71	0.00041926	-1.97158E-06	-0.00039656	-0.089225925	0.000674256	0.041681137
25.715	0.000629958	-3.0106E-06	-0.000606467	-0.136455049	0.000674357	0.041681137
25.72	0.000822997	-3.96594E-06	-0.000799452	-0.17987675	0.000674528	0.041681137
25.725	0.000959915	-4.64581E-06	-0.000936782	-0.210775968	0.000674761	0.041681137
25.73	0.001038844	-5.03904E-06	-0.001016208	-0.228646832	0.000675034	0.041681137
25.735	0.001088549	-5.28671E-06	-0.001066232	-0.239902139	0.000675333	0.041681137
25.74	0.001144202	-5.56265E-06	-0.001121964	-0.252441789	0.000675664	0.041681137
25.745	0.001230508	-5.98985E-06	-0.001208246	-0.271855283	0.000676047	0.041681137
25.75	0.001342523	-6.54508E-06	-0.001320378	-0.297085137	0.000676502	0.041681137
25.755	0.001450221	-7.08027E-06	-0.001428461	-0.321403734	0.000677034	0.041681137
25.76	0.001527806	-7.4674E-06	-0.001506641	-0.338994293	0.000677624	0.041681137
25.765	0.001563427	-7.64701E-06	-0.001542911	-0.347155018	0.000678241	0.041681137
25.77	0.001568531	-7.67467E-06	-0.001548496	-0.348411506	0.000678863	0.041681137
25.775	0.001583701	-7.75094E-06	-0.001563898	-0.351877157	0.000679497	0.041681137
25.78	0.001639658	-8.02915E-06	-0.001620079	-0.364517877	0.000680177	0.041681137
25.785	0.001726669	-8.46274E-06	-0.001707633	-0.384217528	0.0006809	0.041681137
25.79	0.001809432	-8.87774E-06	-0.001791431	-0.403071992	0.000681758	0.041681137
25.795	0.001846322	-9.06777E-06	-0.001829802	-0.411705452	0.000682619	0.041681137
25.8	0.001812296	-8.90745E-06	-0.001797407	-0.404416483	0.000683449	0.041681137
25.805	0.001715138	-8.43375E-06	-0.001701693	-0.382881033	0.000684193	0.041681137
25.81	0.001579336	-7.76707E-06	-0.001566998	-0.352574538	0.000684823	0.041681137
25.815	0.001429428	-7.02886E-06	-0.001417859	-0.31901823	0.00068534	0.041681137
25.82	0.001279459	-6.28917E-06	-0.001268431	-0.28539703	0.000685753	0.041681137
25.825	0.001124899	-5.52601E-06	-0.001114274	-0.250711661	0.000686073	0.041681137
25.83	0.000963286	-4.72701E-06	-0.000952885	-0.214399197	0.000686308	0.041681137
25.835	0.00080573	-3.94706E-06	-0.000795356	-0.178955107	0.000686472	0.041681137
25.84	0.000655887	-3.2046E-06	-0.000645408	-0.145216721	0.000686581	0.041681137
25.845	0.000507752	-2.47001E-06	-0.000497059	-0.111838257	0.000686646	0.041681137
25.85	0.00035739	-1.7237E-06	-0.000346351	-0.077929013	0.000686678	0.041681137
25.855	0.000203143	-9.57235E-07	-0.000191581	-0.043105733	0.000686688	0.041681137
25.86	4.99957E-05	-1.94994E-07	-3.77071E-05	-0.008484102	0.000686689	0.041681137
25.865	-9.29471E-05	5.17976E-07	0.000106186	0.023891933	0.000686691	0.041681137
25.87	-0.000222117	1.16394E-06	0.000236544	0.053222436	0.000686704	0.041681137
25.875	-0.000333737	1.72441E-06	0.000349646	0.078670271	0.000686732	0.041681137
25.88	-0.000412258	2.12283E-06	0.000430044	0.096759949	0.000686775	0.041681137
25.885	-0.000424877	2.19685E-06	0.000444975	0.100119487	0.00068682	0.041681137
25.89	-0.000335469	1.76652E-06	0.000358024	0.080555371	0.000686849	0.041681137
25.895	-0.000135466	7.87304E-07	0.000160181	0.036040704	0.000686854	0.041681137
25.9	0.000148914	-6.13076E-07	-0.000122722	-0.027612469	0.000686859	0.041681137
25.905	0.000466187	-2.18122E-06	-0.000439475	-0.098881963	0.000686914	0.041681137
25.91	0.000744183	-3.56016E-06	-0.000717977	-0.161544895	0.000687054	0.041681137
25.915	0.000917515	-4.42475E-06	-0.00089258	-0.200830464	0.000687267	0.041681137
25.92	0.000960088	-4.64321E-06	-0.000936697	-0.21075673	0.0006875	0.041681137
25.925	0.000886778	-4.28665E-06	-0.000864651	-0.194546488	0.000687699	0.041681137
25.93	0.00074245	-3.57541E-06	-0.000720946	-0.16221285	0.000687838	0.041681137
25.935	0.000581703	-2.77921E-06	-0.00056009	-0.126020159	0.000687923	0.041681137
25.94	0.000447619	-2.11169E-06	-0.000425238	-0.095678585	0.000687974	0.041681137
25.945	0.000373568	-1.73878E-06	-0.000349908	-0.078729346	0.000688009	0.041681137
25.95	0.000383709	-1.78136E-06	-0.000358515	-0.080665852	0.000688046	0.041681137
25.955	0.000482444	-2.26294E-06	-0.00045582	-0.102559508	0.000688105	0.041681137
25.96	0.000651901	-3.09672E-06	-0.000624277	-0.14046236	0.000688213	0.041681137
25.965	0.000850898	-4.08001E-06	-0.000822924	-0.185158003	0.000688396	0.041681137
25.97	0.001027858	-4.95739E-06	-0.001000141	-0.225031722	0.000688663	0.041681137
25.975	0.001152034	-5.57528E-06	-0.001124912	-0.253105116	0.000688998	0.041681137
25.98	0.001227161	-5.95047E-06	-0.001200672	-0.270151139	0.000689379	0.041681137
25.985	0.001284938	-6.23883E-06	-0.001258895	-0.283251414	0.000689796	0.041681137
25.99	0.001368279	-6.65297E-06	-0.001342515	-0.302065915	0.000690269	0.041681137
25.995	0.001498903	-7.30202E-06	-0.00147356	-0.331551099	0.000690837	0.041681137

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
31.10961914	0.001308196	1.959131043
31.11572266	0.001434371	2.284540226
31.12182617	0.001682544	2.571685664
31.12792969	0.001756991	2.725163754
31.1340332	0.001599835	2.642283812
31.14013672	0.001492691	2.518421295
31.14624023	0.001704805	2.980472526
31.15234375	0.001779059	3.157144244
31.15844727	0.001267577	2.187084348
31.16455078	0.000630452	1.100821543
31.1706543	0.000311954	0.549356648
31.17675781	0.000558954	0.975315061
31.18286133	0.001058355	1.852467969
31.18896484	0.001651381	2.917024566
31.19506836	0.002190692	4.173286215
31.20117188	0.00215278	4.498786806
31.20727539	0.001769288	3.565161735
31.21337891	0.001631446	3.219821498
31.21948242	0.001360458	2.899069471
31.22558594	0.000909565	1.979540885
31.23168945	0.001383935	2.931138337
31.23779297	0.002094838	4.398889602
31.24389648	0.002086818	4.159654011
31.25	0.00186608	3.465821983
31.25610352	0.002180023	3.931963837
31.26220703	0.003341849	6.016668888
31.26831055	0.005087155	9.029193828
31.27441406	0.006149599	10.63321184
31.28051758	0.005597333	9.455083435
31.28662109	0.003875336	6.367589555
31.29272461	0.002468505	3.987024898
31.29882813	0.002196749	3.615713337
31.30493164	0.00290882	4.776549765
31.31103516	0.004383529	6.782751783
31.31713867	0.005391721	7.9264593
31.32324219	0.005205541	7.525116008
31.3293457	0.004756547	6.746763543
31.33544922	0.004799354	6.596897432
31.34155273	0.00468923	6.369063215
31.34765625	0.004312136	6.013287235
31.35375977	0.004125646	5.757370903
31.35986328	0.004304295	5.765348908
31.3659668	0.004596057	6.058353502
31.37207031	0.004828071	6.46561951
31.37817383	0.004822914	6.6695672
31.38427734	0.004020868	5.814380011
31.39038086	0.002775509	3.975469338
31.39648438	0.002445603	3.384924007
31.40258789	0.00363366	5.169633332
31.40869141	0.005245608	7.727118265
31.41479492	0.005942546	8.796374839
31.42089844	0.005394136	8.137350855
31.42700195	0.004132951	6.217373257
31.43310547	0.002884679	4.27587085
31.43920898	0.002339004	3.590059876
31.4453125	0.002456978	3.88079304
31.45141602	0.002868145	4.528465369
31.45751953	0.003230506	5.344282999
31.46362305	0.002952152	5.32806664
31.46972656	0.002181872	4.152822763
31.47583008	0.001785735	3.310210035
31.48193359	0.002591894	4.547678955
31.48803711	0.003698885	6.68655414
31.49414063	0.004014086	7.905102665
31.50024414	0.003478564	7.078731445
31.50634766	0.002927825	5.989090858
31.51245117	0.00289796	5.952899604
31.51855469	0.003244367	6.561072235
31.5246582	0.00329144	6.797942491
31.53076172	0.002645659	5.723073011
31.53686523	0.00211029	4.740062172
31.54296875	0.002398875	5.671170423
31.54907227	0.00305715	7.17863526
31.55517578	0.00317781	7.31057213
31.5612793	0.002185754	5.397977243
31.56738281	0.00039804	1.000394607
31.57348633	0.001288076	3.146312648
31.57958984	0.001740355	4.579948499
31.58569336	0.001725769	4.580267837
31.59179688	0.003290634	8.303241921
31.59790039	0.003819642	9.79815435
31.60400391	0.003053076	7.33995862
31.61010742	0.00271159	6.066844137
31.61621094	0.003167993	7.317287256
31.62231445	0.003926417	8.903439654
31.62841797	0.005025012	10.66051342
31.63452148	0.005663504	11.44312047
31.640625	0.005348135	10.37996475
31.64672852	0.004974527	9.756564135
31.65283203	0.005585203	11.20936602
31.65893555	0.006680182	13.12796089
31.66503906	0.007300525	14.18066671
31.67114258	0.00690384	13.05138339
31.67724609	0.005697346	10.17246544
31.68334961	0.004837915	8.188706454
31.68945313	0.005376677	8.702808231
31.69555664	0.006698708	10.946
31.70166016	0.007228462	11.92153631
31.70776367	0.006811345	10.3747033
31.71386719	0.006568264	9.524504478
31.7199707	0.006458139	9.498746728
31.72607422	0.00622609	9.026741482
31.73217773	0.005674684	8.380303304
31.73828125	0.005417731	8.288534825

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
26	0.001653839	-8.07411E-06	-0.00162944	-0.366624087	0.000691528	0.041681137
26.005	0.001776126	-8.68789E-06	-0.001753353	-0.394504479	0.000692326	0.041681137
26.01	0.001814112	-8.88639E-06	-0.001793425	-0.40352063	0.000693157	0.041681137
26.015	0.001755797	-8.60793E-06	-0.001737159	-0.390860786	0.000693937	0.041681137
26.02	0.001623688	-7.96204E-06	-0.001606658	-0.361498124	0.000694603	0.041681137
26.025	0.001455719	-7.13539E-06	-0.001439648	-0.32392077	0.000695139	0.041681137
26.03	0.001299775	-6.36482E-06	-0.001283978	-0.288894942	0.000695565	0.041681137
26.035	0.001196729	-5.85368E-06	-0.001180725	-0.265663181	0.000695927	0.041681137
26.04	0.001160337	-5.67182E-06	-0.001143988	-0.257397309	0.000696268	0.041681137
26.045	0.001176436	-5.75072E-06	-0.00115993	-0.260984296	0.000696618	0.041681137
26.05	0.001209957	-5.91761E-06	-0.001193654	-0.268572089	0.000696988	0.041681137
26.055	0.001226498	-6.00186E-06	-0.001210676	-0.272402157	0.000697368	0.041681137
26.06	0.001215022	-5.94785E-06	-0.001199763	-0.269946675	0.000697741	0.041681137
26.065	0.00118062	-5.78014E-06	-0.001165875	-0.262321953	0.000698093	0.041681137
26.07	0.001131849	-5.54083E-06	-0.001117528	-0.251443826	0.000698417	0.041681137
26.075	0.001074355	-5.25795E-06	-0.001060388	-0.238587225	0.000698709	0.041681137
26.08	0.001002617	-4.90426E-06	-0.000988948	-0.222513269	0.000698963	0.041681137
26.085	0.000913905	-4.46586E-06	-0.000900398	-0.202589563	0.000699174	0.041681137
26.09	0.000822484	-4.01306E-06	-0.000808943	-0.182012284	0.000699345	0.041681137
26.095	0.000741842	-3.61299E-06	-0.000728143	-0.163832214	0.000699484	0.041681137
26.1	0.000672772	-3.27012E-06	-0.000658897	-0.148251735	0.000699598	0.041681137
26.105	0.000608582	-2.9517E-06	-0.000594589	-0.133782511	0.000699692	0.041681137
26.11	0.00053609	-2.59256E-06	-0.000522059	-0.117463383	0.000699765	0.041681137
26.115	0.000445397	-2.14323E-06	-0.000431319	-0.097046837	0.000699815	0.041681137
26.12	0.000341528	-1.62795E-06	-0.000327265	-0.073634729	0.000699844	0.041681137
26.125	0.000237878	-1.11279E-06	-0.00022324	-0.050228918	0.000699858	0.041681137
26.13	0.000145473	-6.52487E-07	-0.000130295	-0.029316328	0.000699864	0.041681137
26.135	6.78371E-05	-2.64849E-07	-5.20246E-05	-0.011705546	0.000699865	0.041681137
26.14	-8.23375E-08	7.48133E-08	1.65565E-05	0.003725212	0.000699865	0.041681137
26.145	-6.76101E-05	4.12661E-07	8.47696E-05	0.019073153	0.000699866	0.041681137
26.15	-0.000140852	7.79364E-07	0.000158807	0.03573152	0.000699871	0.041681137
26.155	-0.000209383	1.12413E-06	0.000228413	0.051392989	0.000699882	0.041681137
26.16	-0.000237872	1.27257E-06	0.000258381	0.058135727	0.000699897	0.041681137
26.165	-0.000182108	1.00516E-06	0.000204348	0.045978401	0.000699905	0.041681137
26.17	-1.69061E-05	1.95396E-07	4.07379E-05	0.00916603	0.000699905	0.041681137
26.175	0.000245097	-1.09651E-06	-0.000220262	-0.049558847	0.00069992	0.041681137
26.18	0.000550011	-2.6056E-06	-0.000525098	-0.118147099	0.000699997	0.041681137
26.185	0.000824097	-3.96705E-06	-0.000800078	-0.180017578	0.000700168	0.041681137
26.19	0.001008871	-4.88999E-06	-0.000986456	-0.221952525	0.000700425	0.041681137
26.195	0.001080416	-5.25337E-06	-0.001059858	-0.238468025	0.000700721	0.041681137
26.2	0.001055885	-5.13978E-06	-0.001036906	-0.233303839	0.000701002	0.041681137
26.205	0.000992609	-4.83124E-06	-0.000974562	-0.219276418	0.000701251	0.041681137
26.21	0.0009557	-4.65025E-06	-0.000937994	-0.211048582	0.000701482	0.041681137
26.215	0.000975772	-4.74986E-06	-0.00095812	-0.215577092	0.000701723	0.041681137
26.22	0.001051346	-5.12406E-06	-0.00103373	-0.232589358	0.000702002	0.041681137
26.225	0.001170966	-5.71714E-06	-0.001153513	-0.25954034	0.000702349	0.041681137
26.23	0.001311802	-6.41697E-06	-0.001294829	-0.2913366	0.000702784	0.041681137
26.235	0.001444554	-7.07883E-06	-0.001428474	-0.321406579	0.000703311	0.041681137
26.24	0.001546734	-7.59143E-06	-0.001531974	-0.344694248	0.000703916	0.041681137
26.245	0.001592338	-7.82601E-06	-0.001579337	-0.355350881	0.000704557	0.041681137
26.25	0.001552397	-7.63833E-06	-0.001541415	-0.346818472	0.000705166	0.041681137
26.255	0.001421825	-7.00161E-06	-0.001412764	-0.317871926	0.000705677	0.041681137
26.26	0.001224035	-6.03032E-06	-0.001216531	-0.273719453	0.000706055	0.041681137
26.265	0.000994968	-4.90168E-06	-0.00098853	-0.22241926	0.000706305	0.041681137
26.27	0.000772476	-3.80318E-06	-0.000766637	-0.172493399	0.000706456	0.041681137
26.275	0.00058096	-2.85652E-06	-0.000575434	-0.129472741	0.000706542	0.041681137
26.28	0.000420999	-2.0657E-06	-0.000415718	-0.093536566	0.000706586	0.041681137
26.285	0.000276371	-1.35121E-06	-0.000271426	-0.0610708	0.000706606	0.041681137
26.29	0.000121411	-5.8631E-07	-0.000116962	-0.02631648	0.000706609	0.041681137
26.295	-7.20778E-05	3.68935E-07	7.59269E-05	0.017083552	0.000706611	0.041681137
26.3	-0.000321079	1.59967E-06	0.000324419	0.072994204	0.000706637	0.041681137
26.305	-0.000620779	3.0834E-06	0.000623869	0.140370486	0.000706734	0.041681137
26.31	-0.000943613	4.68482E-06	0.000946976	0.21306971	0.000706959	0.041681137
26.315	-0.00124582	6.18785E-06	0.001250201	0.281295297	0.000707351	0.041681137
26.32	-0.001476451	7.33993E-06	0.001482605	0.333586041	0.000707902	0.041681137
26.325	-0.001593028	7.92926E-06	0.001601482	0.360333475	0.000708544	0.041681137
26.33	-0.001591379	7.93276E-06	0.001602165	0.360487167	0.000709184	0.041681137
26.335	-0.001521489	7.59588E-06	0.001534096	0.345171639	0.000709769	0.041681137
26.34	-0.001453609	7.26658E-06	0.001467562	0.330201372	0.000710303	0.041681137
26.345	-0.001421548	7.11426E-06	0.001436786	0.323276777	0.000710814	0.041681137
26.35	-0.001407842	7.05439E-06	0.001424691	0.320555389	0.000711315	0.041681137
26.355	-0.001371771	6.88639E-06	0.001390748	0.312918328	0.00071179	0.041682233
26.36	-0.001255715	6.32518E-06	0.001277364	0.287406975	0.000712189	0.041683305
26.365	-0.000991556	5.03163E-06	0.001016047	0.228610495	0.000712437	0.041683385
26.37	-0.000571676	2.96389E-06	0.000598394	0.134638643	0.00071252	0.041683385
26.375	-7.24817E-05	4.97282E-07	0.000100265	0.022559571	0.000712521	0.041687505
26.38	0.000432899	-2.00664E-06	-0.000405304	-0.091193434	0.000712569	0.041691797
26.385	0.000886039	-4.25898E-06	-0.000859996	-0.193499091	0.000712767	0.041693532
26.39	0.001195182	-5.80466E-06	-0.001171989	-0.263697456	0.000713128	0.041693532
26.395	0.001308615	-6.38401E-06	-0.00128892	-0.29000707	0.000713561	0.041693532
26.4	0.001252297	-6.12224E-06	-0.001236027	-0.278106114	0.000713957	0.041693532
26.405	0.001057988	-5.1745E-06	-0.00104454	-0.235021596	0.00071424	0.041693553
26.41	0.000785408	-3.83419E-06	-0.000773766	-0.1740973	0.000714396	0.041693553
26.415	0.000526208	-2.55511E-06	-0.000515392	-0.115963284	0.000714466	0.041693553
26.42	0.000311731	-1.49435E-06	-0.000301141	-0.067756821	0.000714491	0.041693553
26.425	0.000149883	-6.91765E-07	-0.000139047	-0.031285635	0.000714496	0.041693553
26.43	6.57778E-05	-2.73155E-07	-5.45071E-05	-0.0122641	0.000714497	0.041694252
26.435	3.0785E-05	-9.8883E-08	-1.9313E-05	-0.004345414	0.000714498	0.041696832
26.44	7.2138E-06	1.76146E-08	4.21345E-06	0.000948027	0.000714498	0.041697643
26.445	-1.06136E-05	1.04174E-07	2.16937E-05	0.004881084	0.000714498	0.041697643
26.45	-6.42517E-05	3.6602E-07	7.45718E-05	0.016778645	0.000714499	0.041698202
26.455	-0.000186984	9.69488E-07	0.000196434	0.044197646	0.000714507	0.041698202
26.46	-0.000372589	1.88507E-06	0.000381313	0.085795487	0.000714543	0.041698202
26.465	-0.000628621	3.1514E-06	0.000636995	0.143323853	0.000714642	0.041698202
26.47	-0.000922753	4.61076E-06	0.000931624	0.209615307	0.000714858	0.041698202
26.475	-0.001182912	5.90677E-06	0.001193246	0.268480317	0.000715211	0.041698202
26.48	-0.00136818	6.83605E-06	0.001380823	0.310685082	0.000715684	0.041698202
26.485	-0.001429	7.15236E-06	0.001444667	0.325050116	0.000716201	0.041698202
26.49	-0.001335527	6.70497E-06	0.001354269	0.304710455	0.000716651	0.041698202
26.495	-0.001128674	5.69382E-06	0.001149975	0.258744289	0.000716973	0.04169864
26.5	-0.000842533	4.28678E-06	0.000865727	0.194788624	0.000717153	0.041701082
26.505	-0.000513283	2.6616E-06	0.000537455	0.120927456	0.000717219	0.041702171
26.51	-0.000203035	1.12568E-06	0.000227252	0.051131792	0.00071723	0.041705781
26.515	6.31504E-05	-1.96122E-07	-3.96745E-05	-0.008926751	0.000717231	0.041708012

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
31.74438477	0.005399564	7.958924089
31.75048828	0.004466225	6.522877236
31.7565918	0.003152097	4.727493555
31.76269531	0.00248471	3.598802336
31.76879883	0.002220707	3.246297556
31.77490234	0.00174043	2.714129262
31.78100586	0.001450127	2.298227197
31.78710938	0.002333011	3.754750178
31.79321289	0.003426279	5.633369448
31.79931641	0.003752161	6.057803478
31.80541992	0.003315155	5.411970422
31.81152344	0.002794663	4.746481303
31.81762695	0.002653535	4.508133901
31.82373047	0.002674324	4.530077856
31.82983398	0.002251226	3.877276189
31.8359375	0.001935049	3.332367335
31.84204102	0.002234829	3.786940291
31.84814453	0.002441091	4.201031685
31.85424805	0.002200816	4.026612734
31.86035156	0.002149214	4.034860287
31.86645508	0.00217165	3.966313293
31.87255859	0.001840922	3.338930748
31.87866211	0.001929033	3.472014089
31.88476563	0.002699534	4.88095926
31.89086914	0.00362087	6.980098717
31.89697266	0.00442175	8.773465933
31.90307617	0.005013456	9.585573363
31.90917969	0.004961646	9.62732419
31.9152832	0.004260446	8.602975245
31.92138672	0.003730269	7.471861843
31.92749023	0.00388443	7.66691075
31.93359375	0.004208082	8.691665176
31.93969727	0.004170806	9.672913466
31.94580078	0.004087204	9.664198986
31.9519043	0.003762965	8.061829049
31.95800781	0.002739992	5.735311454
31.96411133	0.00195046	4.096149154
31.97021484	0.002372478	4.741458168
31.97631836	0.00374195	7.473442693
31.98242188	0.005686904	11.1684127
31.98852539	0.00760244	13.9654625
31.99462891	0.008198763	14.6963228
32.00073242	0.007024282	12.33799954
32.00683594	0.005447548	9.299739614
32.01293945	0.005216479	8.801417689
32.01904297	0.006289604	10.37337035
32.02514648	0.006924988	11.39356313
32.03125	0.00657715	10.87831306
32.03735352	0.006054392	9.406884558
32.04345703	0.005198596	7.519536479
32.04956055	0.004210967	5.92151347
32.05566406	0.004009167	5.578702097
32.06176758	0.004404994	6.127613086
32.06787109	0.004540664	6.236969676
32.07397461	0.004409977	5.814369852
32.08007813	0.004445893	5.634843963
32.08618164	0.004313835	5.365135293
32.09228516	0.003686172	4.738706613
32.09838867	0.002998102	4.087182368
32.10449219	0.00283332	3.796767689
32.1105957	0.003074744	3.902649352
32.11669922	0.003349395	4.274023246
32.12280273	0.003393873	4.448944605
32.12890625	0.002751339	3.589890237
32.13500977	0.001940747	2.508239793
32.14111328	0.002407743	3.148272031
32.1472168	0.002686021	3.568932218
32.15332031	0.002977158	3.920165519
32.15942383	0.003507824	4.541176278
32.16552734	0.003370379	4.362830685
32.17163086	0.003436161	4.451173669
32.17773438	0.003539299	4.647015444
32.18383789	0.003277942	4.419754669
32.18994141	0.00251939	3.443045977
32.19604492	0.002121522	2.909116901
32.20214844	0.002764312	3.784724681
32.20825195	0.002959556	4.103525329
32.21435547	0.002746957	4.055435082
32.22045898	0.002832487	4.382407786
32.2265625	0.003056747	4.732174504
32.23266602	0.002902474	4.601586455
32.23876953	0.003052701	4.9607149
32.24487305	0.003480695	5.708634159
32.25097656	0.003082646	5.231364936
32.25708008	0.002217653	3.740787317
32.26318359	0.001976354	3.192835582
32.26928711	0.002504753	4.126794469
32.27539063	0.003804853	6.331718396
32.28149414	0.005169653	8.108262598
32.28759766	0.005687635	8.928611505
32.29370117	0.005296048	8.891103725
32.29980469	0.004937789	8.498121295
32.3059082	0.005184767	9.003710606
32.31201172	0.005637078	10.01233193
32.31811523	0.00580285	9.988468643
32.32421875	0.005900036	9.798087855
32.33032227	0.006279532	10.78921392
32.33642578	0.006568491	11.50401601
32.3425293	0.006121083	10.42107227
32.34863281	0.004917895	8.255950166
32.35473633	0.004185623	6.648058262
32.36083984	0.00423838	6.14554312
32.36694336	0.004498332	6.387055305
32.37304688	0.004739935	6.825309494

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
26.52	0.000250081	-1.12968E-06	-0.000228182	-0.051340974	0.000717246	0.041711777
26.525	0.000299697	-1.38585E-06	-0.000279908	-0.06297921	0.000717269	0.041714409
26.53	0.000213453	-9.68873E-07	-0.000195654	-0.04402211	0.000717281	0.041715231
26.535	1.947E-05	-1.60694E-08	-3.14678E-06	-0.000708026	0.000717281	0.041715231
26.54	-0.000244628	1.28815E-06	0.000260333	0.058574832	0.000717296	0.041715231
26.545	-0.000511066	2.60891E-06	0.000527122	0.118602543	0.000717362	0.041715231
26.55	-0.000738706	3.74175E-06	0.000755929	0.170084107	0.0007175	0.041715231
26.555	-0.000897906	4.53951E-06	0.000917044	0.206335007	0.000717704	0.041715231
26.56	-0.00094743	4.7967E-06	0.000968985	0.218021702	0.000717931	0.041715231
26.565	-0.000882503	4.48764E-06	0.000906536	0.20397055	0.000718127	0.041715231
26.57	-0.000710866	3.64916E-06	0.000737125	0.165853152	0.000718255	0.041715231
26.575	-0.000450588	2.36872E-06	0.000478444	0.107649817	0.000718306	0.041715231
26.58	-0.000164666	9.5681E-07	0.000193237	0.043478358	0.000718313	0.041715231
26.585	8.40848E-05	-2.75077E-07	-5.5577E-05	-0.012504815	0.000718315	0.041715231
26.59	0.000254354	-1.12088E-06	-0.000226396	-0.050939137	0.000718331	0.041715231
26.595	0.00033902	-1.54271E-06	-0.000311581	-0.070105622	0.00071836	0.041715231
26.6	0.000387573	-1.78363E-06	-0.000360223	-0.0810502	0.000718398	0.041715231
26.605	0.000451909	-2.10049E-06	-0.000424199	-0.095444792	0.00071845	0.041715231
26.61	0.000571766	-2.69064E-06	-0.00054335	-0.122253734	0.000718533	0.041715231
26.615	0.000776903	-3.70343E-06	-0.000747818	-0.168259081	0.000718685	0.041715231
26.62	0.001036113	-4.98686E-06	-0.001006905	-0.226553589	0.000718956	0.041715231
26.625	0.001296015	-6.2773E-06	-0.001267383	-0.285161177	0.000719381	0.041715231
26.63	0.001520677	-7.39684E-06	-0.001493332	-0.335999805	0.000719965	0.041715231
26.635	0.001669617	-8.14429E-06	-0.001644176	-0.369939629	0.00072067	0.041715231
26.64	0.001736424	-8.48621E-06	-0.001713176	-0.385464489	0.000721432	0.041715231
26.645	0.00173684	-8.49989E-06	-0.001715927	-0.386083471	0.000722194	0.041715231
26.65	0.001665131	-8.15647E-06	-0.001646536	-0.370470644	0.000722895	0.041716033
26.655	0.001529734	-7.49676E-06	-0.001513244	-0.340479871	0.000723487	0.041716109
26.66	0.001339898	-6.56624E-06	-0.00132525	-0.29818127	0.00072394	0.041717031
26.665	0.001096576	-5.36881E-06	-0.001083357	-0.243755359	0.000724244	0.041718516
26.67	0.000824681	-4.02724E-06	-0.000812375	-0.182784294	0.000724416	0.041718758
26.675	0.000527656	-2.55883E-06	-0.000515808	-0.116056868	0.000724487	0.041719179
26.68	0.000198704	-9.28846E-07	-0.000186648	-0.041995698	0.000724497	0.041719628
26.685	-0.000117662	6.43745E-07	0.000130884	0.029448804	0.0007245	0.041719628
26.69	-0.000361247	1.86072E-06	0.000376586	0.084731772	0.000724533	0.041719628
26.695	-0.000478575	2.45605E-06	0.000496772	0.111773608	0.000724591	0.041719628
26.7	-0.000437905	2.26977E-06	0.000459131	0.103304569	0.000724639	0.041719628
26.705	-0.000267469	1.43861E-06	0.000291195	0.065518926	0.000724658	0.041719628
26.71	-2.1611E-05	2.30025E-07	4.70275E-05	0.010581195	0.000724658	0.041719628
26.715	0.000242523	-1.07357E-06	-0.000216305	-0.048668679	0.000724672	0.041719628
26.72	0.000478298	-2.24037E-06	-0.00045198	-0.101695502	0.00072473	0.041719628
26.725	0.000678749	-3.2348E-06	-0.000652821	-0.146884794	0.000724847	0.041719628
26.73	0.000826032	-3.96825E-06	-0.000800943	-0.180212115	0.000725019	0.041719628
26.735	0.000897769	-4.32824E-06	-0.000873639	-0.196568882	0.000725223	0.041719628
26.74	0.000925759	-4.47047E-06	-0.000902362	-0.203031496	0.00072544	0.041719628
26.745	0.00093706	-4.52884E-06	-0.000914149	-0.205683495	0.000725661	0.041719628
26.75	0.000948579	-4.58649E-06	-0.000925791	-0.208303084	0.000725889	0.041719628
26.755	0.001012618	-4.90267E-06	-0.000989639	-0.222668756	0.000726148	0.041719628
26.76	0.001143507	-5.55079E-06	-0.00112051	-0.252114861	0.000726479	0.041719628
26.765	0.001297932	-6.31813E-06	-0.001275448	-0.286975901	0.000726904	0.041720173
26.77	0.001429915	-6.97746E-06	-0.001408571	-0.316928446	0.000727421	0.041721283
26.775	0.001490922	-7.28804E-06	-0.001471278	-0.331037471	0.000727983	0.041722734
26.78	0.00145147	-7.10209E-06	-0.001433704	-0.322583474	0.000728515	0.041723996
26.785	0.001323236	-6.47539E-06	-0.001307078	-0.294092577	0.000728958	0.041726218
26.79	0.001140683	-5.57722E-06	-0.001125616	-0.253263684	0.000729287	0.041726906
26.795	0.000945286	-4.61258E-06	-0.000930743	-0.209417156	0.000729513	0.041729138
26.8	0.000762146	-3.70606E-06	-0.000747624	-0.168215329	0.000729659	0.041730937
26.805	0.000613252	-2.96656E-06	-0.000598256	-0.134607605	0.000729754	0.041731248
26.81	0.000527845	-2.53962E-06	-0.000512024	-0.115205378	0.000729825	0.041731248
26.815	0.000507865	-2.436E-06	-0.000491095	-0.110496334	0.00072989	0.041731248
26.82	0.000559228	-2.68528E-06	-0.000541465	-0.121829675	0.000729969	0.041733647
26.825	0.000705291	-3.40445E-06	-0.000686771	-0.154523536	0.000730095	0.041737382
26.83	0.000923512	-4.48405E-06	-0.000904884	-0.203598945	0.00073031	0.041740452
26.835	0.001163209	-5.67387E-06	-0.00114524	-0.257678919	0.000730652	0.041742918
26.84	0.00138641	-6.78565E-06	-0.001369807	-0.30820661	0.000731138	0.041744849
26.845	0.001562326	-7.66621E-06	-0.001547627	-0.348216052	0.000731755	0.041751411
26.85	0.001677967	-8.25042E-06	-0.00166557	-0.374753228	0.000732467	0.041759183
26.855	0.001710661	-8.42583E-06	-0.001700982	-0.382720839	0.000733206	0.041766165
26.86	0.001621779	-7.99991E-06	-0.001614923	-0.363357585	0.000733871	0.04177236
26.865	0.001413004	-6.97877E-06	-0.001408608	-0.316936822	0.000734376	0.041777807
26.87	0.001112173	-5.49881E-06	-0.001109631	-0.249666971	0.000734688	0.04178272
26.875	0.000752715	-3.72428E-06	-0.000751196	-0.169019037	0.000734831	0.041786996
26.88	0.000399768	-1.97695E-06	-0.000398304	-0.089618475	0.000734872	0.041790517
26.885	0.00011914	-5.83711E-07	-0.000116961	-0.026316261	0.000734875	0.041793169
26.89	-5.93143E-05	3.05529E-07	6.2592E-05	0.014083204	0.000734876	0.041794861
26.895	-0.000135683	6.89208E-07	0.00014006	0.031513505	0.000734881	0.041795539
26.9	-0.000125209	6.41373E-07	0.00013039	0.029337785	0.000734885	0.041795539
26.905	-4.51495E-05	2.46218E-07	5.05466E-05	0.011372979	0.000734885	0.041795539
26.91	6.37593E-05	-2.9589E-07	-5.89842E-05	-0.013271439	0.000734886	0.041795539
26.915	0.00013977	-6.79176E-07	-0.000136422	-0.030694926	0.000734891	0.041795539
26.92	0.000140074	-6.90425E-07	-0.000138693	-0.031205932	0.000734896	0.041795539
26.925	3.41181E-05	-1.76708E-07	-3.48934E-05	-0.007851014	0.000734897	0.041795539
26.93	-0.000181867	8.83269E-07	0.000179241	0.040329334	0.000734905	0.041795539
26.935	-0.000458091	2.24508E-06	0.000454181	0.102190687	0.000734958	0.041795539
26.94	-0.000737831	3.62816E-06	0.000733385	0.165011544	0.000735096	0.041795539
26.945	-0.000978028	4.81879E-06	0.000973714	0.219085648	0.000735337	0.041795539
26.95	-0.001150331	5.6751E-06	0.001146551	0.25797387	0.000735672	0.041795539
26.955	-0.001271606	6.2789E-06	0.001268413	0.285393035	0.000736081	0.041795539
26.96	-0.001372028	6.77932E-06	0.001369408	0.308116749	0.000736556	0.041795539
26.965	-0.001461789	7.22722E-06	0.0014598	0.328454901	0.000737096	0.041795539
26.97	-0.001548264	7.65934E-06	0.001547005	0.348076074	0.000737702	0.041795539
26.975	-0.00162815	8.06E-06	0.001627852	0.366266724	0.000738372	0.041795539
26.98	-0.00168135	8.33054E-06	0.001682424	0.378545317	0.000739087	0.041795539
26.985	-0.00166303	8.24938E-06	0.001666016	0.374853499	0.000739786	0.041795539
26.99	-0.001508801	7.49633E-06	0.001513859	0.340618262	0.000740361	0.041795539
26.995	-0.001202515	5.98801E-06	0.001209137	0.272055753	0.000740727	0.041795539
27	-0.00078897	3.94306E-06	0.000796064	0.179114468	0.000740884	0.041795539
27.005	-0.00033757	1.70286E-06	0.000343631	0.077316987	0.000740913	0.041795539
27.01	4.61129E-05	-2.10941E-07	-4.2818E-05	-0.009634041	0.000740913	0.041795539
27.015	0.000250542	-1.24441E-06	-0.000251481	-0.056583195	0.000740929	0.041795539
27.02	0.000214985	-1.09305E-06	-0.000220884	-0.049698909	0.000740941	0.041795539
27.025	-5.92459E-05	2.41069E-07	4.86648E-05	0.010949589	0.000740942	0.041795539
27.03	-0.00051446	2.47579E-06	0.000500098	0.112521976	0.000741008	0.041795539
27.035	-0.001081959	5.27264E-06	0.001064967	0.239617551	0.000741304	0.041795539

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
32.37915039	0.004578225	6.414787987
32.38525391	0.003940722	5.508873728
32.39135742	0.003552636	4.992397073
32.39746094	0.003904815	5.124413724
32.40356445	0.004645845	5.789027449
32.40966797	0.005152108	6.486243278
32.41577148	0.00505616	6.361328791
32.421875	0.004373739	5.4305933
32.42797852	0.003543195	4.322707643
32.43408203	0.002975131	3.496824808
32.44018555	0.002623991	3.041931166
32.44628906	0.002770597	3.220922243
32.45239258	0.002965482	3.384110158
32.45849609	0.0021435	2.426163994
32.46459961	0.001007325	1.144302783
32.47070313	0.000694667	0.78860163
32.47680664	0.00113301	1.297691714
32.48291016	0.001968018	2.242436844
32.48901367	0.00270814	3.043258845
32.49511719	0.002641837	3.021205778
32.5012207	0.001908258	2.213656479
32.50732422	0.001411165	1.622140771
32.51342773	0.001786625	2.060990676
32.51953125	0.002534536	2.954940431
32.52563477	0.002888077	3.456558195
32.53173828	0.003225056	4.027459543
32.5378418	0.003197873	4.016858957
32.54394531	0.002394646	2.999845174
32.55004883	0.001828995	2.324576338
32.55615234	0.001096815	1.373113032
32.56225586	0.001011496	1.275487084
32.56835938	0.002413253	3.242530327
32.57446289	0.00288305	3.970920215
32.58056641	0.002682937	3.709748931
32.58666992	0.002875764	4.079884723
32.59277344	0.003416664	4.756129254
32.59887695	0.003787353	5.231564191
32.60498047	0.004060656	5.931835024
32.61108398	0.004023905	6.028040819
32.6171875	0.003812898	5.728777219
32.62329102	0.004625238	7.161564893
32.62939453	0.005961249	9.272927822
32.63549805	0.006205134	9.603273905
32.64160156	0.006046218	9.468756406
32.64770508	0.006849499	10.56569692
32.65380859	0.007680017	11.6871192
32.65991211	0.007727508	12.13376794
32.66601563	0.007067275	11.52192069
32.67211914	0.006348809	10.63762272
32.67822266	0.005951795	10.11664719
32.68432617	0.005661124	9.336227013
32.69042969	0.005349699	8.557686295
32.6965332	0.004965249	8.023202788
32.70263672	0.004257536	6.74898929
32.70874023	0.003602828	5.379280893
32.71484375	0.003812586	5.588095885
32.72094727	0.004235945	6.120964002
32.72705078	0.004121829	5.532003175
32.7331543	0.003594408	4.522290232
32.73925781	0.003228675	3.979438944
32.74536133	0.002927514	3.536937704
32.75146484	0.002701195	3.216361367
32.75756836	0.001998411	2.37394203
32.76367188	0.001291633	1.493472293
32.76977539	0.001500009	1.678160244
32.77587891	0.001217085	1.356076549
32.78198242	0.001127298	1.263596086
32.78808594	0.002213905	2.478390986
32.79418945	0.002607361	2.86530744
32.80029297	0.001783946	1.887971641
32.80639648	0.001023364	1.066052926
32.8125	0.001039399	1.099343066
32.81860352	0.001496021	1.572550958
32.82470703	0.002195803	2.291721444
32.83081055	0.003157397	3.38465924
32.83691406	0.003098392	3.342714167
32.84301758	0.001931198	2.066102545
32.84912109	0.000972419	1.061531103
32.85522461	0.001344715	1.478284153
32.86132813	0.002299363	2.540464488
32.86743164	0.00296228	3.39904231
32.87353516	0.002922459	3.401766256
32.87963867	0.002111866	2.428482855
32.88574219	0.001086566	1.241296141
32.8918457	0.001870727	2.132258353
32.89794922	0.003069991	3.673049638
32.90405273	0.003223777	4.092811158
32.91015625	0.002752047	3.403094348
32.91625977	0.002839415	3.467978286
32.92236328	0.003667179	4.660951731
32.9284668	0.004184441	5.327533255
32.93457031	0.003974414	5.038735225
32.94067383	0.004115208	5.295412142
32.94677734	0.004875459	6.274994879
32.95288086	0.005096156	6.704116477
32.95898438	0.004541168	6.213314541
32.96508789	0.004520208	6.28117497
32.97119141	0.005410441	7.555686208
32.97729492	0.005646431	7.990990866
32.98339844	0.005401848	7.940828204
32.98950195	0.005515342	8.5076594
32.99560547	0.005673167	8.757412968
33.00170898	0.005481522	8.273758842
33.0078125	0.005020206	7.528037803

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
27.04	-0.001694189	8.29824E-06	0.001675897	0.377076751	0.00074203	0.041795539
27.045	-0.002264053	1.11208E-05	0.002245189	0.505167609	0.000743325	0.041795539
27.05	-0.002761077	1.35869E-05	0.002742482	0.617058472	0.000745252	0.041795539
27.055	-0.003211021	1.58231E-05	0.00319335	0.718503795	0.000747858	0.041795539
27.06	-0.003594342	1.77331E-05	0.003578352	0.805129256	0.000751123	0.041795539
27.065	-0.003895079	1.92366E-05	0.003881364	0.873306988	0.000754958	0.041804934
27.07	-0.00411586	2.03468E-05	0.004105074	0.923641645	0.000759239	0.041827614
27.075	-0.004190708	2.0737E-05	0.00418369	0.941330284	0.000763678	0.041850999
27.08	-0.004086598	2.02395E-05	0.004083176	0.918714651	0.000767899	0.041876901
27.085	-0.003893753	1.92976E-05	0.003892862	0.87589404	0.000771731	0.041930476
27.09	-0.003717085	1.84314E-05	0.003717881	0.836523143	0.000775223	0.041991012
27.095	-0.003585065	1.77853E-05	0.003587352	0.807154095	0.000778471	0.042067749
27.1	-0.003425267	1.70023E-05	0.003429201	0.771570335	0.000781436	0.042147603
27.105	-0.003191651	1.58515E-05	0.003196768	0.719272744	0.000784011	0.042250405
27.11	-0.002999497	1.49014E-05	0.00300488	0.676098055	0.000786285	0.042376659
27.115	-0.002902274	1.44211E-05	0.002907882	0.654273386	0.000788414	0.042508932
27.12	-0.00278599	1.38476E-05	0.002792065	0.628214719	0.000790375	0.042633302
27.125	-0.00267077	1.32762E-05	0.002676686	0.602254318	0.000792178	0.042748725
27.13	-0.002683268	1.33359E-05	0.002688742	0.604966986	0.000793998	0.042856706
27.135	-0.002758335	1.37092E-05	0.002764178	0.621939939	0.000795921	0.042980925
27.14	-0.002770077	1.37709E-05	0.002776641	0.624744142	0.00079786	0.043109695
27.145	-0.002779345	1.38179E-05	0.002786134	0.62688014	0.000799813	0.043234006
27.15	-0.002882654	1.43303E-05	0.002889663	0.650174262	0.000801913	0.043348796
27.155	-0.003010165	1.49657E-05	0.003018029	0.679056617	0.000804203	0.043455323
27.16	-0.003109518	1.54622E-05	0.003118348	0.701628394	0.000806647	0.043553736
27.165	-0.003273882	1.62814E-05	0.003283832	0.738862302	0.000809356	0.043645354
27.17	-0.003437074	1.7101E-05	0.003449386	0.776111835	0.000812342	0.043757469
27.175	-0.0034172	1.70175E-05	0.003432509	0.772314602	0.000815293	0.04386896
27.18	-0.003298316	1.64407E-05	0.003315954	0.746089601	0.000818042	0.043974163
27.185	-0.003161141	1.57729E-05	0.003181036	0.715732998	0.000820568	0.044072513
27.19	-0.002895637	1.44685E-05	0.002917513	0.656440407	0.000822687	0.044163689
27.195	-0.002609463	1.30546E-05	0.002631938	0.592185967	0.000824408	0.044247365
27.2	-0.002445136	1.22415E-05	0.002467742	0.555242017	0.000825919	0.044348609
27.205	-0.002295811	1.15031E-05	0.002318658	0.521698153	0.000827251	0.044453131
27.21	-0.002185589	1.09553E-05	0.002208067	0.496815171	0.000828459	0.044550481
27.215	-0.002201634	1.10334E-05	0.002223835	0.500362782	0.000829684	0.044641571
27.22	-0.002236943	1.12105E-05	0.00225963	0.508416714	0.000830948	0.044726389
27.225	-0.002262387	1.13402E-05	0.002285835	0.514312912	0.000832242	0.044822234
27.23	-0.002288673	1.14769E-05	0.002313462	0.520528974	0.000833566	0.044954116
27.235	-0.002238255	1.12366E-05	0.002264905	0.509603728	0.000834832	0.045114939
27.24	-0.002120347	1.06629E-05	0.002149026	0.483530942	0.000835968	0.045304317
27.245	-0.001906777	9.61721E-06	0.00193792	0.436032109	0.000836887	0.045487449
27.25	-0.001543875	7.83013E-06	0.001577176	0.354864605	0.00083749	0.045663277
27.255	-0.001143615	5.85253E-06	0.001178027	0.265056019	0.00083782	0.045830972
27.26	-0.000763276	3.97023E-06	0.000798162	0.179586366	0.000837967	0.045989445
27.265	-0.000398812	2.16252E-06	0.000433397	0.097514318	0.000838008	0.046174
27.27	-0.000135933	8.54066E-07	0.0001694	0.038115031	0.000838012	0.046350361
27.275	3.96578E-05	-2.20531E-08	-7.35486E-06	-0.001654844	0.000838013	0.046515087
27.28	0.000205342	-8.48726E-07	-0.000174125	-0.039178118	0.000838023	0.046668483
27.285	0.000385922	-1.75024E-06	-0.000355983	-0.080096133	0.000838061	0.04681002
27.29	0.00056862	-2.66659E-06	-0.000540822	-0.121684963	0.000838143	0.046939733
27.295	0.000577917	-2.72976E-06	-0.000553514	-0.124540602	0.000838227	0.047058928
27.3	0.000347019	-1.59979E-06	-0.000325209	-0.07317193	0.000838258	0.047167506
27.305	0.000126157	-5.11529E-07	-0.000105353	-0.023704492	0.000838262	0.047265748
27.31	-2.42096E-05	2.28209E-07	4.40791E-05	0.009917792	0.000838262	0.047353972
27.315	-0.000274867	1.46517E-06	0.000293933	0.066134854	0.000838281	0.047450708
27.32	-0.00056595	2.90982E-06	0.000585706	0.131783806	0.000838362	0.047554103
27.325	-0.000688055	3.52484E-06	0.000709908	0.159729378	0.000838481	0.047649678
27.33	-0.000584707	3.02281E-06	0.00060847	0.136905654	0.000838568	0.047737578
27.335	-0.000443477	2.32727E-06	0.000467941	0.105286762	0.000838618	0.047817578
27.34	-0.000386871	2.05142E-06	0.000412211	0.092747467	0.000838655	0.047889386
27.345	-0.000187813	1.07442E-06	0.000214836	0.048338085	0.000838664	0.047953055
27.35	0.000177295	-7.31447E-07	-0.000149942	-0.033736998	0.000838672	0.048009728
27.355	0.000402374	-1.85073E-06	-0.000376005	-0.084601031	0.000838713	0.048060375
27.36	0.00056007	-2.6336E-06	-0.000534111	-0.120174882	0.000838792	0.048106039
27.365	0.000788874	-3.77096E-06	-0.000763573	-0.171803986	0.00083895	0.0481468
27.37	0.000879127	-4.22643E-06	-0.000855438	-0.192473578	0.000839145	0.048182442
27.375	0.000886283	-4.26625E-06	-0.00086347	-0.194280726	0.000839344	0.04821332
27.38	0.000977049	-4.71969E-06	-0.00095492	-0.214857089	0.000839585	0.048240811
27.385	0.00100302	-4.85471E-06	-0.000982148	-0.220983393	0.000839839	0.048264864
27.39	0.001012775	-4.9057E-06	-0.000992434	-0.22329767	0.000840098	0.048285448
27.395	0.001166275	-5.66912E-06	-0.001146396	-0.257939023	0.000840442	0.048302536
27.4	0.001304244	-6.36133E-06	-0.00128599	-0.289347843	0.000840872	0.04831604
27.405	0.00136451	-6.66939E-06	-0.001348113	-0.30332537	0.000841343	0.048329117
27.41	0.001453578	-7.12123E-06	-0.001439227	-0.323826168	0.000841877	0.048352216
27.415	0.001473171	-7.23385E-06	-0.001461919	-0.328931804	0.000842425	0.048372057
27.42	0.001325002	-6.51638E-06	-0.001316952	-0.296314236	0.000842869	0.048388629
27.425	0.001082771	-5.33021E-06	-0.001077307	-0.242394173	0.000843165	0.048402014
27.43	0.000774339	-3.81387E-06	-0.000770996	-0.17347412	0.000843317	0.048412361
27.435	0.000385339	-1.89423E-06	-0.00038327	-0.086235696	0.000843354	0.048420193
27.44	1.04089E-05	-3.71106E-08	-8.22938E-06	-0.001851611	0.000843354	0.048426826
27.445	-0.000241424	1.21538E-06	0.000244678	0.055052452	0.000843369	0.048432429
27.45	-0.000382	1.91832E-06	0.000386607	0.086986684	0.000843406	0.048437078
27.455	-0.000433901	2.18308E-06	0.000440063	0.099014148	0.000843454	0.048440818
27.46	-0.000383307	1.93967E-06	0.00039088	0.087947947	0.000843491	0.048443664
27.465	-0.000288404	1.47443E-06	0.000296877	0.066797416	0.000843512	0.048445603
27.47	-0.000183269	9.57669E-07	0.00019247	0.043305824	0.00084352	0.048446606
27.475	-3.39265E-05	2.21008E-07	4.36441E-05	0.009819929	0.00084352	0.048446748
27.48	0.000129151	-5.86162E-07	-0.000119415	-0.026868395	0.000843525	0.048446748
27.485	0.000280511	-1.33694E-06	-0.000271072	-0.060991311	0.000843545	0.048446748
27.49	0.000421731	-2.03939E-06	-0.000412957	-0.09291535	0.00084359	0.048446748
27.495	0.000520315	-2.5321E-06	-0.000512474	-0.115306676	0.000843658	0.048446748
27.5	0.000606876	-2.96529E-06	-0.000599966	-0.134992309	0.000843751	0.048446748
27.505	0.000689362	-3.38006E-06	-0.000683734	-0.153840066	0.000843871	0.048446748
27.51	0.000718458	-3.53171E-06	-0.00071436	-0.160731016	0.000844002	0.048446748
27.515	0.000741903	-3.65587E-06	-0.000739435	-0.166372917	0.000844141	0.048446748
27.52	0.000723277	-3.57554E-06	-0.000723199	-0.162719799	0.000844273	0.048446748
27.525	0.000545815	-2.7102E-06	-0.000548358	-0.123380633	0.000844348	0.048446748
27.53	0.000276941	-1.3898E-06	-0.000281601	-0.063360233	0.000844368	0.048446748
27.535	-7.10004E-05	3.2257E-07	6.42965E-05	0.014466723	0.000844369	0.048446748
27.54	-0.000565857	2.76616E-06	0.000557783	0.125501194	0.00084445	0.048446748
27.545	-0.001064133	5.23409E-06	0.001055992	0.237598102	0.000844736	0.048446748
27.55	-0.001505988	7.42555E-06	0.001498315	0.337120977	0.000845309	0.048446748
27.555	-0.00198031	9.78125E-06	0.001973713	0.444085352	0.0008463	0.048446748

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
33.01391602	0.004366108	6.514382667
33.02001953	0.003640564	5.360187165
33.02612305	0.0034791	5.056727748
33.03222656	0.00376757	5.506981699
33.03833008	0.003687364	5.405070633
33.04443359	0.003180297	4.510815437
33.05053711	0.002608727	3.585422917
33.05664063	0.002691054	3.633253054
33.06274414	0.003212711	4.287473079
33.06884766	0.00321893	4.35889779
33.07495117	0.00309557	4.157178756
33.08105469	0.003154222	3.978077375
33.0871582	0.002954713	3.569601995
33.09326172	0.002692535	3.229286584
33.09936523	0.00256299	3.036115414
33.10546875	0.002064999	2.402041183
33.11157227	0.001728889	1.980922834
33.11767578	0.001929331	2.182059491
33.1237793	0.001308147	1.453810667
33.12988281	0.000725288	0.794611191
33.13598633	0.0015863	1.748161214
33.14208984	0.001534234	1.681950904
33.14819336	0.000978641	1.05267956
33.15429688	0.0009586	1.043092033
33.16040039	0.001583136	1.741705537
33.16650391	0.001878283	2.02338133
33.17260742	0.001130527	1.197046287
33.17871094	0.000716572	0.74981647
33.18481445	0.001626074	1.68444868
33.19091797	0.001667545	1.736658169
33.19702148	0.001542129	1.597481276
33.203125	0.001725135	1.769844135
33.20922852	0.002201221	2.252423147
33.21533203	0.00308846	3.105187566
33.22143555	0.003674987	3.687444447
33.22753906	0.003205898	3.283915239
33.23364258	0.002596023	2.664276203
33.23974609	0.002697443	2.813406974
33.24584961	0.00292158	3.150172037
33.25195313	0.003350054	3.603852516
33.25805664	0.004772597	5.152892725
33.26416016	0.00612526	6.852235932
33.27026367	0.006244394	7.142531895
33.27636719	0.005726994	6.707663927
33.2824707	0.005469818	6.61140836
33.28857422	0.005467954	6.6529946
33.29467773	0.00581561	7.227909137
33.30078125	0.006442186	8.456289961
33.30688477	0.006632449	8.937603492
33.31298828	0.005820637	7.915166418
33.3190918	0.004527835	6.376693194
33.32519531	0.003832751	5.481336924
33.33129883	0.003710056	5.233499857
33.33740234	0.003758658	5.430784814
33.34350586	0.004172357	6.280338738
33.34960938	0.004806881	7.223535857
33.35571289	0.004769278	7.210545957
33.36181641	0.003817876	5.964808422
33.36791992	0.002919042	4.506015949
33.37402344	0.002757607	4.109203986
33.38012695	0.002935359	4.29655056
33.38623047	0.00315241	4.477416879
33.39233398	0.003363204	4.689006808
33.3984375	0.003360489	4.621296558
33.40454102	0.003006305	3.960726489
33.41064453	0.002915636	3.796840249
33.41674805	0.003124639	4.108313763
33.42285156	0.002814056	3.498656345
33.42895508	0.002277165	2.740711175
33.43505859	0.002017038	2.537681141
33.44116211	0.001973579	2.475073613
33.44726563	0.002042848	2.455901322
33.45336914	0.002212402	2.673196205
33.45947266	0.002188264	2.6257797
33.46557617	0.00177872	2.090400758
33.47167969	0.001042472	1.255957935
33.4777832	0.001113323	1.336637831
33.48388672	0.001769465	2.021211428
33.48999023	0.001741777	1.974837234
33.49609375	0.000831287	0.949907953
33.50219727	0.001029159	1.149015933
33.50830078	0.001436924	1.601976395
33.5144043	0.001936928	2.214621227
33.52050781	0.002118651	2.421212766
33.52661133	0.001537163	1.726921062
33.53271484	0.000923648	1.037631848
33.53881836	0.00075368	0.849642364
33.54492188	0.000566683	0.638311693
33.55102539	0.000470727	0.53421425
33.55712891	0.001161299	1.329523229
33.56323242	0.00141894	1.624195625
33.56933594	0.001641544	1.869718054
33.57543945	0.002366059	2.682887347
33.58154297	0.003295754	3.806489144
33.58764648	0.004012756	4.822594533
33.59375	0.004269571	5.210149959
33.59985352	0.004084432	4.940622691
33.60595703	0.003873509	4.743333436
33.61206055	0.004024028	5.03390331
33.61816406	0.004356386	5.457507786
33.62426758	0.004389809	5.482002519
33.63037109	0.004009118	5.090840067
33.63647461	0.003628098	4.744079225
33.64257813	0.003271968	4.347438263

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
27.56	-0.002391626	1.18315E-05	0.002387406	0.537166291	0.000847746	0.048446748
27.565	-0.002667549	1.32145E-05	0.002666439	0.599948842	0.000849545	0.048446748
27.57	-0.002828377	1.40297E-05	0.002830898	0.636952054	0.000851566	0.048446748
27.575	-0.002820591	1.40098E-05	0.002826841	0.636039247	0.000853577	0.048446748
27.58	-0.002750403	1.36761E-05	0.002759422	0.620869984	0.000855489	0.048446748
27.585	-0.002727988	1.35789E-05	0.002739773	0.616448996	0.00085737	0.048446748
27.59	-0.002593288	1.29282E-05	0.002608312	0.586870098	0.00085907	0.048447356
27.595	-0.002327965	1.16266E-05	0.002345353	0.527704523	0.000860439	0.048448758
27.6	-0.002099129	1.05013E-05	0.002118035	0.47655792	0.000861553	0.048448903
27.605	-0.001876743	9.40786E-06	0.001897187	0.426867173	0.000862443	0.048448903
27.61	-0.001592302	8.00567E-06	0.001613998	0.363149473	0.000863084	0.048448903
27.615	-0.001286453	6.49459E-06	0.001308852	0.294491643	0.000863502	0.048448903
27.62	-0.000955968	4.85906E-06	0.000978615	0.220188296	0.000863733	0.048448903
27.625	-0.000602961	3.10793E-06	0.000625079	0.140642883	0.000863825	0.048448903
27.63	-0.000297052	1.58506E-06	0.000317665	0.071474661	0.000863847	0.048448903
27.635	-9.10535E-05	5.53797E-07	0.000109508	0.024639224	0.00086385	0.048463164
27.64	2.37345E-05	-2.66796E-08	-7.6534E-06	-0.001722014	0.00086385	0.048478375
27.645	6.50645E-05	-2.43668E-07	-5.14483E-05	-0.01157587	0.000863851	0.048490248
27.65	2.73785E-05	-6.83609E-08	-1.60255E-05	-0.003605734	0.000863851	0.048512316
27.655	-2.12547E-05	1.63875E-07	3.08992E-05	0.006952311	0.000863851	0.048530263
27.66	-2.47836E-05	1.72291E-07	3.25995E-05	0.007334894	0.000863851	0.048544731
27.665	-8.98722E-05	4.83113E-07	9.54008E-05	0.021465184	0.000863853	0.048559539
27.67	-0.00024475	1.24075E-06	0.000248473	0.055906369	0.000863868	0.048581574
27.675	-0.00037262	1.86807E-06	0.000375206	0.084421338	0.000863903	0.048599617
27.68	-0.000453382	2.26329E-06	0.000455046	0.102385449	0.000863955	0.048614301
27.685	-0.000481684	2.39976E-06	0.000482615	0.108588297	0.000864014	0.04862563
27.69	-0.000444173	2.20924E-06	0.000444117	0.099926375	0.000864064	0.048643206
27.695	-0.000406289	2.01527E-06	0.000404926	0.091108283	0.000864106	0.048663077
27.7	-0.000343513	1.69784E-06	0.000340789	0.076677514	0.000864135	0.048679554
27.705	-0.000265128	1.29975E-06	0.000260359	0.058580672	0.000864153	0.048692554
27.71	-0.000305278	1.48656E-06	0.000298104	0.0670735	0.000864177	0.048702008
27.715	-0.000408666	1.98974E-06	0.000399773	0.089948889	0.000864219	0.048708767
27.72	-0.000486014	2.36505E-06	0.000475601	0.107010242	0.000864279	0.048720573
27.725	-0.000608993	2.9665E-06	0.000597099	0.134347219	0.000864372	0.048736525
27.73	-0.000734146	3.58136E-06	0.000721295	0.162291472	0.000864509	0.048749098
27.735	-0.000822327	4.01299E-06	0.000808479	0.18190769	0.00086468	0.048758585
27.74	-0.000939087	4.58596E-06	0.000924205	0.207946025	0.000864902	0.048766241
27.745	-0.001019324	4.9788E-06	0.001003545	0.22579764	0.000865165	0.048772249
27.75	-0.001094494	5.34234E-06	0.001076966	0.242317289	0.000865468	0.048776625
27.755	-0.001328914	6.49185E-06	0.001309109	0.294549543	0.000865914	0.048779393
27.76	-0.001674545	8.19476E-06	0.001652975	0.371919429	0.000866623	0.048780623
27.765	-0.00208694	1.02298E-05	0.002063851	0.464366409	0.000867724	0.048783899
27.77	-0.002620004	1.28662E-05	0.002596042	0.58410948	0.000869459	0.048795377
27.775	-0.003154612	1.55174E-05	0.003131003	0.704475637	0.000871974	0.04880554
27.78	-0.003617132	1.78155E-05	0.003594523	0.808767739	0.000875281	0.048814527
27.785	-0.004050273	1.99717E-05	0.004029373	0.906608828	0.000879427	0.048822464
27.79	-0.004344436	2.14439E-05	0.004326117	0.973376333	0.000884197	0.048830224
27.795	-0.004487772	2.21662E-05	0.004471632	1.006117182	0.000889287	0.048839511
27.8	-0.004699128	2.32207E-05	0.004684033	1.053907405	0.000894868	0.048853208
27.805	-0.005007227	2.47566E-05	0.00499338	1.123510536	0.000901205	0.048868824
27.81	-0.005268333	2.60631E-05	0.005256464	1.1827043	0.00090822	0.048885515
27.815	-0.005526299	2.73538E-05	0.005516326	1.241173434	0.000915939	0.048922298
27.82	-0.005843394	2.89409E-05	0.00583583	1.313061855	0.000924568	0.048959674
27.825	-0.006069783	3.00857E-05	0.006066248	1.364905789	0.00093388	0.049008054
27.83	-0.006137685	3.04474E-05	0.006139035	1.381282933	0.000943401	0.049084757
27.835	-0.006155522	3.05616E-05	0.006162015	1.386453358	0.000952978	0.049185373
27.84	-0.006072034	3.01785E-05	0.006084608	1.369036909	0.000962296	0.049280228
27.845	-0.005751426	2.86224E-05	0.005770226	1.298300907	0.000970656	0.049387371
27.85	-0.005263897	2.62348E-05	0.005287924	1.189782824	0.00097766	0.049522191
27.855	-0.004721889	2.35729E-05	0.004750341	1.068826821	0.000983295	0.049686056
27.86	-0.004110075	2.05626E-05	0.004142517	0.932066322	0.000987564	0.049842272
27.865	-0.003391066	1.70172E-05	0.003426823	0.771035169	0.000990471	0.049989733
27.87	-0.002592146	1.30686E-05	0.002629957	0.591740315	0.000992169	0.050138305
27.875	-0.001827189	9.27847E-06	0.001865264	0.419684488	0.000993013	0.050267158
27.88	-0.001201905	6.1724E-06	0.001238728	0.278713793	0.000993378	0.050404789
27.885	-0.000735702	3.8497E-06	0.00077029	0.173315278	0.000993514	0.050554805
27.89	-0.00044675	2.40213E-06	0.00047838	0.107635606	0.000993565	0.050685639
27.895	-0.000331193	1.8142E-06	0.000359829	0.080961585	0.000993593	0.050796173
27.9	-0.000297172	1.63393E-06	0.00032348	0.072783031	0.000993615	0.050889113
27.905	-0.00026575	1.46893E-06	0.00029021	0.065297338	0.000993633	0.050967377
27.91	-0.000250358	1.38347E-06	0.000272979	0.061420243	0.000993649	0.051032374
27.915	-0.00028595	1.55148E-06	0.000306928	0.06905885	0.000993669	0.051085709
27.92	-0.000320896	1.71852E-06	0.00034068	0.076653045	0.000993695	0.051130929
27.925	-0.000323105	1.72282E-06	0.000341547	0.076848084	0.000993722	0.051184844
27.93	-0.000389048	2.04097E-06	0.00040583	0.091311711	0.00099376	0.051261842
27.935	-0.000511652	2.64176E-06	0.000527214	0.118623096	0.000993826	0.051329532
27.94	-0.000612977	3.13808E-06	0.000627484	0.141183803	0.000993921	0.051389199
27.945	-0.000775478	3.93702E-06	0.000788883	0.177498648	0.000994073	0.051441816
27.95	-0.000976292	4.93007E-06	0.00098948	0.222633035	0.000994314	0.051487451
27.955	-0.001109804	5.59271E-06	0.001123325	0.252748066	0.000994625	0.05152622
27.96	-0.001251597	6.29807E-06	0.00126579	0.284802697	0.000995021	0.051572824
27.965	-0.001321139	6.65169E-06	0.001337208	0.300871857	0.000995462	0.051637361
27.97	-0.001200393	6.06317E-06	0.001218295	0.274116331	0.000995827	0.051696836
27.975	-0.001083957	5.49225E-06	0.001102946	0.24816284	0.000996124	0.051752152
27.98	-0.000964568	4.90995E-06	0.000985304	0.221693316	0.000996359	0.051803159
27.985	-0.000674496	3.48173E-06	0.000696788	0.15677732	0.000996474	0.051849699
27.99	-0.000375769	2.00355E-06	0.000398216	0.089598693	0.000996509	0.051919474
27.995	-0.000167353	9.69714E-07	0.000189554	0.042649727	0.000996516	0.051989317
28	-1.46643E-05	2.09123E-07	3.62021E-05	0.008145481	0.000996516	0.052052331
28.005	-7.13877E-06	1.65386E-07	2.74191E-05	0.006169301	0.000996516	0.052108312
28.01	-9.30577E-05	5.87009E-07	0.00011261	0.025337258	0.000996519	0.052157189
28.015	-0.000222848	1.22697E-06	0.000241909	0.054429592	0.000996531	0.052199913
28.02	-0.000447039	2.33752E-06	0.000466268	0.10491034	0.000996582	0.052238514
28.025	-0.000627842	3.23901E-06	0.000648376	0.14588449	0.000996681	0.05227308
28.03	-0.000734033	3.77167E-06	0.00075597	0.170093198	0.000996818	0.052303687
28.035	-0.000864119	4.42414E-06	0.000887757	0.199745315	0.000997006	0.052330377
28.04	-0.000922116	4.7234E-06	0.000948202	0.213345471	0.000997221	0.052378731
28.045	-0.000889914	4.57605E-06	0.000918428	0.206646356	0.000997421	0.052422896
28.05	-0.000812245	4.20375E-06	0.000843203	0.189720644	0.000997588	0.052461784
28.055	-0.000644561	3.38449E-06	0.000677679	0.152477753	0.000997693	0.052495723
28.06	-0.000484354	2.59836E-06	0.000518863	0.116744118	0.000997752	0.052526178
28.065	-0.000383281	2.10451E-06	0.000419097	0.094296873	0.000997789	0.052553126
28.07	-0.00029353	1.66655E-06	0.000330629	0.074391447	0.000997811	0.052576477
28.075	-0.000247745	1.44682E-06	0.000286244	0.064404848	0.000997827	0.052596159

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
33.64868164	0.002560063	3.412315166
33.65478516	0.002175301	2.890955738
33.66088867	0.002913599	3.830423657
33.66699219	0.003359818	4.464256633
33.6730957	0.002603101	3.636571808
33.67919922	0.001703068	2.483498028
33.68530273	0.001330413	1.951980715
33.69140625	0.000988579	1.416158915
33.69750977	0.001316189	1.839839546
33.70361328	0.001650234	2.335760366
33.7097168	0.001559478	2.235033291
33.71582031	0.001056957	1.482279455
33.72192383	0.001213035	1.701669885
33.72802734	0.001518052	2.160918617
33.73413086	0.001349335	1.85576354
33.74023438	0.001351502	1.773445648
33.74633789	0.00210315	2.727038506
33.75244141	0.002565841	3.305357353
33.75854492	0.001761301	2.217117067
33.76464844	0.000773173	0.951643214
33.77075195	0.001332755	1.602038738
33.77685547	0.002466136	2.883535097
33.78295898	0.00327705	3.789657638
33.7890625	0.003085372	3.553643785
33.79516602	0.002526284	2.855051667
33.80126953	0.002588827	2.91313808
33.80737305	0.00268468	3.055553169
33.81347656	0.002775013	3.091583108
33.81958008	0.003143143	3.373669365
33.82568359	0.00348416	3.724991934
33.83178711	0.003488246	3.782668695
33.83789063	0.003600014	3.920434962
33.84399414	0.003862311	4.189024903
33.85009766	0.003824683	4.085771544
33.85620117	0.003397873	3.510791667
33.86230469	0.002524259	2.56453278
33.8684082	0.001644676	1.712327558
33.87451172	0.001263657	1.351928548
33.88061523	0.001356898	1.461304251
33.88671875	0.002583242	2.801006471
33.89282227	0.00376942	4.062244456
33.89892578	0.004179755	4.463029636
33.9050293	0.004242466	4.632854413
33.91113281	0.003907505	4.389864297
33.91723633	0.003264171	3.76069341
33.92333984	0.002733837	3.272551081
33.92944336	0.002579053	3.148528941
33.93554688	0.002692731	3.257168176
33.94165039	0.002869945	3.426511353
33.94775391	0.002688635	3.225946732
33.95385742	0.001790844	2.241699271
33.95996094	0.001128037	1.463829278
33.96606445	0.001297383	1.685649048
33.97216797	0.001078611	1.415473986
33.97827148	0.001005027	1.321600221
33.984375	0.001590454	2.072151701
33.99047852	0.001891746	2.556582062
33.99658203	0.001130073	1.601019973
34.00268555	0.00116176	1.689773257
34.00878906	0.001973672	2.965692755
34.01489258	0.001776719	2.664249494
34.02099609	0.001521683	2.231494471
34.02709961	0.001587674	2.369684532
34.03320313	0.001811967	2.744960395
34.03930664	0.002068747	3.141764906
34.04541016	0.002163718	3.352380458
34.05151367	0.002272464	3.458389399
34.05761719	0.002931537	4.213024882
34.0637207	0.003773155	5.272425793
34.06982422	0.003853002	5.415132132
34.07592773	0.003112583	4.401098908
34.08203125	0.0021906	3.091824434
34.08813477	0.001846706	2.58533946
34.09423828	0.002386725	3.247037088
34.1003418	0.003093253	4.082864291
34.10644531	0.003199577	4.257517884
34.11254883	0.002962699	4.029387219
34.11865234	0.00275723	3.688912976
34.12475586	0.002519861	3.264065376
34.13085938	0.002132776	2.686583893
34.13696289	0.001989744	2.406264275
34.14306641	0.002474646	2.90407236
34.14916992	0.002653409	3.099778327
34.15527344	0.002390011	2.75992599
34.16137695	0.002048931	2.349231465
34.16748047	0.001759292	2.03993389
34.17358398	0.001858134	2.099402639
34.1796875	0.002086994	2.265372756
34.18579102	0.001406589	1.552938662
34.19189453	0.00027281	0.311232796
34.19799805	0.000957363	1.092940656
34.20410156	0.00070905	0.815731853
34.21020508	0.000678877	0.784822713
34.21630859	0.000774823	0.878004249
34.22241211	0.000737627	0.829048478
34.22851563	0.001438638	1.619995274
34.23461914	0.001786717	2.016627865
34.24072266	0.002074704	2.390938852
34.24682617	0.0034609	2.72438105
34.25292969	0.002585478	2.960615616
34.2590332	0.002327181	2.684625506
34.26513672	0.001410646	1.6586028
34.27124023	0.001025491	1.225264375
34.27734375	0.002053326	2.532804155

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
28.08	-0.000171739	1.07935E-06	0.000212016	0.047703557	0.000997834	0.052612126
28.085	-9.19937E-05	6.91001E-07	0.000133575	0.030054473	0.000997836	0.052624697
28.09	-0.00012898	8.82813E-07	0.000172333	0.038774886	0.000997841	0.052635349
28.095	-6.81623E-05	5.97529E-07	0.000114696	0.025806517	0.000997842	0.052644215
28.1	0.000172859	-5.81066E-07	-0.00012311	-0.027699734	0.000997849	0.052651267
28.105	0.00043655	-1.87273E-06	-0.000383509	-0.086289532	0.000997897	0.052656434
28.11	0.000864085	-3.97282E-06	-0.000806842	-0.181539457	0.000998086	0.052659628
28.115	0.001508035	-7.14866E-06	-0.001446921	-0.325557278	0.000998661	0.052660715
28.12	0.002268134	-1.09048E-05	-0.0022038	-0.495855101	0.000999961	0.052660715
28.125	0.003205029	-1.55442E-05	-0.003138431	-0.706147023	0.001002557	0.052660715
28.13	0.004104959	-2.00154E-05	-0.004038922	-0.908757557	0.001006816	0.052660715
28.135	0.004772051	-2.33408E-05	-0.00470851	-1.059414675	0.001012572	0.052660715
28.14	0.005341305	-2.61861E-05	-0.005281328	-1.188298771	0.001019782	0.052660715
28.145	0.005653756	-2.77675E-05	-0.00559966	-1.259923413	0.001027861	0.052660715
28.15	0.005643574	-2.77483E-05	-0.005595692	-1.259030649	0.001035911	0.052660715
28.155	0.005573897	-2.74297E-05	-0.005531329	-1.24454894	0.001043763	0.052660715
28.16	0.005341594	-2.63065E-05	-0.005304388	-1.193487324	0.001050975	0.052662753
28.165	0.00492607	-2.42681E-05	-0.004892608	-1.100836868	0.001057108	0.052671197
28.17	0.004584209	-2.2587E-05	-0.004553073	-1.024441444	0.001062419	0.052683177
28.175	0.004244046	-2.09128E-05	-0.004214976	-0.94836969	0.001066971	0.052718873
28.18	0.003898792	-1.92076E-05	-0.003870656	-0.870897591	0.001070813	0.052755898
28.185	0.003687015	-1.816E-05	-0.003659132	-0.823304594	0.001074249	0.052789722
28.19	0.00353204	-1.73931E-05	-0.003504316	-0.788471205	0.001077402	0.052824429
28.195	0.003479953	-1.71333E-05	-0.003451861	-0.776668626	0.001080463	0.052862722
28.2	0.003570993	-1.75844E-05	-0.003543	-0.797175001	0.001083686	0.052899473
28.205	0.003705008	-1.82512E-05	-0.003677739	-0.827491332	0.001087155	0.052944604
28.21	0.0039377	-1.94096E-05	-0.003911762	-0.880146386	0.001091074	0.052981196
28.215	0.00418603	-2.06537E-05	-0.004163069	-0.936690574	0.001095503	0.05300958
28.22	0.004303588	-2.12553E-05	-0.004284584	-0.964031342	0.001100184	0.053045524
28.225	0.004361323	-2.15635E-05	-0.004346831	-0.978036992	0.001104991	0.05309274
28.23	0.004260663	-2.10928E-05	-0.004251718	-0.956636567	0.001109579	0.053177603
28.235	0.003926723	-1.94655E-05	-0.003922949	-0.882663561	0.001113476	0.053259544
28.24	0.003522799	-1.74878E-05	-0.003523467	-0.792780175	0.001116613	0.053336528
28.245	0.002994702	-1.4895E-05	-0.00300003	-0.675006676	0.001118879	0.053413589
28.25	0.002280999	-1.1377E-05	-0.002290009	-0.515252065	0.001120194	0.053477021
28.255	0.001553976	-7.78308E-06	-0.001564856	-0.352092532	0.001120805	0.053551024
28.26	0.000895545	-4.52084E-06	-0.00090677	-0.204023339	0.001121007	0.053642256
28.265	0.000392227	-2.01838E-06	-0.000402048	-0.090460736	0.001121046	0.0537204
28.27	0.000159473	-8.52024E-07	-0.000166832	-0.037537183	0.001121053	0.053786766
28.275	0.000115406	-6.21989E-07	-0.000120444	-0.027099792	0.001121056	0.053848262
28.28	0.000199453	-1.02759E-06	-0.000202399	-0.045539723	0.001121066	0.053901006
28.285	0.000447187	-2.24642E-06	-0.000448649	-0.100946086	0.001121117	0.053943706
28.29	0.000791475	-3.94925E-06	-0.000792638	-0.178343563	0.001121275	0.05397754
28.295	0.001159609	-5.7758E-06	-0.001161565	-0.261352175	0.001121615	0.054045022
28.3	0.001515219	-7.54662E-06	-0.001519185	-0.34181663	0.001122195	0.05412527
28.305	0.001755963	-8.7548E-06	-0.001763149	-0.396708451	0.001122974	0.054199101
28.31	0.001840494	-9.19124E-06	-0.001851273	-0.41653652	0.001123831	0.054266551
28.315	0.001845519	-9.23395E-06	-0.001859895	-0.4184764	0.001124691	0.054327577
28.32	0.001767436	-8.86698E-06	-0.001785746	-0.401792879	0.001125481	0.054382093
28.325	0.001545374	-7.78697E-06	-0.00156754	-0.352696545	0.001126085	0.054447409
28.33	0.001247604	-6.32908E-06	-0.001273024	-0.286430295	0.001126478	0.054545592
28.335	0.000928611	-4.76491E-06	-0.000957077	-0.215342232	0.001126696	0.054635368
28.34	0.000540221	-2.85601E-06	-0.000571555	-0.128599845	0.00112677	0.05471906
28.345	0.000118784	-7.80452E-07	-0.000152439	-0.034298796	0.001126773	0.05479631
28.35	-0.000302806	1.29738E-06	0.000266587	0.059982006	0.001126796	0.05486675
28.355	-0.000766138	3.58369E-06	0.000727548	0.163698346	0.001126945	0.054949202
28.36	-0.00122661	5.85875E-06	0.001186176	0.266889657	0.001127325	0.055057582
28.365	-0.001688475	8.14143E-06	0.001646278	0.370412462	0.001128046	0.055155324
28.37	-0.002210519	1.07247E-05	0.00216688	0.487548086	0.001129281	0.055241875
28.375	-0.002701636	1.31593E-05	0.002657458	0.597928119	0.001131125	0.055316667
28.38	-0.003136193	1.53149E-05	0.003091755	0.69564487	0.001133611	0.055381965
28.385	-0.003571477	1.74756E-05	0.003527026	0.79358084	0.001136835	0.055439436
28.39	-0.003931293	1.92644E-05	0.003887333	0.874649821	0.001140741	0.055488755
28.395	-0.004258046	2.08867E-05	0.00421408	0.948167937	0.001145324	0.055542068
28.4	-0.004670193	2.29318E-05	0.004625926	1.04083336	0.001150836	0.055613732
28.405	-0.005062865	2.48836E-05	0.005018953	1.129264474	0.001157314	0.055672138
28.41	-0.0054266	2.6691E-05	0.005382845	1.211140095	0.001164757	0.055721545
28.415	-0.005899571	2.90401E-05	0.005855753	1.317544374	0.001173554	0.055762735
28.42	-0.006378744	3.14265E-05	0.006336081	1.425618178	0.001183837	0.055799785
28.425	-0.006750945	3.32867E-05	0.006710371	1.509833406	0.001195356	0.055847354
28.43	-0.007097535	3.50222E-05	0.007059493	1.588385973	0.001208088	0.055898831
28.435	-0.007359857	3.63462E-05	0.007325795	1.648303986	0.001221778	0.055947307
28.44	-0.00741908	3.66672E-05	0.007390362	1.662831415	0.00123569	0.056014217
28.445	-0.007341104	3.63078E-05	0.007317744	1.646492317	0.001249311	0.056110925
28.45	-0.007127691	3.5278E-05	0.00710967	1.599675789	0.001262151	0.056221166
28.455	-0.006722016	3.32925E-05	0.006708585	1.509431655	0.001273571	0.056329314
28.46	-0.006258922	3.10149E-05	0.006248554	1.405924599	0.001283472	0.056464058
28.465	-0.005821414	2.88586E-05	0.005813125	1.307953235	0.001292037	0.056604645
28.47	-0.005392792	2.67401E-05	0.005385371	1.211708468	0.001299387	0.056797804
28.475	-0.005139548	2.54823E-05	0.005131459	1.154578369	0.001306063	0.056973532
28.48	-0.005129134	2.54277E-05	0.00512045	1.152101221	0.001312713	0.057198416
28.485	-0.00518751	2.57189E-05	0.005179284	1.165338879	0.001319514	0.057504062
28.49	-0.005240714	2.59878E-05	0.005233607	1.177561664	0.001326455	0.057789693
28.495	-0.005235424	2.59699E-05	0.005229992	1.17674826	0.001333383	0.058061865
28.5	-0.00515158	2.55621E-05	0.005147596	1.158209055	0.00134009	0.058367896
28.505	-0.005119964	2.54121E-05	0.0051173	1.15139256	0.001346716	0.058652256
28.51	-0.005032375	2.49893E-05	0.005031938	1.132186162	0.001353116	0.058915004
28.515	-0.00476478	2.36729E-05	0.0047662	1.072395065	0.001358854	0.059156259
28.52	-0.004545252	2.25879E-05	0.004547216	1.023123685	0.001364076	0.059375976
28.525	-0.004383387	2.17888E-05	0.004385945	0.986837529	0.001368932	0.059575019
28.53	-0.004166242	2.07129E-05	0.004168812	0.937982611	0.001373319	0.059755742
28.535	-0.004107276	2.04147E-05	0.004108621	0.924439776	0.001377583	0.0599875
28.54	-0.004217072	2.09553E-05	0.004217868	0.949020406	0.001382077	0.060212741
28.545	-0.004323632	2.14834E-05	0.004324559	0.973025694	0.001386802	0.060417566
28.55	-0.004490899	2.23129E-05	0.004492149	1.010733623	0.001391899	0.06060411
28.555	-0.004704398	2.3376E-05	0.004706907	1.059054158	0.001397493	0.060773156
28.56	-0.004864457	2.41795E-05	0.004869193	1.095568327	0.001403474	0.060924689
28.565	-0.004908469	2.44117E-05	0.004916108	1.106124284	0.001409563	0.061058662
28.57	-0.004791825	2.38466E-05	0.00480193	1.080434344	0.001415366	0.061175025
28.575	-0.004709729	2.34481E-05	0.004721399	1.062314726	0.001420972	0.061345277
28.58	-0.004653135	2.31798E-05	0.004667204	1.050120792	0.001426445	0.06152126
28.585	-0.004357042	2.17253E-05	0.004373369	0.984008044	0.001431243	0.061678162
28.59	-0.004080536	2.0358E-05	0.00409718	0.921865454	0.001435451	0.061816199
28.595	-0.003969407	1.98117E-05	0.003986944	0.897062418	0.001439433	0.061938713

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
34.28344727	0.003444795	4.375022068
34.28955078	0.003660629	4.673607401
34.2956543	0.002662755	3.37332625
34.30175781	0.001574179	1.973883876
34.30786133	0.001031271	1.303000704
34.31396484	0.001082333	1.398266166
34.32006836	0.001786284	2.330198114
34.32617188	0.002744908	3.594572617
34.33227539	0.003238757	4.260563853
34.33837891	0.002725204	3.584605979
34.34448242	0.001477845	1.964657053
34.35058594	0.000739305	1.001703299
34.35668945	0.000978534	1.356285605
34.36279297	0.001012806	1.449091018
34.36889648	0.000139012	0.200951764
34.375	0.001298065	1.855936528
34.38110352	0.001259847	1.81097505
34.38720703	0.001429831	2.078336658
34.39331055	0.003124953	4.603189369
34.39941406	0.003485805	5.326400901
34.40551758	0.003019232	4.780090646
34.41162109	0.001889164	2.991865677
34.41772461	0.000303251	0.46935148
34.42382813	0.000337884	0.512754942
34.42993164	0.001102055	1.658278952
34.43603516	0.002762855	4.171521601
34.44213867	0.003289622	5.010252683
34.44824219	0.002562218	3.868459506
34.4543457	0.001372254	2.003223751
34.46044922	0.000335224	0.473293212
34.46655273	0.000648665	0.900654744
34.47265625	0.001130632	1.54241867
34.47875977	0.001403326	1.8591126
34.48486328	0.001771948	2.302634329
34.4909668	0.002402109	3.114549215
34.49707031	0.003000074	3.838974748
34.50317383	0.003028793	3.768863312
34.50927734	0.002633045	3.234391525
34.51538086	0.002351487	2.916737138
34.52148438	0.002503323	3.163146677
34.52758789	0.002819451	3.584838805
34.53369141	0.002817959	3.528781282
34.53979492	0.001984467	2.420014035
34.54589844	0.000952347	1.128767065
34.55200195	0.001432662	1.70229517
34.55810547	0.001543337	1.927604071
34.56420898	0.001416995	1.829730106
34.5703125	0.001327734	1.706404209
34.57641602	0.001340173	1.711696733
34.58251953	0.001046385	1.321376014
34.58862305	0.000627373	0.791487556
34.59472656	0.000896449	1.161319112
34.60083008	0.002042134	2.680475172
34.60693359	0.002906537	3.844253176
34.61303711	0.002691389	3.574454623
34.61914063	0.002128816	2.721986495
34.62524414	0.001996267	2.490798412
34.63134766	0.001772545	2.292212979
34.63745117	0.001367198	1.853248233
34.64355469	0.001250389	1.764017982
34.6496582	0.001655479	2.37511824
34.65576172	0.002211328	3.103272054
34.66186523	0.002929309	4.076201875
34.66796875	0.00318293	4.587292937
34.67407227	0.002485828	3.764616236
34.68017578	0.001537233	2.444971235
34.6862793	0.001031465	1.679135043
34.69238281	0.000931573	1.489184478
34.69848633	0.000870197	1.367367875
34.70458984	0.001803861	2.893976581
34.71069336	0.003224328	5.402550167
34.71679688	0.003662706	6.365987631
34.72290039	0.003079777	5.543426892
34.72900391	0.002807552	5.180630349
34.73510742	0.003063857	5.629226965
34.74121094	0.003193029	5.801340665
34.74731445	0.003146265	5.71409942
34.75341797	0.002880825	5.372264373
34.75952148	0.002560974	5.128330074
34.765625	0.002953657	6.031519967
34.77172852	0.003887383	7.475370783
34.77783203	0.004539204	8.302136143
34.78393555	0.00496003	8.676199705
34.79003906	0.005172292	8.787851582
34.79614258	0.004590725	8.034103179
34.80224609	0.003541496	6.257490004
34.80834961	0.002907916	4.897723635
34.81445313	0.002765321	4.468913661
34.82055664	0.002771333	4.352200272
34.82666016	0.003381656	5.19335459
34.83276367	0.003689052	5.6357424
34.83886719	0.003055726	4.754856084
34.8449707	0.002152833	3.460453047
34.85107422	0.00228675	3.613267286
34.85717773	0.003217188	4.738045397
34.86328125	0.004132156	5.844217757
34.86938477	0.004838626	6.855453569
34.87548828	0.005069755	7.247502542
34.8815918	0.004683018	6.846823179
34.88769531	0.004125421	6.063974594
34.89379883	0.003961343	5.52427203
34.89990234	0.003577272	4.720616009
34.90600586	0.002675564	3.495444038
34.91210938	0.002181192	2.873403527

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
28.6	-0.003655135	1.82622E-05	0.003674285	0.826714096	0.00144281	0.062048544
28.605	-0.003326678	1.66319E-05	0.003345344	0.752702463	0.001445607	0.062148442
28.61	-0.003250252	1.62495E-05	0.003268198	0.735344441	0.001448277	0.062238972
28.615	-0.003072567	1.53714E-05	0.003091062	0.695489009	0.001450663	0.062319907
28.62	-0.002833791	1.41837E-05	0.002851475	0.64158181	0.001452693	0.062440904
28.625	-0.002839632	1.4205E-05	0.002855816	0.642558531	0.00145473	0.062595249
28.63	-0.00291059	1.45557E-05	0.002926673	0.658501492	0.001456872	0.062735707
28.635	-0.002927887	1.46433E-05	0.002944382	0.662485874	0.001459038	0.062864074
28.64	-0.002948094	1.47477E-05	0.002965475	0.667231903	0.001461235	0.062983262
28.645	-0.002911722	1.45751E-05	0.002930591	0.659382914	0.001463378	0.063093091
28.65	-0.002815403	1.4107E-05	0.002836007	0.638101605	0.001465381	0.063193368
28.655	-0.002629705	1.3198E-05	0.002652651	0.596846516	0.001467129	0.06336
28.66	-0.002339281	1.17694E-05	0.002364506	0.532013765	0.001468512	0.063526567
28.665	-0.002011646	1.01547E-05	0.002038844	0.458739842	0.001469535	0.063679684
28.67	-0.001607783	8.16096E-06	0.00163681	0.368282161	0.001470188	0.063818824
28.675	-0.001190172	6.09458E-06	0.001220173	0.274538882	0.001470546	0.063944542
28.68	-0.000832312	4.32285E-06	0.000862985	0.1941716	0.001470721	0.064166012
28.685	-0.000394358	2.15355E-06	0.000425701	0.095782709	0.00147076	0.064418841
28.69	1.9518E-05	9.62689E-08	1.10507E-05	0.002486406	0.00147076	0.064657405
28.695	0.000270124	-1.15392E-06	-0.000240903	-0.054203215	0.001470779	0.064908806
28.7	0.000568953	-2.64199E-06	-0.000540773	-0.12167388	0.001470861	0.065175908
28.705	0.00082196	-3.91129E-06	-0.000796536	-0.1792206	0.001471031	0.06549479
28.71	0.000784248	-3.74233E-06	-0.000762359	-0.171530747	0.001471187	0.065850282
28.715	0.00070659	-3.36844E-06	-0.000686814	-0.154533103	0.001471313	0.066182902
28.72	0.000683096	-3.26519E-06	-0.000665954	-0.149839626	0.001471431	0.066512652
28.725	0.000430195	-2.02891E-06	-0.000416185	-0.093641679	0.001471478	0.066873207
28.73	-5.14987E-06	1.18893E-07	1.76715E-05	0.003976095	0.001471478	0.067243701
28.735	-0.000386685	2.00841E-06	0.000399291	0.089840416	0.001471516	0.067594267
28.74	-0.000701727	3.5717E-06	0.000714979	0.160870182	0.00147164	0.067925563
28.745	-0.001006435	5.08658E-06	0.001020856	0.229692654	0.001471896	0.068238118
28.75	-0.001270635	6.40557E-06	0.001287152	0.289609298	0.001472304	0.068568078
28.755	-0.001393976	7.0307E-06	0.001413353	0.318004502	0.001472795	0.068897975
28.76	-0.001395384	7.04995E-06	0.001417237	0.31887824	0.001473287	0.069212881
28.765	-0.001439988	7.28047E-06	0.001463775	0.329349353	0.001473811	0.069551807
28.77	-0.001531231	7.74503E-06	0.001557555	0.350449799	0.001474404	0.069889727
28.775	-0.001559939	7.90375E-06	0.001589595	0.357658904	0.001475019	0.07021271
28.78	-0.001489412	7.57358E-06	0.001522881	0.342648179	0.00147558	0.070521538
28.785	-0.001253457	6.42499E-06	0.00129082	0.290434558	0.001475977	0.070870136
28.79	-0.000897011	4.67483E-06	0.000937266	0.210884934	0.00147618	0.071201767
28.795	-0.000579558	3.11373E-06	0.000621951	0.139938922	0.001476265	0.07151621
28.8	-0.000233088	1.40971E-06	0.000277812	0.062507796	0.001476279	0.071815134
28.805	0.000216905	-8.10746E-07	-0.000170556	-0.038375024	0.001476291	0.072097362
28.81	0.000616723	-2.78851E-06	-0.000569856	-0.128217499	0.001476387	0.072361523
28.815	0.000970436	-4.53864E-06	-0.000922939	-0.207661245	0.001476625	0.072606353
28.82	0.001367487	-6.50672E-06	-0.001319453	-0.296876932	0.001477097	0.07283071
28.825	0.001668206	-8.00318E-06	-0.001620917	-0.364706437	0.001477801	0.073033651
28.83	0.001868367	-9.00093E-06	-0.001821901	-0.409927643	0.001478683	0.073217129
28.835	0.002100119	-1.01565E-05	-0.002054653	-0.462296869	0.001479798	0.073400108
28.84	0.002201956	-1.06728E-05	-0.002158648	-0.485695813	0.001481023	0.07359488
28.845	0.002182266	-1.05815E-05	-0.002140203	-0.481545616	0.001482227	0.073773592
28.85	0.002368406	-1.15063E-05	-0.002326526	-0.523468457	0.001483645	0.073938713
28.855	0.002555608	-1.24459E-05	-0.002515759	-0.566045849	0.001485295	0.074090097
28.86	0.002466376	-1.20142E-05	-0.002428527	-0.546418682	0.001486833	0.074228076
28.865	0.002564179	-1.24974E-05	-0.002526136	-0.568380621	0.001488494	0.074354844
28.87	0.002940773	-1.43689E-05	-0.002903017	-0.653178872	0.00149068	0.074470251
28.875	0.00311005	-1.52215E-05	-0.003074701	-0.691807812	0.001493125	0.074573767
28.88	0.003258359	-1.59635E-05	-0.003224095	-0.72542146	0.001495808	0.074665066
28.885	0.003601476	-1.76739E-05	-0.003568473	-0.802906455	0.001499086	0.074743876
28.89	0.003782707	-1.85897E-05	-0.003752844	-0.844389861	0.001502703	0.074812004
28.895	0.003890383	-1.91362E-05	-0.003862867	-0.869145159	0.001506528	0.074869925
28.9	0.004102088	-2.01993E-05	-0.004076878	-0.917297534	0.001510781	0.074917474
28.905	0.004177879	-2.05919E-05	-0.00415591	-0.935079836	0.001515192	0.074956138
28.91	0.004250577	-2.0963E-05	-0.00423061	-0.951887148	0.001519759	0.074987327
28.915	0.004460331	-2.20146E-05	-0.004442272	-0.999511249	0.001524787	0.075013043
28.92	0.004583448	-2.2641E-05	-0.004568346	-1.027877835	0.001530097	0.075033519
28.925	0.004689975	-2.31834E-05	-0.00467752	-1.052441917	0.001535656	0.075048673
28.93	0.004812361	-2.38083E-05	-0.004803295	-1.08074138	0.001541509	0.075059041
28.935	0.00479032	-2.37203E-05	-0.00478548	-1.076733097	0.001547309	0.075066683
28.94	0.004743072	-2.35056E-05	-0.004742095	-1.066971389	0.001552995	0.075071706
28.945	0.004664567	-2.31392E-05	-0.004668082	-1.050318374	0.001558494	0.075074129
28.95	0.004453149	-2.2115E-05	-0.00446115	-1.003758662	0.001563506	0.075074374
28.955	0.00422304	-2.09973E-05	-0.004235368	-0.952957876	0.001568013	0.075074374
28.96	0.003883016	-1.93386E-05	-0.003900324	-0.877572873	0.001571824	0.075074374
28.965	0.003364063	-1.67918E-05	-0.003385992	-0.761848099	0.001574684	0.075074374
28.97	0.002784323	-1.39421E-05	-0.002810599	-0.632384737	0.001576644	0.075074374
28.975	0.002010281	-1.01308E-05	-0.002041239	-0.459278808	0.001577665	0.075074374
28.98	0.001011939	-5.20138E-06	-0.001046462	-0.235453854	0.001577924	0.075074374
28.985	-1.73934E-05	-1.0866E-07	-1.90832E-05	-0.004293722	0.001577924	0.075074374
28.99	-0.001043523	4.97552E-06	0.001006236	0.22640309	0.001578199	0.075074374
28.995	-0.00203414	9.89169E-06	0.001997362	0.449406523	0.001579245	0.075074374
29	-0.002953713	1.44632E-05	0.002918728	0.656713775	0.00158145	0.075074374
29.005	-0.003765184	1.85075E-05	0.003733635	0.840067968	0.001585033	0.075087228
29.01	-0.004391224	2.16391E-05	0.004364498	0.982012103	0.001589906	0.075111404
29.015	-0.004911403	2.42505E-05	0.004890487	1.100359463	0.001596003	0.075127794
29.02	-0.005199399	2.5721E-05	0.00518664	1.166993921	0.001602836	0.075136239
29.025	-0.005053776	2.50428E-05	0.00504961	1.136162334	0.001609291	0.075137457
29.03	-0.004828195	2.39567E-05	0.004830175	1.086789298	0.001615183	0.075139768
29.035	-0.004725392	2.34782E-05	0.004733505	1.065038646	0.001620826	0.075142288
29.04	-0.004476636	2.22811E-05	0.0044917	1.010632403	0.001625891	0.075146815
29.045	-0.004051584	2.02103E-05	0.004073448	0.916525737	0.00163004	0.075148361
29.05	-0.003393552	1.69856E-05	0.003422272	0.770011088	0.00163295	0.075150985
29.055	-0.002432664	1.22508E-05	0.002466438	0.554948649	0.001634446	0.075156774
29.06	-0.001542946	7.85251E-06	0.001578822	0.355235037	0.001635048	0.07518383
29.065	-0.000825558	4.30405E-06	0.000862901	0.194152827	0.00163522	0.075199671
29.07	-2.43729E-05	3.36741E-07	6.26733E-05	0.014101488	0.00163522	0.075204455
29.075	0.000708434	-3.30505E-06	-0.000671718	-0.151136506	0.001635347	0.075204455
29.08	0.001088095	-5.20626E-06	-0.001055043	-0.237384731	0.001635646	0.075204455
29.085	0.001135158	-5.45689E-06	-0.001105566	-0.248752271	0.001635972	0.075204455
29.09	0.001134832	-5.46381E-06	-0.001106963	-0.24906671	0.001636298	0.075204455
29.095	0.001252469	-6.05486E-06	-0.001226125	-0.275878158	0.001636694	0.075204455
29.1	0.001209147	-5.85304E-06	-0.001185308	-0.266694351	0.001637064	0.075204455
29.105	0.001049058	-5.06353E-06	-0.00102579	-0.23080284	0.001637342	0.075204455
29.11	0.001215543	-5.88666E-06	-0.001192105	-0.268223685	0.001637715	0.075204455
29.115	0.001457157	-7.09502E-06	-0.001435813	-0.323057961	0.001638252	0.075204455

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
34.91821289	0.002420335	3.238928269
34.92431641	0.002912525	4.017407162
34.93041992	0.003256443	4.551069435
34.93652344	0.003650743	5.005941266
34.94262695	0.004058889	5.44520416
34.94873047	0.00419305	5.52617451
34.95483398	0.004221815	5.570933844
34.9609375	0.004436524	6.049337694
34.96704102	0.004494833	6.305165311
34.97314453	0.003817661	5.333875403
34.97924805	0.002718895	3.715691087
34.98535156	0.002104473	2.82757392
34.99145508	0.00145072	1.990462669
34.99755859	0.000562822	0.814713845
35.00366211	0.001574546	2.377673647
35.00976563	0.002367063	3.657840244
35.01586914	0.002644734	4.084475165
35.02197266	0.002748257	4.18167323
35.02807617	0.002830797	4.46712173
35.03417969	0.00273912	4.669046446
35.0402832	0.002495408	4.371088325
35.04638672	0.002417835	4.2223186
35.05249023	0.00273623	4.885555195
35.05859375	0.002853386	5.166836079
35.06469727	0.002916861	5.340190912
35.07080078	0.003342291	6.299712753
35.0769043	0.003574605	6.884350642
35.08300781	0.003396807	6.801305307
35.08911133	0.003342292	7.039049449
35.09521484	0.003509136	7.183185969
35.10131836	0.003454907	6.624941467
35.10742188	0.002994172	5.698882153
35.11352539	0.002447908	4.826103295
35.11962891	0.001959308	4.153266084
35.12573242	0.001654701	3.700357659
35.13183594	0.001745166	3.742794386
35.13793945	0.001996831	4.013917419
35.14404297	0.002023633	4.003888682
35.15014648	0.00207406	4.043200349
35.15625	0.001832779	3.5850324
35.16235352	0.000925494	1.888208803
35.16845703	0.000723098	1.466301112
35.17456055	0.001847144	3.584726145
35.18066406	0.002478546	4.690735282
35.18676758	0.002530738	4.569768709
35.19287109	0.00244929	4.241797598
35.19897461	0.002330906	4.126697311
35.20507813	0.002471117	4.547094402
35.21118164	0.003264867	6.05527709
35.21728516	0.004133334	7.555312422
35.22338867	0.004268133	7.448518615
35.22949219	0.00390932	6.581627146
35.2355957	0.003727759	6.465015445
35.24169922	0.003555195	6.4488801
35.24780273	0.003480223	6.306148634
35.25390625	0.004190017	7.285493433
35.26000977	0.005246903	8.601756143
35.26611328	0.005456392	8.655883141
35.2722168	0.004783342	7.727232867
35.27832031	0.004103005	6.775699422
35.28442383	0.003689641	6.092098535
35.29052734	0.003213275	5.269445853
35.29663086	0.002807078	4.530938151
35.30273438	0.002666952	4.267978585
35.30883789	0.002553882	4.11713823
35.31494141	0.002365744	3.858488505
35.32104492	0.002189918	3.687463547
35.32714844	0.001926689	3.362774451
35.33325195	0.001456255	2.520410664
35.33935547	0.001033633	1.735504606
35.34545898	0.0010135	1.679984276
35.3515625	0.001224436	2.082089589
35.35766602	0.001055615	1.894076475
35.36376953	0.000616974	1.133686008
35.36987305	0.001168559	2.127238304
35.37597656	0.001857359	3.379549195
35.38208008	0.00222137	4.076666725
35.38818359	0.00197947	3.745382479
35.39428711	0.001203985	2.426243545
35.40039063	0.000948419	2.056786896
35.40649414	0.000744032	1.69877555
35.41259766	0.001065954	2.466296017
35.41870117	0.00186902	4.235885601
35.42480469	0.002346003	5.239554707
35.4309082	0.002259978	5.133670319
35.43701172	0.001417682	3.372587165
35.44311523	0.000602821	1.526260661
35.44921875	0.000662283	1.721519207
35.45532227	0.001374386	3.509441959
35.46142578	0.002214861	5.418340154
35.4675293	0.003141743	7.497136453
35.47363281	0.003754344	9.38028615
35.47973633	0.003472463	9.188206934
35.48583984	0.003032871	7.998536314
35.49194336	0.003293541	8.480768199
35.49804688	0.003711324	9.241056115
35.50415039	0.003315177	8.003401678
35.51025391	0.003287454	7.946209122
35.51635742	0.004108285	9.874587042
35.52246094	0.00438266	10.38090604
35.52856445	0.004504364	10.67721186
35.53466797	0.004571711	10.53742452
35.54077148	0.003777874	8.237886073
35.546875	0.003029699	6.342968481

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
29.12	0.001400851	-6.83121E-06	-0.001382508	-0.311064346	0.001638748	0.075204455
29.125	0.001371759	-6.69562E-06	-0.001355111	-0.304899977	0.001639223	0.075205181
29.13	0.001432194	-7.00913E-06	-0.001418459	-0.319153277	0.001639742	0.075205807
29.135	0.001216916	-5.96183E-06	-0.001206853	-0.271541944	0.001640116	0.075205807
29.14	0.000846933	-4.13832E-06	-0.000838471	-0.188655957	0.001640297	0.075205807
29.145	0.00066321	-3.23004E-06	-0.000655005	-0.147376065	0.001640408	0.075205807
29.15	0.000545502	-2.65119E-06	-0.000538089	-0.121070037	0.001640484	0.075205807
29.155	0.000375559	-1.80986E-06	-0.000368165	-0.082837111	0.001640519	0.075205807
29.16	0.000451519	-2.18067E-06	-0.000443094	-0.09969617	0.001640571	0.075205807
29.165	0.000728451	-3.55619E-06	-0.000721	-0.162225069	0.001640705	0.075205807
29.17	0.000798374	-3.91455E-06	-0.000793395	-0.178513944	0.001640866	0.075205807
29.175	0.000796957	-3.9157E-06	-0.000793627	-0.178565975	0.001641027	0.075205807
29.18	0.000857287	-4.2267E-06	-0.000856453	-0.192702035	0.001641212	0.075205807
29.185	0.000669082	-3.31109E-06	-0.000671455	-0.151077274	0.001641325	0.075205807
29.19	0.000354053	-1.75945E-06	-0.000357986	-0.080546742	0.001641357	0.075205807
29.195	0.000112498	-5.68918E-07	-0.000117555	-0.026449839	0.00164136	0.075205807
29.2	-0.000216554	1.05704E-06	0.000210775	0.047424322	0.001641372	0.075205807
29.205	-0.000444995	2.19302E-06	0.000440138	0.099031069	0.001641422	0.075205807
29.21	-0.000466816	2.30329E-06	0.000462402	0.104040407	0.001641477	0.075205807
29.215	-0.000574604	2.83501E-06	0.000569753	0.128194405	0.001641561	0.075205807
29.22	-0.000676236	3.34044E-06	0.000671793	0.15115339	0.001641676	0.075205807
29.225	-0.000645284	3.18696E-06	0.000640781	0.144175799	0.001641782	0.075205807
29.23	-0.000700362	3.45439E-06	0.000694799	0.156329739	0.001641906	0.075205807
29.235	-0.00083955	4.13976E-06	0.000833158	0.187460539	0.001642084	0.075205807
29.24	-0.000953796	4.70153E-06	0.000946562	0.21297634	0.001642314	0.075205807
29.245	-0.001128617	5.55985E-06	0.001119819	0.2519593	0.001642636	0.075205807
29.25	-0.001475614	7.26989E-06	0.001464974	0.329619093	0.001643186	0.075205807
29.255	-0.001966206	9.69645E-06	0.001954678	0.439802622	0.001644163	0.075205807
29.26	-0.002433785	1.20159E-05	0.002422695	0.545106405	0.00164566	0.075205807
29.265	-0.002867494	1.4171E-05	0.002857487	0.642934566	0.001647738	0.075205807
29.27	-0.003270785	1.61822E-05	0.003263177	0.734214814	0.001650442	0.075205807
29.275	-0.003462445	1.71502E-05	0.003458422	0.778145019	0.001653472	0.075205807
29.28	-0.003559764	1.76489E-05	0.003559007	0.800776525	0.001656675	0.075205807
29.285	-0.003639911	1.80682E-05	0.003643584	0.819806415	0.001660023	0.075205807
29.29	-0.003360113	1.67103E-05	0.003369213	0.758072844	0.001662877	0.075205807
29.295	-0.002804914	1.39784E-05	0.002817348	0.633903406	0.001664865	0.075205807
29.3	-0.002291148	1.14434E-05	0.002305388	0.518712257	0.001666192	0.075205807
29.305	-0.001717936	8.6107E-06	0.00173341	0.390017212	0.001666938	0.075205807
29.31	-0.001135795	5.72523E-06	0.001150899	0.258952372	0.001667264	0.075209327
29.315	-0.000671551	3.41884E-06	0.000685381	0.154210641	0.001667378	0.075219232
29.32	-0.000233251	1.23753E-06	0.000245173	0.055164022	0.001667392	0.07522437
29.325	5.80165E-05	-2.21879E-07	-4.93103E-05	-0.01109481	0.001667393	0.075225098
29.33	0.000129264	-5.91403E-07	-0.00012387	-0.027870639	0.001667397	0.075225098
29.335	9.39171E-05	-4.29919E-07	-9.12401E-05	-0.02052902	0.001667399	0.075225098
29.34	-3.26903E-05	1.87475E-07	3.35042E-05	0.007538454	0.001667399	0.075229872
29.345	-0.00010683	5.49527E-07	0.000106653	0.023996917	0.001667402	0.075233815
29.35	-0.000167178	8.39157E-07	0.000165168	0.037162697	0.001667409	0.075234131
29.355	-0.000500016	2.47785E-06	0.000496206	0.11164639	0.001667472	0.075234131
29.36	-0.00089223	4.42179E-06	0.00088885	0.19999128	0.001667674	0.075234131
29.365	-0.001096073	5.43611E-06	0.001093701	0.246082705	0.001667977	0.075234131
29.37	-0.001325951	6.57618E-06	0.001323927	0.297883681	0.001668422	0.075234131
29.375	-0.001612697	8E-06	0.001611427	0.362571087	0.001669079	0.075234131
29.38	-0.00188538	9.3555E-06	0.001885103	0.424148123	0.001669977	0.075234131
29.385	-0.002164188	1.07439E-05	0.002165385	0.487211559	0.001671161	0.075234131
29.39	-0.002290478	1.1379E-05	0.002293591	0.516058029	0.001672487	0.075234131
29.395	-0.002316353	1.15101E-05	0.002320071	0.522015946	0.001673843	0.075234131
29.4	-0.002467728	1.22573E-05	0.002470896	0.555951668	0.001675382	0.075234131
29.405	-0.002723726	1.35224E-05	0.002726244	0.613404828	0.001677257	0.075234131
29.41	-0.003100652	1.53879E-05	0.003102717	0.698111235	0.001679687	0.075234131
29.415	-0.00351986	1.74707E-05	0.003523008	0.792676857	0.001682818	0.075234131
29.42	-0.003733571	1.85408E-05	0.003738885	0.841249179	0.001686342	0.075234131
29.425	-0.003889426	1.93209E-05	0.003896217	0.876648814	0.001690165	0.075234131
29.43	-0.004112556	2.04379E-05	0.004121469	0.927330526	0.00169444	0.075234131
29.435	-0.00415113	2.06463E-05	0.004163475	0.936781784	0.001698795	0.075234131
29.44	-0.004068472	2.02506E-05	0.004083515	0.918790787	0.001702978	0.075234131
29.445	-0.004038226	2.01147E-05	0.004056054	0.912612173	0.0017071	0.075234131
29.45	-0.003889213	1.93948E-05	0.0039106	0.879885083	0.001710923	0.075236973
29.455	-0.003623728	1.80951E-05	0.003648052	0.8208118	0.001714242	0.075240524
29.46	-0.003416912	1.70848E-05	0.003443972	0.774893794	0.001717192	0.075241286
29.465	-0.003180483	1.59341E-05	0.003211542	0.722596919	0.001719749	0.075241286
29.47	-0.002694877	1.35544E-05	0.002730952	0.614464234	0.001721585	0.075241286
29.475	-0.001904858	9.66326E-06	0.001945327	0.437698508	0.001722502	0.075241286
29.48	-0.001018108	5.28418E-06	0.001061439	0.23882383	0.001722764	0.075241286
29.485	-9.06609E-05	7.00624E-07	0.000136563	0.030726708	0.001722766	0.075241286
29.49	0.001106817	-5.22603E-06	-0.001058911	-0.238254867	0.001723075	0.075241286
29.495	0.002363796	-1.14673E-05	-0.002317078	-0.52134255	0.001724487	0.075270734
29.5	0.003256936	-1.59218E-05	-0.003214695	-0.723306326	0.001727168	0.075300589
29.505	0.003862093	-1.89533E-05	-0.003825414	-0.860718207	0.001730938	0.075324316
29.51	0.004275676	-2.10397E-05	-0.00424569	-0.955280319	0.001735559	0.075341709
29.515	0.004463699	-2.20116E-05	-0.004441443	-0.999324603	0.001740595	0.075352636
29.52	0.004481959	-2.2146E-05	-0.004468463	-1.005404122	0.001745672	0.075357044
29.525	0.004156775	-2.05842E-05	-0.004152916	-0.934406134	0.001750039	0.07535943
29.53	0.003443777	-1.70961E-05	-0.003448353	-0.77587951	0.001753036	0.075367039
29.535	0.002565405	-1.27813E-05	-0.002577042	-0.579834456	0.001754699	0.075371139
29.54	0.001421111	-7.14439E-06	-0.001439198	-0.323819536	0.00175521	0.075377209
29.545	2.11239E-05	-2.25064E-07	-4.30836E-05	-0.009693806	0.00175521	0.075382943
29.55	-0.001279479	6.22098E-06	0.00125697	0.282818343	0.001755624	0.075384093
29.555	-0.002395208	1.1763E-05	0.002374278	0.534212472	0.001757074	0.075398056
29.56	-0.003283616	1.61897E-05	0.003266463	0.73495407	0.001759799	0.075417852
29.565	-0.003864571	1.90986E-05	0.003852593	0.866833429	0.001763573	0.075442401
29.57	-0.004243078	2.10065E-05	0.004236997	0.953324399	0.001768124	0.075458372
29.575	-0.004290802	2.12788E-05	0.004291753	0.965644399	0.001772777	0.075469062
29.58	-0.004015095	1.99385E-05	0.004020956	0.904715143	0.001776851	0.075477456
29.585	-0.003844945	1.91081E-05	0.003853203	0.86697072	0.001780588	0.075488267
29.59	-0.003763717	1.87191E-05	0.003774614	0.84928815	0.001784168	0.075497021
29.595	-0.003527487	1.75602E-05	0.003540524	0.796617812	0.001787313	0.075510182
29.6	-0.003322052	1.65455E-05	0.00333559	0.750507836	0.001790102	0.075524576
29.605	-0.003231826	1.61008E-05	0.00324577	0.730298273	0.001792742	0.075535988
29.61	-0.003098312	1.54432E-05	0.003112968	0.700417885	0.001795168	0.075550895
29.615	-0.002909518	1.45099E-05	0.00292449	0.658010322	0.001797308	0.075559714
29.62	-0.002734134	1.36413E-05	0.002749095	0.61854646	0.001799197	0.075569103
29.625	-0.002565346	1.28066E-05	0.002580557	0.580625321	0.00180086	0.075613111
29.63	-0.002296482	1.14788E-05	0.002312466	0.520304853	0.001802193	0.07567099
29.635	-0.001887925	9.45833E-06	0.001904585	0.428531693	0.001803094	0.075711482

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
35.55297852	0.003449046	7.084554409
35.55908203	0.004032037	8.422502543
35.56518555	0.004340873	9.289696473
35.57128906	0.004226048	8.93222968
35.57739258	0.003774212	7.813404544
35.58349609	0.003407776	6.811541907
35.58959961	0.003528399	6.738330222
35.59570313	0.003988868	7.71131949
35.60180664	0.004336699	8.803078995
35.60791016	0.004157397	8.550344633
35.61401367	0.003591951	7.215747643
35.62011719	0.002969009	5.685224441
35.6262207	0.002734707	5.07960302
35.63232422	0.003277028	6.174924151
35.63842773	0.004004474	7.647042914
35.64453125	0.003980862	7.611731753
35.65063477	0.003312081	6.34965573
35.65673828	0.002909696	5.47667766
35.6628418	0.002819342	5.242575203
35.66894531	0.002503866	4.671133771
35.67504883	0.001602713	2.965085262
35.68115234	0.000336247	0.644370646
35.68725586	0.000757347	1.542643243
35.69335938	0.001268414	2.521302494
35.69946289	0.001312012	2.501166331
35.70556641	0.000944137	1.824219268
35.71166992	0.000301974	0.589250923
35.71777344	0.000375835	0.745749602
35.72387695	0.0007816	1.600172813
35.72998047	0.001214158	2.441476763
35.73608398	0.001365262	2.718978723
35.7421875	0.001464524	3.012416669
35.74829102	0.002118944	4.441152148
35.75439453	0.002099526	4.551569283
35.76049805	0.001091116	2.491003568
35.76660156	0.000281416	0.656132105
35.77270508	0.000572302	1.382941241
35.77880859	0.001600834	4.065010325
35.78491211	0.001740089	4.479134713
35.79101563	0.000753455	2.034165582
35.79711914	0.000552968	1.612461383
35.80322266	0.001791888	5.403380129
35.80932617	0.002387038	7.291329901
35.81542969	0.001941048	5.770716986
35.8215332	0.001411351	3.987538074
35.82763672	0.001416777	4.075400974
35.83374023	0.001640296	5.020235613
35.83984375	0.00226052	7.400784892
35.84594727	0.003258577	11.05677871
35.85205078	0.003874261	12.33178828
35.8581543	0.003622338	10.58751735
35.86425781	0.002983634	8.65197373
35.87036133	0.002460697	7.175276681
35.87646484	0.00219077	6.27901827
35.88256836	0.0027984	8.009615207
35.88867188	0.004009851	11.38432153
35.89477539	0.004712474	12.80764061
35.90087891	0.004263695	10.62594134
35.90698242	0.003202523	7.191187209
35.91308594	0.002623578	5.631865494
35.91918945	0.002813142	6.222076986
35.92529297	0.003384937	7.726529498
35.93139648	0.003691597	8.333023549
35.9375	0.003640559	7.868327791
35.94360352	0.003520812	7.165135605
35.94970703	0.003482945	6.790414294
35.95581055	0.003462176	6.82439149
35.96191406	0.003437942	7.097653435
35.96801758	0.003455709	7.193620131
35.97412109	0.003543165	7.030242356
35.98022461	0.003706524	7.180794756
35.98632813	0.003491328	6.892938997
35.99243164	0.002610286	5.072859373
35.99853516	0.001984674	3.782840949
36.00463867	0.002169725	4.342296602
36.01074219	0.002155182	4.438183629
36.0168457	0.001980914	3.889527125
36.02294922	0.002064157	3.918295929
36.02905273	0.002317323	4.390979067
36.03515625	0.002442481	4.716331254
36.04125977	0.002449089	4.98825591
36.04736328	0.002276512	4.71445413
36.0534668	0.001924315	3.820586162
36.05957031	0.00184467	3.611183329
36.06567383	0.002321863	4.59525884
36.07177734	0.002814781	5.59621579
36.07788086	0.002989913	6.139186898
36.08398438	0.002631491	5.607793483
36.09008789	0.002005104	4.237632956
36.09619141	0.001819276	3.76375433
36.10229492	0.001296333	2.662639957
36.10839844	0.000674721	1.394749295
36.11450195	0.000828228	1.760939252
36.12060547	0.001587341	3.563311893
36.12670898	0.002137929	5.167243883
36.1328125	0.002240912	5.810554827
36.13891602	0.001771648	4.655655889
36.14501953	0.000905828	2.350677251
36.15112305	0.00071757	1.936177445
36.15722656	0.001016622	2.969485255
36.16333008	0.000652998	2.084094039
36.16943359	0.000198741	0.669904759
36.17553711	0.000721273	2.33155078
36.18164063	0.000985714	2.972564211

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
29.64	-0.001375216	6.92019E-06	0.00139228	0.313262916	0.001803572	0.075739508
29.645	-0.0007033	3.5905E-06	0.00072034	0.162076482	0.001803697	0.075757481
29.65	2.92736E-05	-4.84562E-08	-1.38376E-05	-0.003113467	0.001803697	0.075774684
29.655	0.000626467	-3.02368E-06	-0.000613974	-0.138144207	0.001803796	0.075812233
29.66	0.001121648	-5.49489E-06	-0.00111236	-0.250280909	0.001804114	0.075855361
29.665	0.001556062	-7.66704E-06	-0.001550366	-0.348832342	0.001804726	0.075885732
29.67	0.001897692	-9.38199E-06	-0.001896136	-0.426630704	0.001805637	0.075925874
29.675	0.002100973	-1.04134E-05	-0.002104066	-0.473414815	0.001806752	0.075981941
29.68	0.002178114	-1.08163E-05	-0.002185301	-0.491692689	0.001807951	0.076031844
29.685	0.002379939	-1.18327E-05	-0.0023902	-0.537795064	0.001809383	0.076075486
29.69	0.002671849	-1.33028E-05	-0.002686524	-0.604467864	0.001811187	0.076112717
29.695	0.002794864	-1.39417E-05	-0.002815296	-0.633441563	0.001813161	0.076143356
29.7	0.002931599	-1.46495E-05	-0.00295795	-0.665538855	0.001815333	0.0761673
29.705	0.002980706	-1.49351E-05	-0.003015472	-0.678481279	0.001817579	0.076184901
29.71	0.002636987	-1.32789E-05	-0.00268086	-0.603193446	0.001819336	0.07620442
29.715	0.002198706	-1.11508E-05	-0.002250981	-0.506470788	0.001820558	0.076222306
29.72	0.001552622	-8.00194E-06	-0.001615032	-0.36338228	0.001821168	0.076240022
29.725	0.000386257	-2.27183E-06	-0.000458167	-0.103087595	0.001821205	0.076251283
29.73	-0.000853414	3.83676E-06	0.000774592	0.17428331	0.001821389	0.076263238
29.735	-0.002133087	1.01456E-05	0.002047233	0.460627324	0.001822539	0.076269404
29.74	-0.003688067	1.7827E-05	0.003596067	0.809114975	0.001825977	0.076270026
29.745	-0.005211371	2.53668E-05	0.005115298	1.150942023	0.001832841	0.076270578
29.75	-0.00673781	3.29298E-05	0.006638079	1.493567786	0.001844315	0.076288626
29.755	-0.00828438	4.0609E-05	0.008182941	1.841161651	0.001861661	0.076306677
29.76	-0.009466196	4.64966E-05	0.009366128	2.107378728	0.001884309	0.076325185
29.765	-0.010405839	5.11866E-05	0.010308112	2.319325296	0.001911676	0.076344508
29.77	-0.011229944	5.53105E-05	0.011136021	2.505604676	0.00194355	0.07636944
29.775	-0.011821505	5.82876E-05	0.011733478	2.640032567	0.00197887	0.076420475
29.78	-0.012283173	6.06245E-05	0.012202317	2.745521288	0.002017002	0.076494001
29.785	-0.012444191	6.1478E-05	0.012373536	2.7840457	0.002056141	0.076595843
29.79	-0.012309459	6.08603E-05	0.012248727	2.755963681	0.002094437	0.076715609
29.795	-0.012281656	6.07666E-05	0.012229664	2.751674505	0.002132561	0.076841281
29.8	-0.012289936	6.08565E-05	0.01224796	2.755791071	0.002170735	0.076980932
29.805	-0.012163683	6.02905E-05	0.012133599	2.730059866	0.00220813	0.077121826
29.81	-0.011577901	5.74642E-05	0.011562667	2.601600039	0.002242009	0.077240189
29.815	-0.009969366	4.9567E-05	0.009968084	2.242818797	0.002267128	0.077341108
29.82	-0.007992269	3.97987E-05	0.007996923	1.799307726	0.002283273	0.077472679
29.825	-0.006892603	3.43425E-05	0.006896448	1.551700893	0.00229528	0.077613943
29.83	-0.006471343	3.22564E-05	0.006475812	1.457057666	0.002305864	0.077836605
29.835	-0.005836287	2.91228E-05	0.005844048	1.314910811	0.002314473	0.078138325
29.84	-0.005058614	2.52678E-05	0.005067005	1.140076129	0.002320941	0.078462231
29.845	-0.004826951	2.4103E-05	0.004832258	1.087258014	0.002326829	0.078761584
29.85	-0.005039426	2.51544E-05	0.005044706	1.135058796	0.002333248	0.079017068
29.855	-0.004796784	2.3968E-05	0.004805061	1.081138694	0.002339063	0.079236174
29.86	-0.004310479	2.15551E-05	0.004318827	0.971736045	0.002343759	0.079448026
29.865	-0.004479395	2.23797E-05	0.004485433	1.00922236	0.002348831	0.079637779
29.87	-0.004679497	2.33831E-05	0.004688158	1.05483545	0.002354365	0.07981981
29.875	-0.004349715	2.17594E-05	0.004360099	0.981022265	0.002359147	0.079994516
29.88	-0.00436889	2.18482E-05	0.004378146	0.985082952	0.002363971	0.080220392
29.885	-0.004669894	2.33508E-05	0.00468172	1.053386927	0.002369483	0.080425414
29.89	-0.004445472	2.22614E-05	0.004461615	1.003863287	0.002374477	0.080614535
29.895	-0.0041234	2.06739E-05	0.004141275	0.931786904	0.002378775	0.080810108
29.9	-0.00406253	2.03819E-05	0.004082436	0.918548129	0.002382946	0.08100253
29.905	-0.003777899	1.89906E-05	0.003802138	0.855481127	0.002386553	0.081206124
29.91	-0.003264022	1.64569E-05	0.003291721	0.740637269	0.002389246	0.081452115
29.915	-0.002841512	1.43695E-05	0.002871257	0.646032852	0.002391287	0.081681892
29.92	-0.002391966	1.21495E-05	0.002424148	0.545433324	0.002392733	0.081900033
29.925	-0.001800713	9.22269E-06	0.001834787	0.412827186	0.002393552	0.082106307
29.93	-0.001297689	6.72423E-06	0.001331755	0.299644797	0.002393978	0.082306688
29.935	-0.000947835	4.98455E-06	0.000981533	0.220844951	0.002394205	0.082528641
29.94	-0.000532293	2.92111E-06	0.000566181	0.127390685	0.002394276	0.082812225
29.945	-0.000114544	8.41924E-07	0.000147707	0.033233993	0.00239428	0.08308915
29.95	0.00020187	-7.34477E-07	-0.00016954	-0.038146468	0.00239429	0.083398248
29.955	0.000650781	-2.96488E-06	-0.000618354	-0.139129743	0.002394397	0.083705737
29.96	0.001170931	-5.55672E-06	-0.001139831	-0.256462059	0.002394744	0.084035214
29.965	0.001503405	-7.22489E-06	-0.001475425	-0.331970657	0.002395315	0.084420708
29.97	0.001737086	-8.40361E-06	-0.001712536	-0.385320508	0.002396077	0.084791914
29.975	0.00187818	-9.12733E-06	-0.001858112	-0.418075137	0.002396969	0.085187149
29.98	0.001826582	-8.89786E-06	-0.001811745	-0.407642611	0.002397812	0.085603083
29.985	0.001622961	-7.91435E-06	-0.001613036	-0.36293306	0.002398478	0.086030693
29.99	0.001207436	-5.87955E-06	-0.00120198	-0.270445589	0.002398846	0.086479391
29.995	0.000641015	-3.08901E-06	-0.000638373	-0.143633961	0.00239895	0.086945862
30	8.96889E-05	-3.65592E-07	-8.8443E-05	-0.019899682	0.002398952	0.087441085
30.005	-0.000477278	2.44107E-06	0.000478181	0.107590671	0.00239901	0.087937201
30.01	-0.000965377	4.8663E-06	0.000967706	0.217733884	0.002399245	0.088421169
30.015	-0.001272807	6.40169E-06	0.001277577	0.287454866	0.002399655	0.088941592
30.02	-0.001467125	7.3806E-06	0.001475123	0.331902579	0.002400199	0.089450627
30.025	-0.001397073	7.05502E-06	0.00140932	0.317097046	0.002400692	0.089948728
30.03	-0.001031082	5.25825E-06	0.00104632	0.235421973	0.002400961	0.0904609
30.035	-0.000646268	3.35979E-06	0.000662839	0.149138665	0.002401067	0.090993496
30.04	-0.000239971	1.35339E-06	0.000257619	0.057964385	0.002401081	0.091510932
30.045	0.000318862	-1.41217E-06	-0.000300819	-0.067684213	0.002401107	0.092011575
30.05	0.000964824	-4.61735E-06	-0.000947881	-0.213273315	0.002401342	0.092495571
30.055	0.001640389	-7.97883E-06	-0.001626342	-0.365927027	0.002402022	0.092961228
30.06	0.002239947	-1.09767E-05	-0.00223009	-0.501770322	0.00240329	0.093406579
30.065	0.002547188	-1.25383E-05	-0.002544151	-0.572434003	0.00240493	0.093855323
30.07	0.002439308	-1.20467E-05	-0.002444807	-0.550081638	0.002406434	0.094279339
30.075	0.002048761	-1.01471E-05	-0.00206105	-0.463736287	0.002407495	0.094678878
30.08	0.001638412	-8.13968E-06	-0.001655561	-0.372501203	0.002408173	0.095055164
30.085	0.001259177	-6.28196E-06	-0.001280377	-0.28808482	0.002408574	0.095410003
30.09	0.000859197	-4.31675E-06	-0.000883545	-0.19879754	0.002408761	0.095746991
30.095	0.000525465	-2.67258E-06	-0.000551585	-0.124106548	0.0024088	0.096067701
30.1	0.000349425	-1.804E-06	-0.000376233	-0.084652446	0.002408861	0.096373137
30.105	0.000411126	-2.1109E-06	-0.000438246	-0.098605372	0.002408904	0.096663786
30.11	0.000675743	-3.42779E-06	-0.000704307	-0.158468997	0.002409019	0.096939396
30.115	0.000964205	-4.86999E-06	-0.000995644	-0.224019845	0.002409254	0.097199111
30.12	0.001243153	-6.27024E-06	-0.001278474	-0.28765655	0.002409645	0.097441943
30.125	0.001430316	-7.22282E-06	-0.001470861	-0.330943795	0.002410162	0.09766772
30.13	0.001410874	-7.15396E-06	-0.001456941	-0.327811779	0.002410665	0.097877889
30.135	0.001329516	-6.77713E-06	-0.001380803	-0.310680691	0.002411112	0.098072422
30.14	0.001089723	-5.61942E-06	-0.001146907	-0.258054005	0.002411412	0.098251568
30.145	0.000552409	-2.98214E-06	-0.000614178	-0.138190024	0.002411489	0.098416075
30.15	8.75231E-05	-6.91417E-07	-0.000151637	-0.034118437	0.002411491	0.098567394
30.155	-0.000250289	9.68979E-07	0.000183511	0.04129	0.002411507	0.098706876

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
36.18774414	0.001098072	3.332684688
36.19384766	0.001918843	5.95282205
36.19995117	0.002126183	6.432134464
36.20605469	0.001313146	3.890070564
36.2121582	0.000228476	0.691194233
36.21826172	0.000787395	2.414184408
36.22436523	0.001768249	5.171043842
36.23046875	0.002553433	7.116807607
36.23657227	0.002812697	7.854569748
36.24267578	0.002402831	6.765161076
36.2487793	0.00201014	5.599882015
36.25488281	0.002359074	6.42066546
36.26098633	0.002448216	6.39804932
36.26708984	0.002167309	5.332116281
36.27319336	0.002108682	4.894303692
36.27929688	0.002243014	5.213356207
36.28540039	0.001924224	4.667653509
36.29150391	0.000890442	2.100736176
36.29760742	0.000364802	0.801430092
36.30371094	0.001045192	2.243124287
36.30981445	0.001559785	3.339031157
36.31591797	0.002105599	4.504375894
36.32202148	0.002755234	6.020461136
36.328125	0.002635115	5.915029391
36.33422852	0.001798828	4.093047944
36.34033203	0.001995258	4.464393221
36.34643555	0.002367037	5.117630341
36.35253906	0.002093033	4.464491587
36.35864258	0.001584732	3.345630299
36.36474609	0.001090173	2.279900011
36.37084961	0.000597685	1.254117586
36.37695313	0.000196965	0.396714408
36.38305664	0.001400862	2.659443069
36.38916016	0.002520756	4.718562246
36.39526367	0.00302788	5.646698899
36.40136719	0.002905787	5.467555924
36.4074707	0.002638194	5.191270155
36.41357422	0.002668075	5.275518521
36.41967773	0.002510373	4.843972209
36.42578125	0.002135207	4.196493098
36.43188477	0.002195068	4.422760223
36.43798828	0.002958377	6.035227192
36.4440918	0.003663226	7.721915256
36.45019531	0.003429909	7.457869872
36.45629883	0.002659393	5.870729972
36.46240234	0.001709237	3.824604195
36.46850586	0.001156065	2.586225671
36.47460938	0.001602457	3.548035811
36.48071289	0.001441328	3.2794429
36.48681641	0.000416434	1.043509454
36.49291992	0.0007005	1.846121346
36.49902344	0.001072609	2.672663294
36.50512695	0.000651582	1.603326775
36.51123047	0.000556143	1.429898031
36.51733398	0.001200038	3.159891047
36.5234375	0.001679316	4.59479979
36.52954102	0.002090331	5.772256581
36.53564453	0.001680012	4.364141832
36.54174805	0.001130175	2.847356172
36.54785156	0.001639797	4.168149184
36.55395508	0.00264195	6.706829691
36.56005859	0.003029107	7.740307878
36.56616211	0.002664893	6.856324657
36.57226563	0.002137707	5.425557743
36.57836914	0.001666299	4.206160186
36.58447266	0.001426331	3.588219867
36.59057617	0.000761514	1.83127091
36.59667969	0.000669009	1.555519938
36.6027832	0.001578377	3.845335021
36.60888672	0.00160778	4.181268903
36.61499023	0.000997258	2.56897051
36.62109375	0.000493706	1.23372375
36.62719727	0.000716366	1.746331757
36.63330078	0.001761558	4.186708967
36.6394043	0.002888927	6.936518193
36.64550781	0.003235901	8.007738367
36.65161133	0.002632264	6.554343653
36.65771484	0.00178322	4.357989936
36.66381836	0.001592191	3.72369712
36.66992188	0.001932056	4.347099042
36.67602539	0.001803737	4.052405269
36.68212891	0.000791283	1.785210223
36.68823242	0.000609524	1.376185756
36.69433594	0.000756031	1.714720025
36.70043945	0.000985029	2.156521981
36.70654297	0.001665598	3.442207071
36.71264648	0.001642331	3.307387588
36.71875	0.001157131	2.314109999
36.72485352	0.000834611	1.674042963
36.73095703	0.000862322	1.772242409
36.73706055	0.001269948	2.647697181
36.74316406	0.002041354	4.138644382
36.74926758	0.002648353	5.162728556
36.75537109	0.002594582	5.055263175
36.76147461	0.002111817	4.271951834
36.76757813	0.001729184	3.594451668
36.77368164	0.001774422	3.682852435
36.77978516	0.001703948	3.512517516
36.78588867	0.001325545	2.738989573
36.79199219	0.001693986	3.528268637
36.7980957	0.002061841	4.325340863
36.80419922	0.001864821	4.012049509
36.81030273	0.001428293	3.23623611
36.81640625	0.001300726	3.04235188

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
30.16	-0.000716713	3.26665E-06	0.000647229	0.145626594	0.002411637	0.098835607
30.165	-0.001137782	5.34458E-06	0.001066536	0.239970517	0.002411964	0.098954894
30.17	-0.001559244	7.41965E-06	0.001485207	0.334171619	0.002412578	0.099065993
30.175	-0.002251702	1.08368E-05	0.002174531	0.489269555	0.00241386	0.099171118
30.18	-0.003024768	1.46622E-05	0.002946028	0.662856338	0.002416172	0.099272645
30.185	-0.003740154	1.82054E-05	0.003660465	0.823604668	0.002419708	0.099372576
30.19	-0.00447665	2.18545E-05	0.004396067	0.98911497	0.002424773	0.099472824
30.195	-0.005270445	2.57866E-05	0.005188546	1.167422753	0.002431793	0.099575333
30.2	-0.006320696	3.09894E-05	0.006236842	1.403289447	0.002441891	0.099682254
30.205	-0.007547532	3.70816E-05	0.007463911	1.679379944	0.002456288	0.099796333
30.21	-0.008505722	4.18567E-05	0.008425405	1.895716103	0.002474573	0.099920664
30.215	-0.009279115	4.57136E-05	0.009201814	2.070408245	0.002496335	0.100057781
30.22	-0.010232792	5.0465E-05	0.010158075	2.285566895	0.002522799	0.100209805
30.225	-0.011129506	5.49502E-05	0.01106051	2.488614775	0.002554105	0.100379145
30.23	-0.011603913	5.73515E-05	0.011543572	2.597303662	0.002588137	0.100568008
30.235	-0.011849413	5.86137E-05	0.011797453	2.654426914	0.002623624	0.100777642
30.24	-0.012114083	5.99695E-05	0.01207014	2.715781597	0.002660714	0.101008689
30.245	-0.01229055	6.08927E-05	0.012255824	2.757560388	0.002698892	0.101261725
30.25	-0.012301609	6.09987E-05	0.012277104	2.76234835	0.00273714	0.101537099
30.255	-0.012153017	6.03144E-05	0.012138837	2.731238298	0.002774469	0.101867511
30.26	-0.011852671	5.88763E-05	0.011848311	2.665869891	0.002809975	0.102262775
30.265	-0.011505071	5.72034E-05	0.011510373	2.589833844	0.00284343	0.102687612
30.27	-0.010956883	5.45416E-05	0.010972804	2.468880941	0.002873772	0.103223857
30.275	-0.010046551	5.00819E-05	0.010072346	2.266277819	0.002899282	0.103809551
30.28	-0.009067529	4.52718E-05	0.009101481	2.047833166	0.002920062	0.104453544
30.285	-0.007999689	4.00215E-05	0.008042141	1.809481691	0.002936236	0.105105998
30.29	-0.006643437	3.33365E-05	0.00669384	1.506114077	0.002947391	0.105762033
30.295	-0.005263364	2.65226E-05	0.005320109	1.197024549	0.002954393	0.106393981
30.3	-0.00376697	1.913E-05	0.003830373	0.861833951	0.002957979	0.106995355
30.305	-0.00202229	1.04939E-05	0.002090874	0.4704467	0.002959013	0.107646277
30.31	-0.000462458	2.75524E-06	0.000532869	0.119895522	0.002959067	0.10825368
30.315	0.000960767	-4.31304E-06	-0.000889574	-0.200154093	0.0029593	0.108819061
30.32	0.00232986	-1.11281E-05	-0.002260522	-0.508617412	0.002960672	0.109343502
30.325	0.003233651	-1.56516E-05	-0.003170202	-0.713295471	0.002963315	0.109821662
30.33	0.003873906	-1.88681E-05	-0.003816902	-0.858802998	0.002967108	0.110256627
30.335	0.004392528	-2.14905E-05	-0.004344071	-0.977416058	0.002971984	0.110717344
30.34	0.004383634	-2.15058E-05	-0.004346773	-0.97802389	0.002976841	0.111127921
30.345	0.004114858	-2.02221E-05	-0.004087421	-0.919669751	0.002981121	0.111496474
30.35	0.003861741	-1.90135E-05	-0.003843284	-0.864738795	0.00298489	0.1118253
30.355	0.00332707	-1.641E-05	-0.003317417	-0.746418797	0.002987687	0.112115131
30.36	0.00268871	-1.32813E-05	-0.002685629	-0.604266546	0.002989515	0.112369447
30.365	0.002104319	-1.04177E-05	-0.002107507	-0.474189037	0.002990634	0.112604402
30.37	0.001224282	-6.08689E-06	-0.001233399	-0.277514881	0.002991013	0.112840121
30.375	0.000273783	-1.38537E-06	-0.000284757	-0.0640704	0.002991032	0.113064049
30.38	-0.000131245	6.28695E-07	0.000121536	0.027345703	0.002991036	0.113280431
30.385	-0.000176919	8.52589E-07	0.000166699	0.037507307	0.002991044	0.113484629
30.39	-0.000383075	1.86425E-06	0.000370757	0.083420279	0.002991081	0.113661932
30.395	-0.000504274	2.46136E-06	0.000491191	0.110517956	0.002991145	0.113816532
30.4	-0.000330658	1.58887E-06	0.000314907	0.070854026	0.002991173	0.113949619
30.405	-0.000489817	2.34592E-06	0.000467868	0.105270317	0.002991233	0.114067286
30.41	-0.001186803	5.77105E-06	0.001158656	0.260697676	0.002991589	0.114171209
30.415	-0.001975098	9.6611E-06	0.001942986	0.437171906	0.002992575	0.114263471
30.42	-0.002870179	1.40854E-05	0.00283481	0.637832244	0.002994657	0.114347996
30.425	-0.003929994	1.93391E-05	0.003893502	0.876037983	0.002998561	0.114427986
30.43	-0.004854862	2.39424E-05	0.004820843	1.084689779	0.003004518	0.114507307
30.435	-0.005498376	2.71634E-05	0.005469595	1.230658779	0.003012159	0.114587227
30.44	-0.005848792	2.89386E-05	0.005827084	1.311093961	0.003020805	0.114668635
30.445	-0.005978612	2.9624E-05	0.005965101	1.342147694	0.003029839	0.11475202
30.45	-0.005795924	2.87666E-05	0.005791853	1.303167003	0.003038329	0.114837531
30.455	-0.005113835	2.54296E-05	0.005117751	1.151494033	0.003044938	0.114924859
30.46	-0.004333138	2.15847E-05	0.0043413	0.976792563	0.003049684	0.11501309
30.465	-0.003659653	1.82621E-05	0.00367048	0.825857997	0.003053069	0.115101137
30.47	-0.002879698	1.44001E-05	0.002890982	0.650471005	0.003055165	0.115187994
30.475	-0.002451331	1.22596E-05	0.002459025	0.553280627	0.003056684	0.115276244
30.48	-0.002490503	1.24362E-05	0.002494727	0.561313555	0.003058251	0.115359584
30.485	-0.002536435	1.26495E-05	0.002537829	0.571011488	0.003059877	0.115438531
30.49	-0.002858146	1.42256E-05	0.00285625	0.642656244	0.003061942	0.11552314
30.495	-0.003298266	1.64047E-05	0.003296407	0.741691515	0.003064691	0.115616581
30.5	-0.003302782	1.64324E-05	0.003301992	0.742948091	0.003067448	0.115698746
30.505	-0.003314582	1.64887E-05	0.003313369	0.745508047	0.003070225	0.115770527
30.51	-0.003267739	1.62657E-05	0.003268315	0.735370818	0.003072924	0.115862313
30.515	-0.002671679	1.33208E-05	0.002673378	0.601510157	0.003074728	0.115945792
30.52	-0.002086819	1.0413E-05	0.002086448	0.469450788	0.003075829	0.116018064
30.525	-0.001665619	8.31512E-06	0.001663207	0.374221561	0.00307653	0.116079424
30.53	-0.001122328	5.60854E-06	0.001117256	0.251382676	0.003076848	0.11615217
30.535	-0.000789534	3.93672E-06	0.000780075	0.175516825	0.003077006	0.116216157
30.54	-0.000574997	2.85596E-06	0.000562122	0.126477526	0.003077089	0.116267734
30.545	-0.000305888	1.50464E-06	0.000289626	0.06516582	0.003077113	0.116311322
30.55	-0.000181506	8.72092E-07	0.000162081	0.036468134	0.003077121	0.116350242
30.555	9.90297E-05	-5.25429E-07	-0.000119696	-0.026931593	0.003077124	0.116384667
30.56	0.000580681	-2.92335E-06	-0.000603123	-0.135702563	0.003077209	0.116415998
30.565	0.001046809	-5.24609E-06	-0.001071323	-0.241047581	0.003077486	0.116442686
30.57	0.00179943	-8.98883E-06	-0.001825619	-0.410764189	0.003078304	0.116464936
30.575	0.0026676	-1.33215E-05	-0.002698598	-0.60718463	0.003080103	0.116489888
30.58	0.003296463	-1.64805E-05	-0.003334953	-0.750364392	0.003082849	0.116509499
30.585	0.003910649	-1.95739E-05	-0.003957979	-0.890545221	0.003086714	0.116520314
30.59	0.004319023	-2.16666E-05	-0.004379389	-0.985362423	0.003091429	0.116526783
30.595	0.004178167	-2.10485E-05	-0.004254511	-0.957265055	0.003095841	0.116531221
30.6	0.003660352	-1.8563E-05	-0.003752387	-0.844287033	0.003099227	0.116534333
30.605	0.002769947	-1.42355E-05	-0.002878411	-0.647642578	0.003101167	0.116536201
30.61	0.001332722	-7.19949E-06	-0.001458015	-0.328053484	0.003101615	0.116536962
30.615	-0.000719717	2.89182E-06	0.000577954	0.13003972	0.003101746	0.116536994
30.62	-0.00332678	1.57497E-05	0.003170199	0.713294822	0.003104544	0.116536994
30.625	-0.006210048	3.00054E-05	0.006041883	1.359423587	0.00311429	0.116536994
30.63	-0.009056108	4.41081E-05	0.008880426	1.998095878	0.003135019	0.116536994
30.635	-0.011554257	5.65146E-05	0.011375726	2.559538331	0.00316876	0.116536994
30.64	-0.013613487	6.67633E-05	0.013433414	3.02251806	0.003215599	0.116536994
30.645	-0.015359523	7.54724E-05	0.015178648	3.415195816	0.003275225	0.116538343
30.65	-0.016723984	8.23019E-05	0.016546187	3.722891998	0.003345914	0.116542482
30.655	-0.017754061	8.74799E-05	0.017582399	3.956039727	0.00342558	0.116551342
30.66	-0.018522943	9.13727E-05	0.018361085	4.131244115	0.003512295	0.116589113
30.665	-0.018735039	9.25148E-05	0.018589501	4.182637814	0.003601008	0.116669717
30.67	-0.018485997	9.13644E-05	0.018357062	4.130338895	0.003687378	0.116766263
30.675	-0.018097816	8.95186E-05	0.017984198	4.04644465	0.003770158	0.116864734

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
36.82250977	0.001315757	3.013014164
36.82861328	0.00103798	2.272218046
36.8347168	0.001498741	3.189937126
36.84082031	0.001775094	3.849624974
36.84692383	0.001102777	2.518164688
36.85302734	0.00041421	0.963253233
36.85913086	0.00046832	1.067819104
36.86523438	0.00114514	2.564950063
36.87133789	0.000969891	2.158182172
36.87744141	0.000763278	1.743276241
36.88354492	0.001483708	3.60601671
36.88964844	0.001293209	3.291112194
36.89575195	0.000928152	2.373808368
36.90185547	0.001391646	3.543216107
36.90795898	0.001984788	5.021604753
36.9140625	0.002283879	5.643907831
36.92016602	0.002905033	6.973566938
36.92626953	0.003576271	8.538454959
36.93237305	0.003673982	8.953100196
36.93847656	0.00356433	8.645907798
36.94458008	0.003677093	8.418646939
36.95068359	0.003762946	8.101347989
36.95678711	0.003406928	7.182112748
36.96289063	0.002742441	5.887723408
36.96899414	0.00237112	5.242523501
36.97509766	0.002977142	6.57902171
36.98120117	0.00368279	7.937005297
36.98730469	0.003597067	7.627208265
36.9934082	0.003266258	6.84198678
36.99951172	0.003545143	7.339078397
37.00561523	0.004281329	8.854792434
37.01171875	0.004727176	9.664961051
37.01782227	0.004745553	9.349711307
37.02392578	0.004414608	8.414774275
37.0300293	0.003778894	7.09917359
37.03613281	0.003111292	5.679849579
37.04223633	0.002590178	4.547686696
37.04833984	0.002202825	3.876791294
37.05444336	0.001992626	3.639407167
37.06054688	0.001851934	3.414930137
37.06665039	0.001727036	3.099504184
37.07275391	0.001796335	3.133944134
37.07885742	0.002112292	3.662135009
37.08496094	0.002243835	3.983056473
37.09106445	0.001990906	3.580462088
37.09716797	0.001527201	2.688737501
37.10327148	0.001271188	2.204782912
37.109375	0.001622866	2.776782274
37.11547852	0.002204184	3.702184551
37.12158203	0.002215396	3.808411999
37.12768555	0.001706845	3.021472112
37.13378906	0.001580188	2.800587555
37.13989258	0.002113343	3.856341982
37.14599609	0.002490967	4.643709224
37.15209961	0.002562179	4.634283346
37.15820313	0.002853164	5.138786277
37.16430664	0.002488192	4.63869911
37.17041016	0.002189169	4.284535757
37.17651367	0.002407264	5.038795267
37.18261719	0.00253917	5.419672779
37.1887207	0.002824736	5.872546747
37.19482422	0.003404493	7.156642657
37.20092773	0.004098151	8.863580066
37.20703125	0.004016686	9.034993159
37.21313477	0.003168166	7.646631575
37.21923828	0.002148864	5.363803955
37.2253418	0.001405019	3.463610243
37.23144531	0.001208991	2.979013271
37.23754883	0.00141024	3.479315347
37.24365234	0.001626003	4.080873988
37.24975586	0.00161212	4.2116746
37.25585938	0.001242483	3.317297323
37.26196289	0.000837336	2.227088663
37.26806641	0.001363739	3.580046598
37.27416992	0.00159024	4.033732897
37.28027344	0.001636084	3.975663902
37.28637695	0.002507173	6.093566261
37.29248047	0.004164258	10.59138745
37.29858398	0.005003056	12.83206492
37.3046875	0.004448897	10.85785105
37.31079102	0.003486225	8.226253948
37.31689453	0.002926589	6.748011055
37.32299805	0.002871465	6.397210879
37.32910156	0.003211888	7.233144776
37.33520508	0.003507894	8.332828382
37.34130859	0.003516814	8.376024592
37.34741211	0.003578074	8.09790995
37.35351563	0.003628096	7.906443007
37.35961914	0.003391796	7.230308514
37.36572266	0.003381272	7.131736747
37.37182617	0.004041352	8.578460832
37.37792969	0.005155808	10.90835643
37.3840332	0.006047	12.49465307
37.39013672	0.005762225	11.47187467
37.39624023	0.004517659	8.535009226
37.40234375	0.003949417	7.23537285
37.40844727	0.00413773	7.670244969
37.41455078	0.004199059	7.839621167
37.4206543	0.004115549	7.532478182
37.42675781	0.003910103	6.955602076
37.43286133	0.003259098	5.595567205
37.43896484	0.00210555	3.547098027
37.44506836	0.001509733	2.582434977
37.45117188	0.001997022	3.485213078

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
30.68	-0.017374146	8.6011E-05	0.017275768	3.887047899	0.003846451	0.116948854
30.685	-0.016287433	8.0695E-05	0.01620248	3.645558043	0.003913498	0.117063149
30.69	-0.015018822	7.44627E-05	0.014944724	3.362562818	0.003970508	0.117224235
30.695	-0.013779688	6.83566E-05	0.01371294	3.085411479	0.004018498	0.117391037
30.7	-0.012971854	6.43758E-05	0.012910152	2.904784187	0.004061027	0.117529359
30.705	-0.012262044	6.08872E-05	0.012206794	2.746528561	0.004099028	0.117698379
30.71	-0.011384631	5.65586E-05	0.011334275	2.550211954	0.004131786	0.117886091
30.715	-0.011041748	5.48655E-05	0.010993056	2.473437544	0.0041626	0.118097511
30.72	-0.010960441	5.44857E-05	0.010916522	2.456217404	0.004192962	0.118342869
30.725	-0.010467487	5.207E-05	0.010429748	2.3466934	0.004220655	0.118700347
30.73	-0.010306564	5.1283E-05	0.010271239	2.311028735	0.004247502	0.119067967
30.735	-0.010671452	5.31168E-05	0.010641715	2.394385814	0.004276285	0.119495604
30.74	-0.010651098	5.30693E-05	0.010632104	2.392223409	0.004304957	0.119932612
30.745	-0.010049951	5.01484E-05	0.010042604	2.259585886	0.004330484	0.120458473
30.75	-0.009096597	4.54741E-05	0.009101025	2.047730535	0.004351398	0.121006261
30.755	-0.008045053	4.02997E-05	0.008059005	1.813276205	0.004367756	0.121569357
30.76	-0.007195116	3.61187E-05	0.007217246	1.623880341	0.00438084	0.122090728
30.765	-0.006238885	3.14171E-05	0.006270948	1.410963333	0.004390678	0.122574549
30.77	-0.004907354	2.48499E-05	0.004949552	1.113649289	0.004396765	0.123057562
30.775	-0.003589626	1.83309E-05	0.003638324	0.818622847	0.004400021	0.123514164
30.78	-0.002662048	1.37305E-05	0.002713287	0.610489465	0.004401812	0.124031752
30.785	-0.0020881	1.08837E-05	0.002140971	0.481718474	0.004402914	0.124579423
30.79	-0.001438507	7.66696E-06	0.001494391	0.336238045	0.004403437	0.125113747
30.795	-0.000774077	4.36066E-06	0.000829925	0.186733169	0.004403589	0.125683054
30.8	-0.000815293	4.54059E-06	0.000866741	0.195016631	0.004403757	0.126302006
30.805	-0.001093007	5.91761E-06	0.001144938	0.257610942	0.004404059	0.126924794
30.81	-0.000733179	4.14037E-06	0.00078587	0.176820648	0.004404195	0.127533661
30.815	-0.000668068	3.79632E-06	0.000717001	0.161325294	0.004404307	0.128112281
30.82	-0.001343951	7.13852E-06	0.001392167	0.313237679	0.004404764	0.128651008
30.825	-0.001447642	7.67573E-06	0.001500641	0.337644215	0.004405294	0.129151331
30.83	-0.001082918	5.8749E-06	0.001136823	0.255785113	0.00440559	0.129613257
30.835	-0.001265527	6.77965E-06	0.001319624	0.296915466	0.004405995	0.130035477
30.84	-0.001210259	6.53367E-06	0.001269916	0.285731126	0.004406365	0.130422084
30.845	-0.000400625	2.54467E-06	0.000465015	0.104628433	0.004406406	0.130777326
30.85	0.000212476	-4.90674E-07	-0.000144834	-0.032587656	0.004406417	0.131101085
30.855	0.000723115	-3.00731E-06	-0.000650393	-0.146338367	0.004406549	0.13139352
30.86	0.001743105	-8.04874E-06	-0.001662949	-0.374163602	0.004407317	0.131658315
30.865	0.002668444	-1.26425E-05	-0.00258536	-0.58170592	0.004409117	0.131925513
30.87	0.003262846	-1.5596E-05	-0.003178296	-0.715116608	0.004411807	0.132156502
30.875	0.004010132	-1.93054E-05	-0.003922865	-0.88264454	0.004415872	0.132353846
30.88	0.004613187	-2.23136E-05	-0.004526579	-1.01848026	0.00442125	0.13251626
30.885	0.004830244	-2.34054E-05	-0.004745657	-1.06777275	0.004427147	0.132646122
30.89	0.005158065	-2.50343E-05	-0.005072516	-1.141316185	0.004433872	0.132743173
30.895	0.005597184	-2.72194E-05	-0.005510921	-1.239957307	0.00444179	0.132843004
30.9	0.005822702	-2.83446E-05	-0.005736641	-1.290744132	0.004450358	0.132945318
30.905	0.006189953	-3.01568E-05	-0.006100181	-1.372540691	0.004460042	0.133025342
30.91	0.007025902	-3.42908E-05	-0.006929349	-1.559103423	0.004472519	0.133086833
30.915	0.007949288	-3.88697E-05	-0.007847542	-1.765696903	0.00448849	0.133134363
30.92	0.008846719	-4.33184E-05	-0.008739421	-1.966369782	0.00450827	0.133173351
30.925	0.01017252	-4.98884E-05	-0.010056244	-2.262654811	0.004534424	0.133204124
30.93	0.011801565	-5.79815E-05	-0.011677737	-2.627490844	0.004569625	0.133232169
30.935	0.01324745	-6.51881E-05	-0.013121084	-2.952243989	0.00461398	0.133336177
30.94	0.014556215	-7.173E-05	-0.014430849	-3.246941066	0.004667531	0.133426739
30.945	0.015549059	-7.67294E-05	-0.015431517	-3.472091421	0.004728637	0.133502724
30.95	0.01588217	-7.84726E-05	-0.015780362	-3.550581378	0.00479239	0.133570303
30.955	0.015798219	-7.81515E-05	-0.015715413	-3.535967992	0.00485547	0.133639518
30.96	0.01512109	-7.4902E-05	-0.015058961	-3.388266142	0.004913258	0.133728334
30.965	0.013551933	-6.72236E-05	-0.013508527	-3.039418464	0.004959675	0.133807089
30.97	0.011705398	-5.81423E-05	-0.011675896	-2.627076508	0.004994305	0.133936183
30.975	0.009872528	-4.91138E-05	-0.009855021	-2.217379655	0.005018939	0.134060038
30.98	0.007835332	-3.90574E-05	-0.007828031	-1.761306945	0.005034455	0.134158853
30.985	0.0059082	-2.95205E-05	-0.00590689	-1.329050254	0.005043278	0.134230345
30.99	0.004204252	-2.10747E-05	-0.004206429	-0.94644647	0.005047745	0.134309156
30.995	0.002649477	-1.33486E-05	-0.002651572	-0.596603733	0.005049519	0.134448395
31	0.001743633	-8.81586E-06	-0.001739692	-0.391430806	0.005050288	0.134562789
31.005	0.001451738	-7.3276E-06	-0.001440336	-0.324075627	0.00505082	0.134652824
31.01	0.001412718	-7.09594E-06	-0.001393824	-0.313610505	0.005051325	0.134722535
31.015	0.001882979	-9.39039E-06	-0.001857368	-0.417907893	0.005052221	0.13480348
31.02	0.00256442	-1.27554E-05	-0.002537027	-0.570830986	0.005053883	0.134960041
31.025	0.002911995	-1.44815E-05	-0.002885587	-0.649257026	0.005056026	0.135093775
31.03	0.003261166	-1.62158E-05	-0.003235757	-0.728045218	0.005058714	0.13527669
31.035	0.003625958	-1.8043E-05	-0.00360463	-0.811041712	0.005062037	0.135468837
31.04	0.003509533	-1.74978E-05	-0.003494469	-0.786255623	0.00506515	0.13563827
31.045	0.00311925	-1.55856E-05	-0.003108154	-0.699334707	0.005067609	0.135804531
31.05	0.002928754	-1.46571E-05	-0.002920602	-0.657135365	0.005069777	0.136040856
31.055	0.002696301	-1.35314E-05	-0.002693253	-0.605981877	0.005071614	0.136251097
31.06	0.001990635	-1.00601E-05	-0.001992241	-0.448254171	0.005072616	0.136434353
31.065	0.001332945	-6.80347E-06	-0.001334917	-0.300356434	0.005073065	0.136646811
31.07	0.001195247	-6.1223E-06	-0.001197916	-0.269531017	0.005073426	0.136923416
31.075	0.000776575	-4.06507E-06	-0.000784184	-0.176441441	0.005073579	0.13719998
31.08	1.86281E-05	-3.08957E-07	-2.89067E-05	-0.006504	0.005073579	0.137445741
31.085	-0.000155121	5.67594E-07	0.000147328	0.033148697	0.005073585	0.137659337
31.09	-0.000218298	8.7872E-07	0.000209879	0.047222721	0.005073597	0.137840037
31.095	-0.000635548	2.94741E-06	0.000625758	0.140795544	0.005073699	0.137991447
31.1	-0.000742332	3.48853E-06	0.000734526	0.165268373	0.005073838	0.138119053
31.105	-0.000796658	3.75729E-06	0.000788559	0.177425831	0.005073998	0.138222493
31.11	-0.001140084	5.4624E-06	0.001131295	0.254541458	0.005074327	0.138364747
31.115	-0.001224001	5.89238E-06	0.00121769	0.273980351	0.005074706	0.138501299
31.12	-0.001188458	5.723E-06	0.001183467	0.266280032	0.005075063	0.13861795
31.125	-0.001260158	6.08824E-06	0.001257086	0.282844441	0.005075464	0.138743157
31.13	-0.001021625	4.92355E-06	0.001021769	0.229898019	0.005075728	0.138918806
31.135	-0.000517807	2.43402E-06	0.000518868	0.116745351	0.005075796	0.139075646
31.14	-0.000102718	3.72437E-07	0.000102497	0.023061833	0.005075798	0.139215468
31.145	0.000206371	-1.16582E-06	-0.000208136	-0.046830537	0.005075809	0.139441385
31.15	0.000673749	-3.49096E-06	-0.0006776	-0.152460085	0.005075924	0.139658959
31.155	0.001173853	-5.99908E-06	-0.00118392	-0.266382001	0.005076272	0.139861546
31.16	0.00097034	-5.04004E-06	-0.000990135	-0.222780383	0.00507651	0.140049314
31.165	0.000193064	-1.22726E-06	-0.000219966	-0.049492262	0.005076519	0.140221884
31.17	-0.000606464	2.70099E-06	0.000573275	0.128986917	0.005076612	0.140378411
31.175	-0.001973377	9.43606E-06	0.001929903	0.434228277	0.005077597	0.14051793
31.18	-0.003825832	1.86039E-05	0.003771766	0.848647459	0.005081296	0.14063904
31.185	-0.005351404	2.61759E-05	0.005292355	1.190779804	0.005088534	0.140740001
31.19	-0.006901278	3.38724E-05	0.006837342	1.538401932	0.005100571	0.140819282
31.195	-0.008538057	4.20229E-05	0.008472788	1.906377345	0.005118996	0.140877499

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
37.45727539	0.00211626	3.722133536
37.46337891	0.00207305	3.640888087
37.46948242	0.002420225	4.133949019
37.47558594	0.002969968	4.909961006
37.48168945	0.003072931	5.045041886
37.48779297	0.00286345	4.659067898
37.49389648	0.002968938	4.768516564
37.5	0.002285763	3.754030064
37.50610352	0.001245878	2.091410984
37.51220703	0.001385317	2.275118144
37.51831055	0.001273485	2.070556753
37.52441406	0.001556062	2.610221239
37.53051758	0.00181245	3.179861319
37.53662109	0.002211292	4.098542371
37.54272461	0.002427803	4.654503311
37.54882813	0.001981433	3.744229303
37.55493164	0.001538257	2.921351042
37.56103516	0.00176588	3.479389491
37.56713867	0.002635439	5.311040513
37.57324219	0.003840356	8.004976566
37.5793457	0.004570534	9.825752955
37.58544922	0.004088766	8.528591688
37.59155273	0.002881436	5.82799652
37.59765625	0.002236831	4.530295923
37.60375977	0.002123291	4.244496595
37.60986328	0.00217778	4.316219516
37.6159668	0.002539622	5.157312958
37.62207031	0.002715951	5.652240868
37.62817383	0.002330165	4.798611801
37.63427734	0.002105212	4.182062291
37.64038086	0.002018203	3.937390918
37.64648438	0.001767792	3.490952453
37.65258789	0.001899903	3.796410619
37.65869141	0.002491899	5.031316675
37.66479492	0.003189717	6.36464642
37.67089844	0.003478549	6.498444488
37.67700195	0.003424873	6.085307505
37.68310547	0.003342097	6.030482301
37.68920898	0.003090021	5.686345707
37.6953125	0.002794948	5.162269106
37.70141602	0.002859929	5.295165717
37.70751953	0.00299608	5.423906144
37.71362305	0.002793847	4.940219407
37.71972656	0.002487868	4.389500369
37.72583008	0.002384259	4.181425597
37.73193359	0.002214374	3.918837512
37.73803711	0.001812604	3.340047878
37.74414063	0.002209361	4.191099417
37.75024414	0.003087852	5.74378782
37.75634766	0.003486179	6.105090314
37.76245117	0.003696984	6.24372668
37.76855469	0.004016195	6.978377269
37.7746582	0.004046424	7.328108854
37.78076172	0.003787968	6.803346432
37.78686523	0.003595762	6.193290206
37.79296875	0.002851677	4.737277807
37.79907227	0.001532092	2.510401998
37.80517578	0.000741147	1.218525859
37.8112793	0.001442482	2.426160831
37.81738281	0.001948851	3.378739308
37.82348633	0.001741491	3.018868664
37.82958984	0.001276754	2.178561016
37.83569336	0.001397199	2.376561151
37.84179688	0.001890112	3.197407672
37.84790039	0.001653043	2.845617362
37.85400391	0.000984053	1.805117725
37.86010742	0.00163758	3.124382076
37.86621094	0.002715051	5.096429351
37.87231445	0.003554726	6.54734014
37.87841797	0.003294076	6.047981538
37.88452148	0.002306306	4.324598818
37.890625	0.001907012	3.756314979
37.89672852	0.002428372	4.937951036
37.90283203	0.003273381	6.63846816
37.90893555	0.003540621	7.021769681
37.91503906	0.003002028	5.750267423
37.92114258	0.002789237	5.321526933
37.92724609	0.003042599	6.05120483
37.93334961	0.002920787	5.959593932
37.93945313	0.00289365	5.827362344
37.94555664	0.003525432	6.957408243
37.95166016	0.004442124	8.542202598
37.95776367	0.004798952	8.826187674
37.96386719	0.004284325	7.647840314
37.9699707	0.003365168	6.085019001
37.97607422	0.002700444	4.966482325
37.98217773	0.002648739	4.801562616
37.98828125	0.003086549	5.499256392
37.99438477	0.003504869	6.11634828
38.00048828	0.003379337	5.733533392
38.0065918	0.002794451	4.802065522
38.01269531	0.002242761	4.019303669
38.01879883	0.001706334	3.097416971
38.02490234	0.001319494	2.370525915
38.03100586	0.001438247	2.513011727
38.03710938	0.002089901	3.479473291
38.04321289	0.002742422	4.487645078
38.04931641	0.002778341	4.663243942
38.05541992	0.002518967	4.276647704
38.06152344	0.002408297	4.003417858
38.06762695	0.002525188	4.053573537
38.07373047	0.002841715	4.391363587
38.07983398	0.00323747	4.858248763
38.0859375	0.003157571	4.691579743

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
31.2	-0.00967811	4.77337E-05	0.009618287	2.164114475	0.005142669	0.140924484
31.205	-0.010450306	5.1629E-05	0.010399451	2.339876423	0.00517027	0.140963571
31.21	-0.010771263	5.32978E-05	0.010734064	2.415164478	0.005199594	0.140994503
31.215	-0.010669914	5.28672E-05	0.010647043	2.395584726	0.005228367	0.141017173
31.22	-0.010588384	5.25304E-05	0.010578999	2.3802747	0.005256703	0.141045875
31.225	-0.010114709	5.02562E-05	0.010119588	2.276907327	0.00528256	0.141107708
31.23	-0.009367274	4.66055E-05	0.00938227	2.111010804	0.005304737	0.141155984
31.235	-0.009073364	4.51896E-05	0.009096371	2.046683463	0.005325545	0.141196939
31.24	-0.008747283	4.36239E-05	0.008780242	1.975554546	0.005344883	0.141230754
31.245	-0.008309215	4.14932E-05	0.00835011	1.878774665	0.005362333	0.141257524
31.25	-0.008282116	4.13957E-05	0.008330476	1.874357177	0.005379669	0.141277362
31.255	-0.008196379	4.10212E-05	0.008254849	1.857341034	0.005396649	0.141290297
31.26	-0.008029571	4.02436E-05	0.008097897	1.822026898	0.005412944	0.141296363
31.265	-0.007989763	4.01054E-05	0.00806999	1.815747828	0.005429078	0.141296841
31.27	-0.007445471	3.74808E-05	0.007540289	1.696564965	0.005443089	0.141296841
31.275	-0.006624875	3.34747E-05	0.006731959	1.514690689	0.005454181	0.141296841
31.28	-0.005977083	3.03254E-05	0.006096674	1.371751717	0.005463211	0.141296841
31.285	-0.004881172	2.49664E-05	0.005015903	1.128578244	0.005469232	0.141328181
31.29	-0.003400554	1.76853E-05	0.003548096	0.798321618	0.005472155	0.141399534
31.295	-0.002152893	1.1548E-05	0.002311377	0.520059815	0.005473326	0.141458737
31.3	-0.000743963	4.62005E-06	0.000915873	0.206071497	0.005473466	0.141505203
31.305	0.001162277	-4.7805E-06	-0.000976799	-0.219779716	0.005473808	0.141604077
31.31	0.003093928	-1.43303E-05	-0.002898494	-0.65216112	0.005476227	0.141708832
31.315	0.004756838	-2.25633E-05	-0.004554386	-1.024736938	0.005481946	0.141786897
31.32	0.006222772	-2.98323E-05	-0.006015786	-1.353551831	0.005491733	0.141847409
31.325	0.007184065	-3.46146E-05	-0.006976936	-1.56981049	0.005504777	0.141894429
31.33	0.007476065	-3.60702E-05	-0.007269427	-1.635621045	0.005518903	0.141998661
31.335	0.007979805	-3.85461E-05	-0.007766901	-1.747552741	0.005534997	0.14209394
31.34	0.009143061	-4.42918E-05	-0.008921118	-2.007251608	0.005556125	0.14216261
31.345	0.010123163	-4.91511E-05	-0.009896991	-2.226822928	0.005582026	0.142213528
31.35	0.010737047	-5.21904E-05	-0.01050724	-2.36412893	0.005611163	0.142251165
31.355	0.011656748	-5.67333E-05	-0.011419214	-2.569323202	0.005645505	0.142275253
31.36	0.012919868	-6.29872E-05	-0.012674301	-2.851717692	0.005687693	0.142308195
31.365	0.014102916	-6.88624E-05	-0.013853034	-3.116932666	0.005737962	0.142370956
31.37	0.014928524	-7.29751E-05	-0.014677946	-3.302537866	0.005794288	0.142424179
31.375	0.015670564	-7.6667E-05	-0.015418318	-3.46912166	0.005856352	0.142457224
31.38	0.016703494	-8.18071E-05	-0.016447603	-3.700710609	0.005926869	0.142469918
31.385	0.017378269	-8.51961E-05	-0.017125633	-3.853267396	0.006003198	0.142497358
31.39	0.017433352	-8.55077E-05	-0.017187963	-3.867291622	0.006080011	0.142524214
31.395	0.017775959	-8.72283E-05	-0.01753215	-3.944733726	0.006159874	0.142541306
31.4	0.018204069	-8.93886E-05	-0.017964265	-4.041959628	0.006243629	0.14254846
31.405	0.018100582	-8.89166E-05	-0.017868902	-4.020503057	0.006326435	0.142590239
31.41	0.018138145	-8.91288E-05	-0.017911766	-4.030147256	0.006409585	0.142682989
31.415	0.018272071	-8.98306E-05	-0.01805266	-4.061848535	0.006493967	0.142800382
31.42	0.017841653	-8.77379E-05	-0.017629864	-3.966719438	0.006574421	0.142966308
31.425	0.01749378	-8.60326E-05	-0.0172854	-3.889215	0.006651768	0.143117113
31.43	0.017505639	-8.61134E-05	-0.017301732	-3.892889722	0.00672922	0.143286214
31.435	0.017170585	-8.44833E-05	-0.016972496	-3.818811521	0.006803735	0.143555891
31.44	0.01672993	-8.23131E-05	-0.016534236	-3.720203134	0.006874475	0.143917077
31.445	0.016660926	-8.19769E-05	-0.016466351	-3.704928946	0.006944632	0.144326553
31.45	0.016610809	-8.17383E-05	-0.016418178	-3.694090109	0.007014369	0.144813101
31.455	0.016584128	-8.16068E-05	-0.016391648	-3.688120862	0.007083881	0.145332756
31.46	0.016922217	-8.3278E-05	-0.016729292	-3.764090705	0.007156256	0.145818552
31.465	0.017373145	-8.55158E-05	-0.017181308	-3.865794196	0.00723254	0.146305357
31.47	0.017791048	-8.75869E-05	-0.017599597	-3.959909308	0.007312538	0.146909026
31.475	0.018556338	-9.13742E-05	-0.018361393	-4.131313328	0.007399566	0.147512913
31.48	0.01960903	-9.65994E-05	-0.019406146	-4.366382827	0.007496749	0.148106185
31.485	0.020407788	-0.000100583	-0.020202312	-4.545520122	0.00760201	0.149050964
31.49	0.020879076	-0.000102943	-0.020673808	-4.651606714	0.007712189	0.150056885
31.495	0.021421977	-0.00010565	-0.021214588	-4.773282355	0.007828172	0.151045978
31.5	0.022147602	-0.000109267	-0.021936866	-4.935794868	0.007952146	0.152025023
31.505	0.022768259	-0.000112375	-0.022557205	-5.075371118	0.008083165	0.153012314
31.51	0.023214263	-0.00011462	-0.023005318	-5.176196644	0.008219368	0.154336731
31.515	0.023660874	-0.000116872	-0.023454641	-5.277294173	0.008360861	0.15573559
31.52	0.023935024	-0.000118282	-0.023735989	-5.34059743	0.008505653	0.157146114
31.525	0.023719101	-0.000117272	-0.023531892	-5.294675623	0.008647844	0.158727253
31.53	0.023156919	-0.000114538	-0.022979601	-5.170410207	0.008783375	0.160665245
31.535	0.022607533	-0.00011186	-0.022438734	-5.048715262	0.008912551	0.16276903
31.54	0.022048024	-0.000109138	-0.02188912	-4.925051954	0.009035412	0.165268107
31.545	0.021108386	-0.000104539	-0.020960746	-4.716167918	0.009148025	0.167951106
31.55	0.019772239	-9.79644E-05	-0.019634182	-4.41769084	0.009246832	0.170886897
31.555	0.018588074	-9.21288E-05	-0.018457126	-4.152853263	0.009334158	0.174070867
31.56	0.01758448	-8.71918E-05	-0.017461671	-3.928876074	0.009412309	0.177361507
31.565	0.016251513	-8.06261E-05	-0.016138299	-3.631117269	0.009479061	0.180762464
31.57	0.014845105	-7.36828E-05	-0.014739373	-3.316358935	0.009534759	0.184298934
31.575	0.013653165	-6.77963E-05	-0.013553825	-3.049610525	0.009581872	0.187803574
31.58	0.012409823	-6.16505E-05	-0.012316477	-2.771207227	0.009620795	0.19126615
31.585	0.011513195	-5.72073E-05	-0.011422187	-2.569992088	0.009654297	0.194676808
31.59	0.011199165	-5.56597E-05	-0.011110755	-2.499919831	0.009685996	0.198027777
31.595	0.010574041	-5.25955E-05	-0.010494206	-2.361196305	0.009714255	0.201314045
31.6	0.00925454	-4.60818E-05	-0.009183908	-2.066379385	0.009735902	0.204886812
31.605	0.008155689	-4.06218E-05	-0.008085954	-1.819339643	0.009752713	0.208642629
31.61	0.008276083	-4.1186E-05	-0.008200469	-1.845105455	0.009770024	0.212473897
31.615	0.009057321	-4.50592E-05	-0.008982836	-2.021138198	0.009790758	0.2162246
31.62	0.009082329	-4.52089E-05	-0.009013026	-2.027930853	0.009811606	0.219896048
31.625	0.009125997	-4.54176E-05	-0.009055204	-2.037420932	0.009832655	0.223591417
31.63	0.010486152	-5.21519E-05	-0.010414884	-2.343348893	0.009860447	0.22723392
31.635	0.011609354	-5.77649E-05	-0.011547652	-2.5982218	0.00989451	0.230829207
31.64	0.011877027	-5.91299E-05	-0.011823072	-2.660191261	0.009930163	0.234530418
31.645	0.013118302	-6.52995E-05	-0.013067565	-2.940202052	0.009973657	0.238194255
31.65	0.014667017	-7.30433E-05	-0.014628917	-3.291506392	0.010028027	0.241843756
31.655	0.015104609	-7.53008E-05	-0.015083937	-3.393885866	0.01008569	0.245497424
31.66	0.015767956	-7.86593E-05	-0.015760777	-3.546174877	0.010148528	0.249212809
31.665	0.016582592	-8.28067E-05	-0.016596403	-3.734190729	0.010218028	0.252899898
31.67	0.01605802	-8.03403E-05	-0.016098132	-3.622079657	0.0102832	0.256661692
31.675	0.015264386	-7.65157E-05	-0.015325674	-3.448276626	0.010342089	0.260447032
31.68	0.014505083	-7.28856E-05	-0.01459272	-3.283361914	0.010395265	0.264200282
31.685	0.012103131	-6.11305E-05	-0.012220535	-2.749620316	0.010432288	0.26791401
31.69	0.009128149	-4.64752E-05	-0.009265629	-2.084766566	0.010453347	0.271579269
31.695	0.007116016	-3.65702E-05	-0.007271419	-1.636069272	0.010466145	0.27517813
31.7	0.004729853	-2.48298E-05	-0.004912104	-1.105223398	0.010471799	0.27869482
31.705	0.001938089	-1.1048E-05	-0.002144433	-0.482497508	0.010472749	0.282112354
31.71	-0.000144815	-7.65944E-07	-8.08705E-05	-0.018195861	0.010472754	0.285412181
31.715	-0.002619256	1.14349E-05	0.002366387	0.532436969	0.010474488	0.288654379

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
38.09204102	0.0021359	3.225374406
38.09814453	0.000759313	1.17288371
38.10424805	0.000586374	0.901357265
38.11035156	0.000522714	0.784938928
38.11645508	0.000653425	0.957438442
38.12255859	0.00122704	1.751436437
38.12866211	0.001703718	2.431587154
38.13476563	0.002014172	2.964426399
38.14086914	0.002272443	3.399675568
38.14697266	0.002122504	3.134103829
38.15307617	0.001740891	2.515583178
38.15917969	0.00181616	2.61380378
38.1652832	0.002242747	3.333883271
38.17138672	0.002163798	3.339566751
38.17749023	0.001215878	1.892455678
38.18359375	0.000355585	0.558465961
38.18969727	0.001061971	1.696924309
38.19580078	0.001569386	2.500898962
38.2019043	0.001570147	2.480627406
38.20800781	0.001339627	2.13476307
38.21411133	0.001230068	2.014839242
38.22021484	0.001319176	2.245353066
38.22631836	0.001685206	2.911064679
38.23242188	0.002178059	3.667374321
38.23852539	0.002579873	4.228447239
38.24462891	0.002606054	4.293703015
38.25073242	0.002005387	3.41601938
38.25683594	0.001273878	2.236240356
38.26293945	0.000905399	1.597258956
38.26904297	0.000792661	1.39158761
38.27514648	0.001015054	1.778068005
38.28125	0.001608604	2.818736895
38.28735352	0.001977336	3.543809165
38.29345703	0.001617922	3.015527218
38.29956055	0.001086947	2.062255994
38.30566406	0.001715674	3.271675855
38.31176758	0.001968155	3.79180232
38.31787109	0.002062192	3.894476822
38.32397461	0.001989542	3.630477722
38.33007813	0.001998924	3.683782184
38.33618164	0.002206303	4.206556037
38.34228516	0.002219679	4.272660473
38.34838867	0.002317498	4.423608619
38.35449219	0.001799508	3.323437041
38.3605957	0.001200177	2.10019283
38.36669922	0.00128345	2.21212915
38.37280273	0.001359202	2.409794067
38.37890625	0.0009776	1.759229986
38.38500977	0.001340266	2.382954844
38.39111328	0.001343209	2.318875964
38.3972168	0.000336895	0.556027314
38.40332031	0.000905932	1.460531659
38.40942383	0.001751591	2.86873521
38.41552734	0.001821217	3.021591503
38.42163086	0.001014489	1.65895701
38.42773438	0.00059342	0.952443173
38.43383789	0.000886974	1.394507983
38.43994141	0.001196157	1.826808576
38.44604492	0.00176263	2.658356271
38.45214844	0.002137449	3.26989535
38.45825195	0.001893202	2.97790093
38.46435547	0.001536561	2.497129284
38.47045898	0.00166954	2.716252833
38.4765625	0.001606154	2.508156091
38.48266602	0.001240357	1.900778175
38.48876953	0.001074215	1.680668335
38.49487305	0.001339828	2.1249257
38.50097656	0.001018973	1.596171916
38.50708008	0.000264629	0.401092786
38.51318359	0.001028597	1.494135916
38.51928711	0.001880865	2.657281891
38.52539063	0.002443265	3.421062975
38.53149414	0.002554439	3.605355996
38.53759766	0.002195654	3.157817816
38.54370117	0.001444225	2.078084041
38.54980469	0.001295747	1.842671138
38.5559082	0.002327064	3.32294
38.56201172	0.002990738	4.302053386
38.56811523	0.002902122	4.2078044
38.57421875	0.002147773	3.211452904
38.58032227	0.001209899	1.88162484
38.58642578	0.000834912	1.315839413
38.5925293	0.001397131	2.156926623
38.59863281	0.002098961	3.13856555
38.60473633	0.002330439	3.47337311
38.61083984	0.001723943	2.651576026
38.61694336	0.000668543	1.05185928
38.62304688	0.000487855	0.760781215
38.62915039	0.0008922	1.370404887
38.63525391	0.000962974	1.466211956
38.64135742	0.000616558	0.930435679
38.64746094	0.000345555	0.521664422
38.65356445	0.00048834	0.752187729
38.65966797	0.00085548	1.343454333
38.66577148	0.000925826	1.461675357
38.671875	0.000928879	1.45984408
38.67797852	0.001332913	2.049199895
38.68408203	0.001585343	2.382586126
38.69018555	0.001331279	2.009992448
38.69628906	0.00106775	1.642054407
38.70239258	0.000920179	1.434032685
38.70849609	0.000564475	0.879870112
38.71459961	0.00056369	0.860950739
38.72070313	0.000630825	0.946288334

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
31.72	-0.005793247	2.71277E-05	0.005511868	1.240170251	0.01048297	0.291744862
31.725	-0.008585112	4.09565E-05	0.00828172	1.863386901	0.010501598	0.294657271
31.73	-0.011298459	5.4405E-05	0.01097361	2.469062205	0.010533862	0.297391302
31.735	-0.013669528	6.61857E-05	0.013330234	2.999302618	0.010581088	0.299936488
31.74	-0.0152319	7.39529E-05	0.014883278	3.34873757	0.010639727	0.302285719
31.745	-0.017414348	8.477E-05	0.017045177	3.835164814	0.010716373	0.304452674
31.75	-0.01988355	9.705E-05	0.019498138	4.387081002	0.010816296	0.306449219
31.755	-0.020969642	0.000102494	0.020585151	4.631658923	0.010927433	0.308273392
31.76	-0.02205566	0.000107893	0.021662826	4.874135795	0.011050379	0.309944747
31.765	-0.024052437	0.000117816	0.023643051	5.31968642	0.011196595	0.311519887
31.77	-0.025171745	0.000123427	0.024762184	5.571491383	0.011356736	0.312978454
31.775	-0.0256204	0.000125687	0.025212666	5.672849863	0.011522636	0.31431307
31.78	-0.026737159	0.000131242	0.026319729	5.921938969	0.011703315	0.315529267
31.785	-0.027687065	0.000135993	0.027266281	6.134913177	0.011897059	0.316602901
31.79	-0.028068881	0.000137923	0.027650706	6.221408787	0.012096185	0.317543042
31.795	-0.028688818	0.000141022	0.02826756	6.360200974	0.012304203	0.318363047
31.8	-0.029274268	0.000143961	0.028852567	6.4918275	0.012520798	0.319127591
31.805	-0.029526523	0.000145248	0.029108875	6.549496953	0.012741141	0.319789394
31.81	-0.029863271	0.000146953	0.029448049	6.62581107	0.012966539	0.320393153
31.815	-0.029983888	0.0001476	0.029576661	6.654748827	0.013193762	0.32093189
31.82	-0.029621081	0.000145848	0.029222873	6.575146537	0.013415519	0.321383179
31.825	-0.029296744	0.000144277	0.028905497	6.503736788	0.013632447	0.321838892
31.83	-0.028966272	0.000142681	0.028583154	6.431209707	0.013844508	0.322393022
31.835	-0.028325726	0.000139549	0.027950549	6.28887352	0.014047294	0.322911809
31.84	-0.027703627	0.0001365	0.027335085	6.150394126	0.014241271	0.323381802
31.845	-0.02701658	0.000133132	0.02665535	5.997453642	0.014425745	0.32402891
31.85	-0.026140551	0.000128819	0.025784958	5.801615608	0.01459845	0.324743444
31.855	-0.025681994	0.000126563	0.025329923	5.699232706	0.01476515	0.325390651
31.86	-0.025335316	0.000124879	0.024990117	5.622776265	0.014927379	0.326223879
31.865	-0.024500644	0.000120778	0.024163191	5.436717902	0.015079094	0.326993512
31.87	-0.023801454	0.000117334	0.023468785	5.280476646	0.015222275	0.327714069
31.875	-0.023144258	0.000114105	0.022817843	5.134014577	0.015357657	0.328511685
31.88	-0.022086023	0.000108881	0.021764898	4.897102145	0.015480942	0.329387109
31.885	-0.021387112	0.000105414	0.021066466	4.739954924	0.015596548	0.33015769
31.89	-0.020911616	0.000103058	0.020591839	4.633163883	0.015707071	0.331165533
31.895	-0.020262861	9.98283E-05	0.019941276	4.486787196	0.015810842	0.33206451
31.9	-0.02038936	0.000100415	0.020060088	4.51351984	0.015915913	0.332871367
31.905	-0.021117256	0.000103992	0.020782527	4.676068587	0.01602862	0.33374219
31.91	-0.022101042	0.000108827	0.021758892	4.895750611	0.016152073	0.334775354
31.915	-0.024224711	0.000119313	0.023875075	5.371891847	0.016300391	0.335737734
31.92	-0.026631781	0.00013125	0.026282306	5.913518775	0.016479648	0.336631495
31.925	-0.028728852	0.000141656	0.028379523	6.385392689	0.016688247	0.337458238
31.93	-0.031553028	0.00015568	0.03118372	7.016337069	0.016939875	0.338221805
31.935	-0.03394825	0.000167638	0.033560004	7.551000939	0.017231155	0.338927798
31.94	-0.035406565	0.000174959	0.035013408	7.878016801	0.017547997	0.339590304
31.945	-0.037262625	0.000184251	0.036857003	8.292825717	0.017898929	0.340897547
31.95	-0.038489927	0.000190472	0.038090477	8.570357219	0.018273359	0.342294839
31.955	-0.038516775	0.000190736	0.038142053	8.581961868	0.018648311	0.343957076
31.96	-0.038762686	0.00019205	0.038403145	8.640707688	0.019028066	0.345901686
31.965	-0.039652205	0.000196536	0.039292077	8.840717334	0.01942545	0.348355102
31.97	-0.041993822	0.000208213	0.041604182	9.360940962	0.019871154	0.351209613
31.975	-0.04576531	0.000227056	0.045330489	10.19936013	0.020400511	0.354030555
31.98	-0.04777722	0.000237312	0.047356258	10.65515799	0.020977434	0.35741873
31.985	-0.046199278	0.000229807	0.045840474	10.31410669	0.021516878	0.36116267
31.99	-0.043190379	0.000215121	0.042876745	9.647267672	0.021988344	0.36486511
31.995	-0.042194409	0.000210335	0.041911633	9.430117424	0.022438316	0.368512162
32	-0.042752022	0.000213342	0.042519116	9.566801207	0.02290026	0.372168096
32.005	-0.039840809	0.000199261	0.039679474	8.927881649	0.023301433	0.375753444
32.01	-0.03343155	0.000167682	0.033322024	7.497455423	0.023583914	0.37931698
32.015	-0.027559733	0.000138655	0.027488008	6.184801806	0.023775881	0.382847997
32.02	-0.019456157	9.84837E-05	0.019428766	4.37147246	0.023871554	0.38677792
32.025	-0.007186398	3.71961E-05	0.00716389	1.611875306	0.023884606	0.390672151
32.03	0.000948749	-3.83973E-06	-0.001028379	-0.231385378	0.023884834	0.394389526
32.035	0.000156303	-1.23001E-07	-0.000271324	-0.06104797	0.02388484	0.397859217
32.04	-0.002670431	1.40596E-05	0.00259109	0.582995355	0.023886643	0.401121597
32.045	-0.001063453	6.14331E-06	0.000992247	0.223255591	0.023886928	0.404206647
32.05	0.004181024	-1.99646E-05	-0.004243281	-0.954738222	0.023891346	0.407127819
32.055	0.008227	-4.03781E-05	-0.008309861	-1.869718836	0.023908453	0.410291625
32.06	0.007963955	-3.91625E-05	-0.008058831	-1.813236981	0.023924483	0.413400984
32.065	0.007154264	-3.502E-05	-0.007222284	-1.625013886	0.023937419	0.416304947
32.07	0.011465564	-5.65679E-05	-0.01153238	-2.594785528	0.023970644	0.419025407
32.075	0.016085558	-7.99067E-05	-0.01617386	-3.639118479	0.02403604	0.421692808
32.08	0.014839042	-7.37336E-05	-0.014926994	-3.358573734	0.024091693	0.424540218
32.085	0.015235042	-7.5595E-05	-0.015303276	-3.443237146	0.024150356	0.427172627
32.09	0.020931268	-0.000104186	-0.020997368	-4.724407875	0.024261086	0.429881382
32.095	0.022496138	-0.000112222	-0.022590866	-5.082944959	0.024388992	0.43258167
32.1	0.021411468	-0.000106731	-0.021481779	-4.833400298	0.024504862	0.435275205
32.105	0.025662794	-0.00012809	-0.025741292	-5.791790627	0.024671312	0.438039509
32.11	0.029009526	-0.000145111	-0.029116355	-6.551179792	0.024884007	0.440626164
32.115	0.028110957	-0.000140645	-0.028214139	-6.348181231	0.025083729	0.443012361
32.12	0.030471325	-0.000152509	-0.030582363	-6.881031686	0.0253184	0.445336051
32.125	0.034181465	-0.000171349	-0.034314085	-7.720669047	0.025613696	0.44742921
32.13	0.034197242	-0.000171552	-0.034348187	-7.728342149	0.025909264	0.44960821
32.135	0.035008487	-0.000175664	-0.035168426	-7.912895807	0.026219022	0.451904485
32.14	0.037811006	-0.000189894	-0.037984495	-8.546511465	0.026580359	0.454001609
32.145	0.038746391	-0.000194755	-0.038946023	-8.762855187	0.026959795	0.455874295
32.15	0.038927316	-0.000195754	-0.03914372	-8.807336923	0.027342783	0.457567842
32.155	0.039916101	-0.000200838	-0.040149048	-9.033535743	0.027745474	0.45921574
32.16	0.040182925	-0.000202307	-0.040439331	-9.098849532	0.028153567	0.460917264
32.165	0.03968128	-0.000199874	-0.039947739	-8.988241286	0.028551534	0.462931137
32.17	0.039406805	-0.00019857	-0.039684317	-8.928971424	0.028944015	0.464780582
32.175	0.039028281	-0.000196756	-0.039317983	-8.846546181	0.029328992	0.466440219
32.18	0.037788231	-0.000190591	-0.038073301	-8.566492628	0.029689893	0.468138956
32.185	0.036030575	-0.000181774	-0.036294174	-8.166189097	0.030018003	0.469856636
32.19	0.034799561	-0.000175588	-0.035046662	-7.885498978	0.030324074	0.471360935
32.195	0.033826628	-0.000170713	-0.034063839	-7.664363729	0.030613271	0.472746303
32.2	0.032298398	-0.000163016	-0.032512542	-7.315321979	0.030876927	0.474067302
32.205	0.031357417	-0.00015824	-0.031550379	-7.098835344	0.031125444	0.475247432
32.21	0.031613718	-0.000159519	-0.031808685	-7.156954144	0.031378041	0.47647445
32.215	0.031775698	-0.000160339	-0.031974479	-7.194257685	0.031633232	0.477562933
32.22	0.032170167	-0.00016231	-0.032372467	-7.283805018	0.031894799	0.478521575
32.225	0.033793178	-0.000170495	-0.034025022	-7.655629883	0.032183424	0.479688735
32.23	0.035483769	-0.000179065	-0.035754404	-8.044740937	0.03250165	0.480802398
32.235	0.036868669	-0.000186093	-0.037171633	-8.36361741	0.032845201	0.481912376

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
38.72680664	0.00033986	0.512572009
38.73291016	0.000714798	1.102875521
38.73901367	0.001063463	1.684581821
38.74511719	0.000858386	1.362063338
38.7512207	0.000463647	0.717949442
38.75732422	0.00104331	1.604425381
38.76342773	0.001549483	2.428554599
38.76953125	0.001858704	2.948700613
38.77563477	0.001998306	3.158867574
38.78173828	0.002141817	3.365819337
38.7878418	0.002390966	3.721963405
38.79394531	0.002666619	4.080356076
38.80004883	0.002723379	4.082914595
38.80615234	0.002326523	3.389694198
38.81225586	0.001562872	2.221778531
38.81835938	0.000850991	1.219331284
38.82446289	0.000595138	0.86765502
38.83056641	0.000378917	0.538333626
38.83666992	0.000736999	0.994594571
38.84277344	0.00174044	2.294080045
38.84887695	0.002518485	3.371921316
38.85498047	0.002533907	3.488537152
38.86108398	0.002000329	2.786363467
38.8671875	0.001860622	2.5811376
38.87329102	0.002366475	3.264838316
38.87939453	0.00301382	4.145102841
38.88549805	0.00312222	4.299753757
38.89160156	0.002410484	3.366481978
38.89770508	0.001448194	2.074301639
38.90380859	0.001151382	1.676966753
38.90991211	0.001372198	1.999076326
38.91601563	0.001726204	2.495013495
38.92211914	0.001913328	2.702572483
38.92822266	0.0020684	2.860548144
38.93432617	0.001966114	2.771459383
38.94042969	0.001801737	2.621941883
38.9465332	0.001857451	2.678064738
38.95263672	0.001872045	2.640522647
38.95874023	0.002038605	2.870358598
38.96484375	0.001882455	2.649255573
38.97094727	0.001856602	2.612388679
38.97705078	0.002397199	3.40272295
38.9831543	0.00237078	3.37567864
38.98925781	0.001755716	2.477444617
38.99536133	0.001226329	1.703348287
39.00146484	0.000929174	1.276253182
39.00756836	0.00087277	1.203087337
39.01367188	0.001442011	2.004753737
39.01977539	0.001549862	2.17204802
39.02587891	0.000799187	1.135604006
39.03198242	0.000182392	0.259993164
39.03808594	0.000522636	0.729438821
39.04418945	0.001437582	1.972779088
39.05029297	0.002049811	2.85531878
39.05639648	0.001889125	2.70622828
39.0625	0.001024001	1.471820714
39.06860352	0.000178639	0.250876989
39.07470703	0.000258455	0.352555865
39.08081055	0.000431634	0.57626104
39.08691406	0.00059034	0.788941726
39.09301758	0.000561448	0.765361679
39.09912109	0.000280825	0.388132879
39.10522461	0.000383058	0.53185076
39.11132813	0.000768651	1.068289445
39.11743164	0.00106193	1.471070627
39.12353516	0.001598876	2.230445868
39.12963867	0.001675173	2.374254574
39.13574219	0.001283403	1.835192632
39.1418457	0.000861787	1.246576073
39.14794922	0.000275317	0.398836011
39.15405273	0.000397861	0.559600774
39.16015625	0.000439964	0.604782916
39.16625977	0.000116039	0.158900661
39.17236328	0.000510926	0.688519613
39.1784668	0.000731498	0.976817526
39.18457031	0.00085846	1.154946262
39.19067383	0.000832401	1.099529694
39.19677734	0.000470974	0.603292751
39.20288086	0.000224312	0.285976072
39.20898438	0.000581574	0.748566141
39.21508789	0.001710353	2.225615885
39.22119141	0.002645835	3.45279905
39.22729492	0.002717992	3.48951599
39.23339844	0.002296224	2.907324093
39.23950195	0.001922899	2.439853477
39.24560547	0.001709124	2.175799562
39.25170898	0.001839919	2.339221257
39.2578125	0.00233523	2.957780324
39.26391602	0.002559364	3.244913942
39.27001953	0.002164924	2.768801545
39.27612305	0.001559463	1.996637407
39.28222656	0.00123307	1.572789382
39.28833008	0.001161611	1.497216289
39.29443359	0.000734499	0.968577627
39.30053711	0.00072198	0.978796406
39.30664063	0.001851387	2.572836588
39.31274414	0.002422599	3.363032735
39.31884766	0.002376912	3.230021104
39.32495117	0.002124521	2.88377506
39.33105469	0.001866917	2.585945975
39.3371582	0.001804025	2.514599115
39.34326172	0.001924588	2.657529075
39.34936523	0.001907328	2.613159079
39.35546875	0.001501529	2.029103613

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
32.24	0.038894006	-0.000196365	-0.039242276	-8.829512158	0.033227533	0.482874836
32.245	0.04065956	-0.000205372	-0.041045546	-9.235247914	0.033645365	0.48382734
32.25	0.041713124	-0.000210784	-0.042115478	-9.475982465	0.03408513	0.485074162
32.255	0.043078622	-0.000217774	-0.043497009	-9.786827094	0.034554159	0.486193852
32.26	0.04381714	-0.000221636	-0.044259974	-9.958494108	0.035039407	0.487196303
32.265	0.043508546	-0.000220186	-0.043967169	-9.892613041	0.035517845	0.488101862
32.27	0.04378182	-0.000221639	-0.04426	-9.958500051	0.036002311	0.489112208
32.275	0.044514702	-0.000225423	-0.045007958	-10.12679059	0.036503132	0.490453471
32.28	0.045802022	-0.000232009	-0.046309047	-10.41953558	0.037033339	0.491693246
32.285	0.04796251	-0.000243063	-0.048491488	-10.91058469	0.037614745	0.492855399
32.29	0.047810085	-0.000242519	-0.048371129	-10.88350395	0.038192462	0.493922991
32.295	0.045070267	-0.000228826	-0.045606909	-10.26155458	0.038705863	0.494917836
32.3	0.044418404	-0.000225583	-0.04495265	-10.11434615	0.039204519	0.495815647
32.305	0.045326978	-0.000230305	-0.04590647	-10.32895566	0.039723785	0.496894648
32.31	0.043439098	-0.000220952	-0.044018406	-9.904141257	0.040200696	0.498283214
32.315	0.040885565	-0.000208121	-0.041431774	-9.322149253	0.040623186	0.499582509
32.32	0.041206525	-0.000209794	-0.041770163	-9.398286723	0.041052334	0.500784725
32.325	0.041170333	-0.000209762	-0.041763541	-9.396796782	0.04148073	0.501998596
32.33	0.039445214	-0.000201169	-0.040031268	-9.007035193	0.041873976	0.503728717
32.335	0.03938794	-0.000200978	-0.039993426	-8.998520867	0.042266081	0.505346205
32.34	0.039173723	-0.000200096	-0.039815182	-8.958415952	0.042653933	0.507161788
32.345	0.036237733	-0.000185471	-0.036870578	-8.295880068	0.042985826	0.50926911
32.35	0.033424655	-0.000171424	-0.034044655	-7.660047271	0.04326819	0.51125233
32.355	0.02981226	-0.000153552	-0.030452463	-6.851804073	0.043492819	0.513127396
32.36	0.023044717	-0.000119987	-0.023715182	-5.335915872	0.043627039	0.514886374
32.365	0.016638861	-8.80584E-05	-0.017316815	-3.896283471	0.043697011	0.516661662
32.37	0.010752079	-5.8666E-05	-0.011435547	-2.572998138	0.04372623	0.518900061
32.375	0.003729085	-2.34462E-05	-0.004399037	-0.989783339	0.043729744	0.52097761
32.38	-2.32235E-05	-4.45719E-06	-0.000610017	-0.137253747	0.043729745	0.522914836
32.385	-0.000240343	-3.25915E-06	-0.000371098	-0.083497043	0.043729759	0.524771532
32.39	-0.000872814	-4.66554E-08	0.000269578	0.060655097	0.043729952	0.527120769
32.395	-0.000714193	-8.17425E-07	0.000112398	0.025289512	0.043730081	0.529296041
32.4	-0.001390844	2.49144E-06	0.000775672	0.174526092	0.043730569	0.531734643
32.405	-0.005906299	2.51034E-05	0.005281913	1.188430451	0.043739386	0.534228626
32.41	-0.008940935	4.04623E-05	0.008340095	1.876521362	0.04375959	0.536550553
32.415	-0.008650544	3.90715E-05	0.00805912	1.813301937	0.043778503	0.538702907
32.42	-0.009720688	4.44422E-05	0.009132221	2.054749657	0.043802385	0.540763879
32.425	-0.011119905	5.15147E-05	0.010539507	2.371389162	0.043833637	0.543226491
32.43	-0.011469307	5.32965E-05	0.010893974	2.451144063	0.043866884	0.545487145
32.435	-0.012714713	5.95678E-05	0.012141388	2.73181235	0.043907743	0.547558638
32.44	-0.013343026	6.27688E-05	0.012777936	2.875035571	0.043952741	0.549465971
32.445	-0.013740198	6.47611E-05	0.013174099	2.964172367	0.044000456	0.551206411
32.45	-0.015981851	7.60441E-05	0.015416974	3.468819197	0.044065011	0.552777465
32.455	-0.01679378	8.02275E-05	0.016248286	3.655864321	0.044136292	0.554204576
32.46	-0.015579182	7.41681E-05	0.0150244	3.380489926	0.044197635	0.555761671
32.465	-0.016024895	7.63914E-05	0.015473572	3.48155367	0.044262538	0.557500469
32.47	-0.017283218	8.27428E-05	0.016748046	3.768310318	0.044338035	0.559081047
32.475	-0.017978431	8.62763E-05	0.017450027	3.926256127	0.044419727	0.560500575
32.48	-0.018816143	9.0537E-05	0.018296317	4.116671219	0.044509209	0.561781705
32.485	-0.018682996	8.99316E-05	0.018172118	4.088726554	0.044597429	0.562938502
32.49	-0.018415037	8.85955E-05	0.017902239	4.028003722	0.044683137	0.563970265
32.495	-0.019563047	9.43788E-05	0.019059273	4.28833643	0.044779865	0.564876475
32.5	-0.01998687	9.65663E-05	0.019493624	4.386065466	0.044880828	0.565656679
32.505	-0.019736975	9.53215E-05	0.019242143	4.329482176	0.044979283	0.566337321
32.51	-0.020938364	0.000101353	0.020443964	4.599891872	0.045090089	0.566926031
32.515	-0.021980188	0.000106631	0.021491671	4.835625934	0.045212195	0.567449913
32.52	-0.022085089	0.000107179	0.021600455	4.860102435	0.04533547	0.568288358
32.525	-0.023099798	0.000112269	0.022610405	5.087341151	0.045470333	0.56904166
32.53	-0.024547499	0.00011956	0.024056974	5.412819107	0.045622629	0.569708545
32.535	-0.025618017	0.000124962	0.025128359	5.653880664	0.045788499	0.570287441
32.54	-0.026850538	0.000131177	0.026360749	5.931168453	0.045970713	0.570782823
32.545	-0.027815311	0.000136051	0.027327004	6.148575878	0.046166257	0.571304852
32.55	-0.029034416	0.000142177	0.028541198	6.421769572	0.046379317	0.571788452
32.555	-0.031392429	0.000154046	0.03089264	6.950844106	0.046628389	0.572295434
32.56	-0.033051692	0.000162461	0.032559128	7.325803854	0.046904487	0.572755757
32.565	-0.033480786	0.000164672	0.032996736	7.424265559	0.047187801	0.573122199
32.57	-0.0349471	0.000172057	0.03445867	7.753200821	0.047496474	0.57341889
32.575	-0.037196691	0.000183425	0.036708035	8.259307915	0.047846165	0.573653896
32.58	-0.038410398	0.000189626	0.037934745	8.535317697	0.048219048	0.573832381
32.585	-0.038950447	0.000192432	0.038489547	8.660148047	0.048602491	0.573986061
32.59	-0.039491792	0.000195234	0.039043671	8.784826024	0.048996667	0.574232447
32.595	-0.040208281	0.000198917	0.039771914	8.948680684	0.049405275	0.574569791
32.6	-0.041031665	0.000203168	0.040612184	9.137741315	0.049830789	0.574953561
32.605	-0.040566387	0.000200977	0.040168947	9.038012985	0.050246708	0.575261254
32.61	-0.038805649	0.000192236	0.038403911	8.640880001	0.050627306	0.575492986
32.615	-0.037832726	0.000187412	0.037430367	8.421832465	0.050989058	0.575663442
32.62	-0.037138063	0.000184024	0.036746754	8.268019717	0.051337647	0.576193851
32.625	-0.034950884	0.000173142	0.034552195	7.774243866	0.051646387	0.576675849
32.63	-0.032612609	0.000161444	0.032194706	7.243808851	0.051915198	0.577086381
32.635	-0.031152259	0.000154155	0.030726562	6.913476363	0.052160474	0.577423313
32.64	-0.029104999	0.00014394	0.02867028	6.450812895	0.052374571	0.577706896
32.645	-0.026252274	0.00012965	0.025795522	5.803992547	0.052548756	0.578025052
32.65	-0.023602387	0.000116341	0.023120121	5.202027335	0.052689551	0.578760282
32.655	-0.021297533	0.000104748	0.02079108	4.677992924	0.05280419	0.57941004
32.66	-0.019195161	9.41524E-05	0.018663802	4.199355501	0.052897314	0.579971702
32.665	-0.01760254	8.60866E-05	0.017045189	3.835167567	0.052975626	0.580443043
32.67	-0.017274134	8.43506E-05	0.016697096	3.756846546	0.053051043	0.580823747
32.675	-0.018297951	8.94342E-05	0.017723916	3.987881164	0.053135664	0.581132484
32.68	-0.019487996	9.53968E-05	0.018927769	4.258748073	0.053231651	0.58139361
32.685	-0.020466646	0.000100308	0.01991888	4.481747962	0.05333752	0.581788744
32.69	-0.021888672	0.00010746	0.021361727	4.806388564	0.053458612	0.582547002
32.695	-0.023213524	0.00011416	0.022712701	5.110357697	0.053594806	0.583214254
32.7	-0.024011286	0.000118218	0.0235307	5.294407476	0.053740521	0.58379029
32.705	-0.025240658	0.000124454	0.024787438	5.577173501	0.05390154	0.584274888
32.71	-0.026090656	0.000128847	0.02567232	5.776272042	0.054073587	0.584689296
32.715	-0.024610667	0.000121548	0.024198168	5.444587889	0.054226668	0.585058021
32.72	-0.022169104	0.000109344	0.021735094	4.890396198	0.054350883	0.585759717
32.725	-0.020817145	0.000102574	0.020369776	4.583199615	0.054460409	0.586653714
32.73	-0.01966604	9.68178E-05	0.019209166	4.322062308	0.054558158	0.587460338
32.735	-0.018799149	9.2459E-05	0.018330652	4.124396667	0.054647478	0.588177711
32.74	-0.019391273	9.54355E-05	0.018931932	4.259684602	0.054742514	0.588804403
32.745	-0.020196037	9.95316E-05	0.019759122	4.445802412	0.054845603	0.589339899
32.75	-0.020446808	0.000100866	0.020028525	4.506418134	0.054951266	0.590191391
32.755	-0.020277239	0.000100111	0.019875906	4.472078892	0.055055185	0.591203605

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
39.36157227	0.001046035	1.379168256
39.36767578	0.001350055	1.747099465
39.3737793	0.00177953	2.293166907
39.37988281	0.001959465	2.515306502
39.38598633	0.002244038	2.865267173
39.39208984	0.002701984	3.472941953
39.39819336	0.003010664	3.87309368
39.40429688	0.003039765	3.84320053
39.41040039	0.00276621	3.478012921
39.41650391	0.002241921	2.872693077
39.42260742	0.001786404	2.352756103
39.42871094	0.001966969	2.64562724
39.43481445	0.002941793	3.946646194
39.44091797	0.003449295	4.576389954
39.44702148	0.002941193	3.949162612
39.453125	0.002274954	3.103263951
39.45922852	0.002257723	3.070690365
39.46533203	0.002476439	3.354524061
39.47143555	0.002462016	3.303032345
39.47753906	0.002499903	3.275531245
39.48364258	0.002503721	3.220751394
39.48974609	0.002429759	3.08366676
39.49584961	0.002712357	3.396546051
39.50195313	0.003218807	4.031427541
39.50805664	0.003293966	4.13201196
39.51416016	0.002795296	3.446561359
39.52026367	0.002249575	2.70251793
39.52636719	0.00218273	2.558394333
39.5324707	0.002676416	3.10737653
39.53857422	0.003313857	3.912265981
39.54467773	0.003543799	4.232514652
39.55078125	0.003380374	3.969377056
39.55688477	0.002981056	3.425301762
39.56298828	0.00203452	2.306787621
39.5690918	0.000673212	0.763573378
39.57519531	0.000870521	1.009219129
39.58129883	0.001218099	1.442765243
39.58740234	0.001183926	1.415152627
39.59350586	0.000946183	1.146484112
39.59960938	0.000464457	0.567812466
39.60571289	0.001299008	1.579654338
39.61181641	0.002111215	2.565854038
39.61791992	0.002013025	2.475223206
39.62402344	0.001400717	1.757902742
39.63012695	0.001267593	1.61279672
39.63623047	0.001136787	1.419372019
39.64233398	0.001104374	1.337142512
39.6484375	0.000794933	0.955197209
39.65454102	9.24517E-05	0.1123188
39.66064453	0.000462482	0.570309307
39.66674805	0.000574439	0.712828945
39.67285156	0.000914269	1.126136005
39.67895508	0.000950703	1.165467778
39.68505859	0.001746636	2.144674858
39.69116211	0.002341223	2.881696288
39.69726563	0.002572945	3.194859168
39.70336914	0.002340296	2.922040849
39.70947266	0.001582472	1.965219871
39.71557617	0.001020932	1.262023194
39.72167969	0.001063434	1.302923531
39.7277832	0.001128699	1.361541199
39.73388672	0.000503798	0.607277908
39.73999023	0.000738766	0.89988885
39.74609375	0.001616076	1.970262376
39.75219727	0.001954925	2.383329491
39.75830078	0.001873384	2.276569017
39.7644043	0.0013121	1.561418423
39.77050781	0.001493283	1.774185168
39.77661133	0.002433757	2.988525379
39.78271484	0.002676316	3.324460269
39.78881836	0.001912423	2.338723184
39.79492188	0.00107641	1.307205687
39.80102539	0.00169735	2.038317648
39.80712891	0.002198662	2.609590371
39.81323242	0.002287635	2.715047269
39.81933594	0.001588007	1.869152282
39.82543945	0.00118665	1.386044231
39.83154297	0.002236634	2.616400854
39.83764648	0.003051724	3.54174858
39.84375	0.003564909	4.099563316
39.84985352	0.003217153	3.672182814
39.85595703	0.002014968	2.274185253
39.86206055	0.001882501	2.139241268
39.86816406	0.002354765	2.724482575
39.87426758	0.002315575	2.683339409
39.88037109	0.002232301	2.573819213
39.88647461	0.00179237	2.039104545
39.89257813	0.001583167	1.766455099
39.89868164	0.00203712	2.286661399
39.90478516	0.002719963	3.077465887
39.91088867	0.003566204	3.940069284
39.91699219	0.003982915	4.316863301
39.9230957	0.003552746	3.828554045
39.92919922	0.0028861	3.074326384
39.93530273	0.002789997	2.977071625
39.94140625	0.002772665	2.983905152
39.94750977	0.002464205	2.640452621
39.95361328	0.002178866	2.357445225
39.9597168	0.002086086	2.307130047
39.96582031	0.001824133	2.021494865
39.97192383	0.00108772	1.20328265
39.97802734	0.000702315	0.78961307
39.98413086	0.001152967	1.330222647
39.99023438	0.001234371	1.454575433

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
32.76	-0.018973581	9.36557E-05	0.018572261	4.178758711	0.055146171	0.592137019
32.765	-0.017761769	8.76199E-05	0.017355595	3.905008766	0.055225906	0.592989631
32.77	-0.01727363	8.52374E-05	0.016875647	3.797020608	0.055301318	0.59375961
32.775	-0.01588542	7.83509E-05	0.015493436	3.48602313	0.055365097	0.594445554
32.78	-0.014423303	7.10615E-05	0.014031767	3.157147635	0.055417675	0.595045842
32.785	-0.013270323	6.5341E-05	0.012885058	2.899138022	0.055462183	0.59555893
32.79	-0.011176946	5.48903E-05	0.010791006	2.427976448	0.055493757	0.596553909
32.795	-0.009633077	4.7165E-05	0.009243733	2.079839977	0.05551721	0.597519469
32.8	-0.008215864	4.01106E-05	0.007831362	1.762056351	0.05553427	0.598394088
32.805	-0.005394976	2.59751E-05	0.005002697	1.125606829	0.055541626	0.599186928
32.81	-0.004184439	1.98652E-05	0.003780632	0.850642171	0.055546052	0.599895576
32.815	-0.004288206	2.0435E-05	0.003895736	0.876540647	0.055550699	0.600518523
32.82	-0.002084633	9.45004E-06	0.001698272	0.382111182	0.055551798	0.601054968
32.825	0.000514304	-3.59822E-06	-0.000909089	-0.204545121	0.055551864	0.602086628
32.83	0.001808129	-1.0096E-05	-0.002206914	-0.496555582	0.055552691	0.603038972
32.835	0.003310077	-1.76225E-05	-0.003709707	-0.83468418	0.055555546	0.603905616
32.84	0.004611709	-2.41521E-05	-0.005013043	-1.127934757	0.055560835	0.604692694
32.845	0.005885171	-3.05198E-05	-0.006283667	-1.413825036	0.055569589	0.605398617
32.85	0.007825612	-4.0246E-05	-0.008223761	-1.85034612	0.055585067	0.606021893
32.855	0.009500439	-4.86587E-05	-0.00990114	-2.227756518	0.055607879	0.606805659
32.86	0.010997111	-5.61714E-05	-0.011398548	-2.564673406	0.055638444	0.607808555
32.865	0.012483887	-6.36367E-05	-0.012885976	-2.89934467	0.055677834	0.608691478
32.87	0.014145099	-7.19698E-05	-0.014545744	-3.272792373	0.055728403	0.609463504
32.875	0.016422476	-8.34232E-05	-0.016826002	-3.785850531	0.055796567	0.610158356
32.88	0.017574109	-8.92549E-05	-0.01798657	-4.046978278	0.055874626	0.610774942
32.885	0.018236083	-9.25706E-05	-0.018646304	-4.195418376	0.055958676	0.611312042
32.89	0.020913791	-0.000106016	-0.021320642	-4.797144438	0.056069221	0.611768693
32.895	0.022937177	-0.000116264	-0.0233579	-5.255527571	0.056202192	0.612143161
32.9	0.023071223	-0.000116989	-0.023501873	-5.287921496	0.056336721	0.612457091
32.905	0.024601747	-0.000124687	-0.02503154	-5.632096596	0.056489692	0.613110987
32.91	0.026531444	-0.000134457	-0.026972176	-6.068739628	0.056667601	0.613690728
32.915	0.026938037	-0.000136581	-0.027394064	-6.163664361	0.056851005	0.614194885
32.92	0.02762235	-0.000140066	-0.028086075	-6.319366903	0.057043845	0.614622787
32.925	0.028718536	-0.000145642	-0.029193033	-6.568432425	0.057252294	0.61497381
32.93	0.029304266	-0.00014867	-0.029793918	-6.703631531	0.057469333	0.615247227
32.935	0.029396619	-0.000149219	-0.029902543	-6.728072067	0.057687742	0.615465917
32.94	0.028954223	-0.000147062	-0.029466872	-6.630046166	0.057899627	0.615647747
32.945	0.029083539	-0.000147755	-0.029606769	-6.661522943	0.058113408	0.61579275
32.95	0.029398698	-0.000149414	-0.029941675	-6.736876899	0.058331848	0.615900867
32.955	0.028305976	-0.000143995	-0.028846999	-6.490574756	0.058534352	0.615972071
32.96	0.027588976	-0.000140401	-0.028121434	-6.327322613	0.058726726	0.616006684
32.965	0.028157746	-0.000143284	-0.02870383	-6.45836181	0.058927114	0.616010368
32.97	0.027920787	-0.00014215	-0.028474673	-6.406801537	0.059124143	0.616010368
32.975	0.02719324	-0.000138516	-0.027740885	-6.241699052	0.059311038	0.616010368
32.98	0.027216107	-0.000138637	-0.027765313	-6.247195443	0.059498248	0.616010368
32.985	0.027525903	-0.000140209	-0.028082903	-6.318653234	0.059689744	0.616010368
32.99	0.027901706	-0.00014212	-0.028468971	-6.40551848	0.059886504	0.616010368
32.995	0.028012449	-0.000142709	-0.028587817	-6.432258786	0.060084829	0.616010368
33	0.027969255	-0.000142501	-0.02854595	-6.422838672	0.060282543	0.616010368
33.005	0.028901137	-0.000147179	-0.029490473	-6.635356374	0.060493652	0.616010368
33.01	0.030446956	-0.000154979	-0.031045988	-6.985347261	0.060727947	0.616010368
33.015	0.031382457	-0.000159743	-0.031991221	-7.198024722	0.060976862	0.616010368
33.02	0.031825621	-0.000162024	-0.032443654	-7.299822225	0.061232856	0.616010368
33.025	0.032685569	-0.000166385	-0.033308595	-7.494433804	0.061502871	0.616010368
33.03	0.034167412	-0.000173892	-0.034797093	-7.829345994	0.061797924	0.616010368
33.035	0.035340335	-0.000179887	-0.035985432	-8.096722254	0.062113582	0.616010368
33.04	0.035779584	-0.000182205	-0.036444914	-8.200105715	0.062437136	0.616010368
33.045	0.035959571	-0.00018322	-0.036646024	-8.245355344	0.062763953	0.616010368
33.05	0.035787465	-0.000182477	-0.036495877	-8.211572418	0.063087649	0.616034605
33.055	0.0351469	-0.000179383	-0.035871021	-8.070979671	0.063399862	0.616072768
33.06	0.03403245	-0.000173917	-0.034767338	-7.822651098	0.063692588	0.616075651
33.065	0.03184131	-0.000163046	-0.032573568	-7.329052847	0.063948835	0.616075651
33.07	0.028583877	-0.000146792	-0.02929623	-6.591651649	0.064155334	0.616427946
33.075	0.024496402	-0.00012644	-0.025197318	-5.669396492	0.064306997	0.61684884
33.08	0.020364572	-0.000105875	-0.021060368	-4.738582809	0.064411813	0.617218613
33.085	0.018493482	-9.64783E-05	-0.019171526	-4.313593239	0.064498253	0.617535507
33.09	0.019187741	-9.98687E-05	-0.01985641	-4.467692338	0.064591304	0.617798523
33.095	0.020169752	-0.000104771	-0.020846294	-4.690416065	0.064694124	0.618007492
33.1	0.019828904	-0.00010313	-0.020514826	-4.61583595	0.064793498	0.618162478
33.105	0.018728368	-9.76734E-05	-0.019412828	-4.3678864	0.064882148	0.61837566
33.11	0.019154721	-9.97782E-05	-0.019838062	-4.463563994	0.064974879	0.619023753
33.115	0.020465577	-0.000106353	-0.021165761	-4.762296251	0.065080737	0.619579925
33.12	0.019894512	-0.000103605	-0.020610613	-4.637388	0.06518077	0.620084326
33.125	0.019388677	-0.000101126	-0.020110015	-4.524753409	0.065275781	0.620539021
33.13	0.020078808	-0.000104639	-0.02081951	-4.68438976	0.065377675	0.620943266
33.135	0.018781488	-9.83168E-05	-0.01954269	-4.397105277	0.065466828	0.621296622
33.14	0.016739006	-8.82223E-05	-0.01751281	-3.940382165	0.065537645	0.621598294
33.145	0.015929436	-8.42642E-05	-0.016717851	-3.761516419	0.065601777	0.621847642
33.15	0.013707658	-7.33235E-05	-0.01452131	-3.267294838	0.065649267	0.622705223
33.155	0.01047436	-5.7289E-05	-0.011304336	-2.543475517	0.065676996	0.623462213
33.16	0.008418187	-4.70733E-05	-0.009256134	-2.082630167	0.065694907	0.624115895
33.165	0.006462761	-3.73748E-05	-0.007312592	-1.645333176	0.065705463	0.624664232
33.17	0.004197059	-2.61142E-05	-0.005057154	-1.137859676	0.065709915	0.625130144
33.175	0.002376666	-1.70447E-05	-0.003241512	-0.729340235	0.065711343	0.62554377
33.18	0.001253669	-1.14372E-05	-0.002119319	-0.476846829	0.06571174	0.62590408
33.185	0.000591892	-8.1415E-06	-0.00145991	-0.328479763	0.065711829	0.626210341
33.19	-0.000476407	-2.83561E-06	-0.000398527	-0.089668621	0.065711886	0.626462027
33.195	-0.001272623	1.1368E-06	0.000395933	0.089084881	0.065712295	0.626658638
33.2	-0.001319627	1.361E-06	0.000440767	0.099172473	0.065712735	0.627364306
33.205	-0.002012642	4.76875E-06	0.001122172	0.252488751	0.065713759	0.628027893
33.21	-0.002924909	9.27977E-06	0.002024013	0.455402945	0.065715921	0.628588116
33.215	-0.003705165	1.31192E-05	0.002791433	0.628072409	0.065719391	0.629069586
33.22	-0.005233755	2.06814E-05	0.004302566	0.968077408	0.065726314	0.629501636
33.225	-0.006354475	2.62415E-05	0.005413285	1.217989059	0.06573652	0.629883395
33.23	-0.007207409	3.04431E-05	0.006252419	1.406794296	0.065749649	0.630214145
33.235	-0.009030725	3.94718E-05	0.008055076	1.812392163	0.065770261	0.630493283
33.24	-0.010604605	4.72941E-05	0.009616253	2.163656963	0.065798684	0.63072008
33.245	-0.011920473	5.38284E-05	0.010919954	2.456989713	0.065834597	0.630893909
33.25	-0.013391426	6.11503E-05	0.012380308	2.785569396	0.065879922	0.631332932
33.255	-0.014146084	6.49153E-05	0.013131063	2.954489114	0.065930498	0.631872651
33.26	-0.015310781	7.06988E-05	0.014284047	3.21391058	0.065989746	0.632314594
33.265	-0.016846697	7.83611E-05	0.015811115	3.55750098	0.066061476	0.632698503
33.27	-0.017536378	8.18239E-05	0.01650107	3.712740721	0.066139201	0.633036634
33.275	-0.01862523	8.72623E-05	0.017584431	3.956497033	0.066226876	0.63332845

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
39.99633789	0.00065778	0.77749524
40.00244141	0.000400783	0.47126876
40.00854492	0.000700078	0.830990125
40.01464844	0.000409844	0.49641253
40.02075195	0.000414174	0.510819179
40.02685547	0.000469187	0.58603535
40.03295898	0.000119946	0.150199836
40.0390625	0.00097951	1.219989891
40.04516602	0.001262305	1.563583233
40.05126953	0.000873662	1.075795435
40.05737305	0.000838775	1.025011587
40.06347656	0.001374573	1.668192054
40.06958008	0.001784268	2.165935255
40.07568359	0.001429599	1.742983256
40.08178711	0.000656603	0.788612748
40.08789063	0.000446586	0.518919938
40.09399414	0.000790495	0.902165894
40.10009766	0.001222851	1.394554162
40.10620117	0.001392774	1.589708276
40.11230469	0.001202153	1.374115266
40.1184082	0.001381196	1.565080811
40.12451172	0.002001941	2.224739738
40.13061523	0.002485027	2.740588457
40.13671875	0.002408252	2.667734883
40.14282227	0.001879901	2.088406272
40.14892578	0.001681494	1.872146599
40.1550293	0.002072125	2.307914939
40.16113281	0.002275619	2.517270803
40.16723633	0.001752103	1.928490473
40.17333984	0.00154086	1.697873994
40.17944336	0.001685714	1.840488551
40.18554688	0.001331321	1.433272884
40.19165039	0.00111697	1.213847032
40.19775391	0.001335982	1.467303398
40.20385742	0.002092729	2.23223245
40.20996094	0.002895488	2.978712137
40.21606445	0.003267528	3.343584428
40.22216797	0.003244288	3.345496166
40.22827148	0.002898094	3.003891865
40.234375	0.002280752	2.363171553
40.24047852	0.001845696	1.89326721
40.24658203	0.001784803	1.814437223
40.25268555	0.002022712	2.061430758
40.25878906	0.002235794	2.309766067
40.26489258	0.002027974	2.13686128
40.27099609	0.001663235	1.771988395
40.27709961	0.001772555	1.889637687
40.28320313	0.002036759	2.175060616
40.28930664	0.002048577	2.19045919
40.29541016	0.001953248	2.085284459
40.30151367	0.002105307	2.248913951
40.30761719	0.002191953	2.366620442
40.3137207	0.002232853	2.470049355
40.31982422	0.00255034	2.85893352
40.32592773	0.002428151	2.690142641
40.33203125	0.0018366	2.030006073
40.33813477	0.001305471	1.473219597
40.34423828	0.00079306	0.915818192
40.3503418	0.000251844	0.296682462
40.35644531	0.001477472	1.754244029
40.36254883	0.002639868	3.095308001
40.36865234	0.003107898	3.604465921
40.37475586	0.002921502	3.387646052
40.38085938	0.002612531	3.013605548
40.38696289	0.002439093	2.778684211
40.39306641	0.002359801	2.668243166
40.39916992	0.002467306	2.797961978
40.40527344	0.002682082	3.050858695
40.41137695	0.002604626	2.944052023
40.41748047	0.001973724	2.21951205
40.42358398	0.001292248	1.462103328
40.4296875	0.00161564	1.851574644
40.43579102	0.002013809	2.33573499
40.44189453	0.00186116	2.164623585
40.44799805	0.001561961	1.801257471
40.45410156	0.001568745	1.791054602
40.46020508	0.00173704	1.971896057
40.46630859	0.001818217	2.060813087
40.47241211	0.001772387	2.005416795
40.47851563	0.00172864	1.930566448
40.48461914	0.001905545	2.094552334
40.49072266	0.002349031	2.571628378
40.49682617	0.002577827	2.798715225
40.50292969	0.002419978	2.593220085
40.5090332	0.002279694	2.457795639
40.51513672	0.002215481	2.412201615
40.52124023	0.002376807	2.578143788
40.52734375	0.002926351	3.172429213
40.53344727	0.003157276	3.411230939
40.53955078	0.00259454	2.766899305
40.5456543	0.001565527	1.672065565
40.55175781	0.001195758	1.301860618
40.55786133	0.001632875	1.809547527
40.56396484	0.001945812	2.167608231
40.57006836	0.002020954	2.227151624
40.57617188	0.002207872	2.402705638
40.58227539	0.002590707	2.820233717
40.58837891	0.003022682	3.306912664
40.59448242	0.003285076	3.596390183
40.60058594	0.003026904	3.295469199
40.60668945	0.002425741	2.605822916
40.61279297	0.002126759	2.254062841
40.61889648	0.002139709	2.252917691
40.625	0.0019376	2.036208264

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
33.28	-0.019369302	9.10253E-05	0.018333895	4.125126323	0.066321697	0.63357343
33.285	-0.018949483	8.89743E-05	0.017919564	4.031901963	0.066412452	0.63377123
33.29	-0.019692255	9.26726E-05	0.018661941	4.198936664	0.066510461	0.633921806
33.295	-0.020581108	9.71475E-05	0.019552965	4.399417087	0.066617518	0.634024941
33.3	-0.020301547	9.57974E-05	0.019280213	4.338047945	0.066721686	0.634080445
33.305	-0.020955757	9.9064E-05	0.019934516	4.485266151	0.066832676	0.63409037
33.31	-0.021520455	0.000101925	0.020503994	4.613398589	0.066949728	0.6342501
33.315	-0.021237416	0.000100539	0.020223999	4.550399739	0.067063721	0.634511013
33.32	-0.022338317	0.000106009	0.021316973	4.796318887	0.067189839	0.634731828
33.325	-0.02359786	0.000112319	0.022572494	5.078811044	0.06733058	0.634912134
33.33	-0.023952657	0.000114118	0.022930353	5.159329437	0.067475585	0.635051507
33.335	-0.025118994	0.000119929	0.024086395	5.419438974	0.067635056	0.63514975
33.34	-0.026558302	0.000127125	0.025517412	5.741417604	0.067813325	0.635206547
33.345	-0.027754833	0.000133114	0.026707999	6.009299703	0.068008019	0.63522154
33.35	-0.029306171	0.000140871	0.028249741	6.356191728	0.068225086	0.63522154
33.355	-0.030621964	0.000147469	0.02956062	6.651139487	0.068462083	0.63522154
33.36	-0.032129646	0.00015501	0.031058438	6.988148538	0.068722991	0.63522154
33.365	-0.034112087	0.000164933	0.033028454	7.431402204	0.069017089	0.63522154
33.37	-0.035645586	0.00017264	0.034558213	7.775597836	0.069338224	0.63522154
33.375	-0.037266107	0.000180774	0.036171898	8.138676967	0.069689222	0.63522154
33.38	-0.039177613	0.000190376	0.03807627	8.567160772	0.07007715	0.63522154
33.385	-0.040681407	0.000197971	0.03958198	8.9059456	0.070495431	0.63522154
33.39	-0.042014173	0.000204725	0.040919908	9.206979245	0.070941567	0.63522154
33.395	-0.042948023	0.000209515	0.041866653	9.419996963	0.071407757	0.63522154
33.4	-0.043420287	0.000212014	0.04236039	9.531087793	0.071884255	0.63522154
33.405	-0.043697742	0.000213562	0.042666315	9.599920933	0.072366862	0.63522154
33.41	-0.042798673	0.000209284	0.041802164	9.405486922	0.072829815	0.63522154
33.415	-0.040778332	0.000199408	0.039808334	8.956875254	0.073250091	0.63522154
33.42	-0.038571519	0.000188584	0.0376246	8.465534948	0.07362611	0.63522154
33.425	-0.035953451	0.000175712	0.035029877	7.881722273	0.073952816	0.63522154
33.43	-0.032723423	0.000159783	0.031821649	7.159870999	0.074223457	0.63522154
33.435	-0.029086964	0.000141813	0.028205633	6.346267412	0.074437289	0.63522154
33.44	-0.025259525	0.000122871	0.024398054	5.489562075	0.074598548	0.63522154
33.445	-0.021225044	0.000102865	0.020380699	4.585657283	0.074712409	0.635433979
33.45	-0.016384922	7.8781E-05	0.015550034	3.498757725	0.074780261	0.635753599
33.455	-0.011078986	5.22817E-05	0.010241494	2.304336092	0.074811284	0.63601581
33.46	-0.006428869	2.89638E-05	0.005575926	1.25458341	0.07482173	0.6362187
33.465	-0.003196996	1.26856E-05	0.00232199	0.52244777	0.074824313	0.636360678
33.47	-0.001960692	6.38889E-06	0.001063964	0.239391804	0.074825284	0.636440735
33.475	-0.001387083	3.46651E-06	0.000480229	0.10805143	0.074825771	0.636458554
33.48	0.000289516	-4.95489E-06	-0.001201477	-0.270332309	0.074825792	0.636458554
33.485	0.001934161	-1.32586E-05	-0.002859037	-0.643283413	0.074826737	0.636458554
33.49	0.002541807	-1.63821E-05	-0.003482378	-0.783535133	0.07482837	0.636891484
33.495	0.002738478	-1.74342E-05	-0.003692314	-0.8307707	0.074830266	0.637385934
33.5	0.002695239	-1.72745E-05	-0.003660017	-0.823503924	0.074832102	0.637817787
33.505	0.002796841	-1.78275E-05	-0.003770802	-0.848430389	0.074834079	0.638186509
33.51	0.002846391	-1.813E-05	-0.003830676	-0.861902123	0.074836126	0.638491662
33.515	0.002367595	-1.57806E-05	-0.003356057	-0.75511274	0.074837543	0.638732958
33.52	0.002261085	-1.52818E-05	-0.003255326	-0.732448306	0.074838835	0.638910338
33.525	0.00177537	-1.29143E-05	-0.002777165	-0.624862177	0.074839632	0.639023807
33.53	3.4161E-05	-4.23712E-06	-0.001025466	-0.230729757	0.074839632	0.639073619
33.535	-0.00080133	-3.69565E-08	-0.000177944	-0.040037321	0.074839794	0.639074853
33.54	-0.000902153	4.55211E-07	-7.86483E-05	-0.017695875	0.07484	0.639074853
33.545	-0.002258567	7.22358E-06	0.001286551	0.289474027	0.074841289	0.639306553
33.55	-0.00341191	1.30326E-05	0.002457774	0.552999108	0.074844232	0.639779175
33.555	-0.003452477	1.32775E-05	0.002507061	0.56408869	0.074847244	0.6401951
33.56	-0.003460339	1.33446E-05	0.002520607	0.5671365	0.07485027	0.640553929
33.565	-0.003338789	1.27678E-05	0.002404083	0.540918577	0.074853088	0.6408553
33.57	-0.003103488	1.16187E-05	0.002171935	0.488685366	0.074855522	0.641098915
33.575	-0.002659126	9.4306E-06	0.001729986	0.389246855	0.074857309	0.641284532
33.58	-0.001781155	5.06049E-06	0.000847537	0.190695914	0.074858111	0.64141193
33.585	-0.00135499	2.93642E-06	0.000418734	0.094215218	0.074858575	0.641480897
33.59	-0.000854533	4.65535E-07	-8.0001E-05	-0.018000235	0.07485876	0.641493452
33.595	0.00048175	-6.19441E-06	-0.001423851	-0.320366388	0.074858818	0.641493452
33.6	0.001496391	-1.12714E-05	-0.002447884	-0.550773803	0.074859384	0.641493452
33.605	0.002316355	-1.53623E-05	-0.0032728	-0.736379892	0.07486074	0.641493452
33.61	0.003499895	-2.12793E-05	-0.0044595	-1.003387391	0.074863836	0.641493452
33.615	0.004233977	-2.49588E-05	-0.00519352	-1.168541889	0.074868367	0.641493452
33.62	0.00496176	-2.85883E-05	-0.005917433	-1.331422498	0.074874589	0.641702588
33.625	0.006052849	-3.40467E-05	-0.007005914	-1.576330588	0.074883849	0.641996607
33.63	0.006415776	-3.58749E-05	-0.007370427	-1.65834597	0.074894252	0.642237578
33.635	0.006387331	-3.57075E-05	-0.007336609	-1.650737012	0.074904564	0.642425228
33.64	0.007273089	-4.00825E-05	-0.008209231	-1.847076884	0.074917933	0.64255945
33.645	0.009216787	-4.97647E-05	-0.010138796	-2.281229007	0.074939403	0.642639972
33.65	0.011346253	-6.04215E-05	-0.012261611	-2.758862578	0.074971941	0.642666299
33.655	0.012359362	-6.5527E-05	-0.013278264	-2.98760932	0.075010548	0.642666299
33.66	0.012273885	-6.51083E-05	-0.013193679	-2.968577761	0.075048623	0.642666299
33.665	0.012865415	-6.80299E-05	-0.013776589	-3.099732498	0.075090456	0.642666299
33.67	0.014559662	-7.64881E-05	-0.01546017	-3.478538316	0.075144033	0.642666299
33.675	0.015599072	-8.17144E-05	-0.016500127	-3.712528614	0.075205533	0.642666299
33.68	0.015700262	-8.22225E-05	-0.016601204	-3.735270953	0.075267833	0.642666299
33.685	0.016739808	-8.73932E-05	-0.017629852	-3.966716773	0.075338657	0.642666299
33.69	0.018315787	-9.52942E-05	-0.019201183	-4.320266087	0.075423443	0.642666299
33.695	0.018523512	-9.63674E-05	-0.019413653	-4.368071838	0.075510164	0.642666299
33.7	0.018898212	-9.82254E-05	-0.019784004	-4.45140089	0.075600428	0.642666299
33.705	0.020530196	-0.000106403	-0.021409533	-4.817144987	0.075706956	0.642666299
33.71	0.020863745	-0.000108139	-0.021752939	-4.89441129	0.075816973	0.642666299
33.715	0.020253258	-0.000105108	-0.021140649	-4.756646032	0.075920646	0.642666299
33.72	0.02080665	-0.000107893	-0.021703308	-4.883244288	0.076030062	0.642666299
33.725	0.020617739	-0.000107018	-0.021526268	-4.84341025	0.0761375	0.642666299
33.73	0.019096943	-9.94498E-05	-0.019997867	-4.499519997	0.076229673	0.642666299
33.735	0.018319801	-9.5575E-05	-0.019215736	-4.323540547	0.076314497	0.642666299
33.74	0.017118097	-8.9611E-05	-0.018012299	-4.052767378	0.076388557	0.642666299
33.745	0.014645923	-7.72555E-05	-0.015520639	-3.492143852	0.076442771	0.642666299
33.75	0.013048032	-6.92223E-05	-0.013901679	-3.127877791	0.076485801	0.642666299
33.755	0.011950892	-6.37078E-05	-0.012790765	-2.877922185	0.076521898	0.642666299
33.76	0.010508848	-5.64454E-05	-0.011328282	-2.548863372	0.07654981	0.642666299
33.765	0.01015947	-5.4618E-05	-0.010960392	-2.466088209	0.076575896	0.642666299
33.77	0.010586303	-5.66944E-05	-0.011379864	-2.560469435	0.076604221	0.642666299
33.775	0.011088458	-5.91481E-05	-0.011875446	-2.671975412	0.076635296	0.642666299
33.78	0.012436925	-6.58396E-05	-0.01322648	-2.975957905	0.07667439	0.642666299
33.785	0.013823952	-7.27629E-05	-0.014623633	-3.290317338	0.076722689	0.642666299
33.79	0.014687913	-7.70637E-05	-0.015491226	-3.485525956	0.076777214	0.642666299
33.795	0.016342994	-8.53079E-05	-0.017153636	-3.859568079	0.07684472	0.642666299

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
40.63110352	0.001297153	1.367830024
40.63720703	0.001068601	1.133255166
40.64331055	0.001277025	1.356406281
40.64941406	0.00115559	1.225591764
40.65551758	0.001082811	1.143271927
40.66162109	0.001286559	1.355020736
40.66772461	0.001460461	1.55407976
40.67382813	0.001793766	1.94151246
40.67993164	0.002219071	2.430442605
40.68603516	0.002194259	2.409220915
40.69213867	0.002052453	2.235884369
40.69824219	0.002141879	2.330890241
40.7043457	0.002193334	2.439009388
40.71044922	0.001801317	2.056356827
40.71655273	0.001162503	1.342287122
40.72265625	0.001198256	1.385210613
40.72875977	0.001705293	1.966447157
40.73486328	0.002052195	2.351281436
40.7409668	0.001827522	2.082326919
40.74707031	0.001155559	1.317382707
40.75317383	0.000588702	0.669542806
40.75927734	0.000768794	0.864869101
40.76538086	0.001857852	2.067824415
40.77148438	0.002674599	2.926013827
40.77758789	0.002898841	3.093139835
40.78369141	0.002824927	2.99524086
40.78979492	0.00268514	2.87732348
40.79589844	0.002641226	2.826960877
40.80200195	0.002560127	2.716302226
40.80810547	0.002086633	2.196916166
40.81420898	0.001663213	1.723933778
40.8203125	0.001781496	1.833973483
40.82641602	0.002042098	2.132236715
40.83251953	0.001638318	1.725353224
40.83862305	0.000886448	0.926929303
40.84472656	0.000949705	0.990440002
40.85083008	0.000504718	0.526625121
40.85693359	0.00072617	0.754196256
40.86303711	0.001878513	1.956060099
40.86914063	0.003115477	3.294894393
40.87524414	0.003278072	3.516478616
40.88134766	0.002931062	3.163288562
40.88745117	0.002804468	3.038086527
40.89355469	0.003037301	3.275296222
40.8996582	0.003600856	3.838302453
40.90576172	0.004270655	4.568494946
40.91186523	0.004386669	4.762906051
40.91796875	0.00365	3.967675956
40.92407227	0.00291317	3.136587315
40.93017578	0.002294839	2.438961182
40.9362793	0.002158492	2.26139711
40.94238281	0.002718714	2.849040087
40.94848633	0.003319864	3.5154221
40.95458984	0.00341904	3.621731216
40.96069336	0.003142621	3.310223501
40.96679688	0.002827526	2.973648403
40.97290039	0.002794871	2.953976694
40.97900391	0.003174806	3.390572293
40.98510742	0.003620306	3.903189064
40.99121094	0.003740567	4.096492018
40.99731445	0.003766081	4.237447112
41.00341797	0.003844603	4.414595221
41.00952148	0.003546389	4.106768699
41.015625	0.002902221	3.384292183
41.02172852	0.002415113	2.825998024
41.02783203	0.002299698	2.702397341
41.03393555	0.002624047	3.112391135
41.04003906	0.003325277	3.949043211
41.04614258	0.004031084	4.751782021
41.05224609	0.004277549	4.995217692
41.05834961	0.004024336	4.624182134
41.06445313	0.003590855	4.080787543
41.07055664	0.003146441	3.598291931
41.07666016	0.002833782	3.246889015
41.08276367	0.002731398	3.095779894
41.08886719	0.002837677	3.21823857
41.0949707	0.002736961	3.121954304
41.10107422	0.002386036	2.704491806
41.10717773	0.00226656	2.570554079
41.11328125	0.002783888	3.183487786
41.11938477	0.003451345	3.939185562
41.12548828	0.003560936	4.060311535
41.1315918	0.003247358	3.692670484
41.13769531	0.00298263	3.339325487
41.14379883	0.002756573	3.06703575
41.14990234	0.002330415	2.610445495
41.15600586	0.001970215	2.222685415
41.16210938	0.001692722	1.936142408
41.16821289	0.001498766	1.725788196
41.17431641	0.00184296	2.102975119
41.18041992	0.002497697	2.851480542
41.18652344	0.002603168	3.004533682
41.19262695	0.002044648	2.379845543
41.19873047	0.00153657	1.802615962
41.20483398	0.001409738	1.653658779
41.2109375	0.001294011	1.501865459
41.21704102	0.001273787	1.457107062
41.22314453	0.001615466	1.820480607
41.22924805	0.002271066	2.551032959
41.23535156	0.002924435	3.310277321
41.24145508	0.003152071	3.579952626
41.24755859	0.002615712	2.971423526
41.25366211	0.00155913	1.764595938
41.25976563	0.001081267	1.210820484

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
33.8	0.018411312	-9.56564E-05	-0.019239164	-4.32881193	0.076930393	0.642666299
33.805	0.019973281	-0.000103483	-0.020815591	-4.683507992	0.077031219	0.642666299
33.81	0.022065563	-0.000113957	-0.022910576	-5.154879621	0.077154276	0.642666299
33.815	0.024517432	-0.000126275	-0.025357257	-5.705382737	0.0773062	0.642666299
33.82	0.025987523	-0.000133713	-0.026834173	-6.037688909	0.077476889	0.642666299
33.825	0.026854222	-0.000138122	-0.027709331	-6.234599397	0.077659153	0.642666299
33.83	0.027564147	-0.000141742	-0.028427717	-6.396236437	0.077851181	0.642666299
33.835	0.028008564	-0.000144015	-0.028878635	-6.497692956	0.078049452	0.642666299
33.84	0.029287009	-0.000150425	-0.030150443	-6.783849639	0.078266235	0.642666299
33.845	0.03204867	-0.000164277	-0.03289733	-7.401899359	0.07852583	0.642666299
33.85	0.035055694	-0.000179426	-0.035899698	-8.077432071	0.078836424	0.642666299
33.855	0.03673802	-0.000188001	-0.037598309	-8.459619484	0.079177544	0.642666299
33.86	0.036685579	-0.000187887	-0.037572388	-8.453787332	0.079517691	0.642666299
33.865	0.036697285	-0.000188034	-0.03760213	-8.460479349	0.079858055	0.642666299
33.87	0.038372088	-0.000196508	-0.0392828	-8.83863005	0.080230196	0.642671753
33.875	0.03949768	-0.000202319	-0.040433095	-9.097446478	0.080624489	0.642687681
33.88	0.038325583	-0.000196633	-0.039284727	-8.839063474	0.080995727	0.642692995
33.885	0.037440906	-0.000192319	-0.038413597	-8.643059357	0.081350025	0.642692995
33.89	0.037750734	-0.000194014	-0.038756029	-8.720106433	0.081710211	0.642692995
33.895	0.036685482	-0.000188888	-0.037721074	-8.487241627	0.082050356	0.642692995
33.9	0.034207869	-0.000176668	-0.035255856	-7.932567689	0.082346109	0.642696772
33.905	0.031887147	-0.000165216	-0.032947435	-7.413172769	0.082603093	0.642709736
33.91	0.02881599	-0.000150039	-0.029890245	-6.725305117	0.08281296	0.642756794
33.915	0.024148861	-0.000126993	-0.025253372	-5.682008619	0.08296035	0.642760108
33.92	0.018921144	-0.000101082	-0.020046803	-4.510530744	0.083050834	0.642760108
33.925	0.01274282	-7.03617E-05	-0.013883053	-3.123686814	0.083091874	0.642760108
33.93	0.005592184	-3.46329E-05	-0.006726228	-1.513401249	0.083099778	0.642760108
33.935	0.000645269	-9.74333E-06	-0.001747916	-0.393281196	0.083099883	0.642760108
33.94	-0.000484506	-3.93545E-06	-0.000587095	-0.132096431	0.083099942	0.642760108
33.945	2.55811E-05	-6.42334E-06	-0.001089684	-0.245178899	0.083099943	0.643202775
33.95	-0.000149058	-5.57153E-06	-0.000917575	-0.206454296	0.083099948	0.64361568
33.955	-0.002582668	6.55703E-06	0.001509238	0.339578655	0.083101634	0.643966761
33.96	-0.006511103	2.62755E-05	0.005446098	1.225371958	0.083112349	0.644254951
33.965	-0.008142689	3.45704E-05	0.00710113	1.597754351	0.083129106	0.644478935
33.97	-0.007831449	3.30518E-05	0.006794334	1.52872509	0.083144607	0.644638085
33.975	-0.010192869	4.48609E-05	0.009153462	2.059528946	0.083170866	0.64473233
33.98	-0.013754254	6.28345E-05	0.012735808	2.865556866	0.083218679	0.644761091
33.985	-0.013996179	6.42067E-05	0.013004878	2.926097512	0.08326819	0.644761091
33.99	-0.013335158	6.09438E-05	0.012345844	2.777814798	0.083313134	0.644761091
33.995	-0.014964592	6.91674E-05	0.013997333	3.149399896	0.083369732	0.644761091
34	-0.015961542	7.43108E-05	0.015021636	3.379867994	0.083434123	0.644761091
34.005	-0.014481256	6.70056E-05	0.013546208	3.047896832	0.083487125	0.644761091
34.01	-0.01313191	6.02762E-05	0.012187786	2.742251831	0.083530709	0.644944879
34.015	-0.013000861	5.96644E-05	0.012064338	2.714476027	0.083573428	0.645350398
34.02	-0.012086428	5.51534E-05	0.011154131	2.509679535	0.083610349	0.645698444
34.025	-0.01014418	4.54306E-05	0.009193252	2.068481786	0.083636357	0.645989029
34.03	-0.009737883	4.33621E-05	0.00877643	1.97469664	0.083660324	0.646240215
34.035	-0.010368473	4.6551E-05	0.009420579	2.119630323	0.083687495	0.646416526
34.04	-0.009319191	4.13209E-05	0.008364777	1.882074777	0.083709445	0.646535579
34.045	-0.008821251	3.87791E-05	0.007852657	1.766847928	0.083729111	0.646597665
34.05	-0.01043923	4.68922E-05	0.009491169	2.135513074	0.083756655	0.646607437
34.055	-0.010604225	4.77729E-05	0.009668794	2.175478684	0.083785075	0.646607437
34.06	-0.010419449	4.68333E-05	0.00947903	2.132781811	0.083812514	0.646607437
34.065	-0.012184266	5.57093E-05	0.011270712	2.535910231	0.083850035	0.646607437
34.07	-0.01200494	5.48972E-05	0.011106228	2.498901262	0.08388646	0.646607437
34.075	-0.010890187	4.92978E-05	0.009975464	2.244479462	0.083916434	0.646607437
34.08	-0.012413335	5.69402E-05	0.011518988	2.591772254	0.083955379	0.646607437
34.085	-0.012587381	5.79028E-05	0.011712766	2.635372343	0.083995424	0.646607437
34.09	-0.011307785	5.14966E-05	0.010419038	2.344283639	0.084027741	0.646607437
34.095	-0.012168969	5.5821E-05	0.011292557	2.54082527	0.084065168	0.646607437
34.1	-0.011964969	5.48713E-05	0.011100606	2.497636358	0.08410135	0.646607437
34.105	-0.010682483	4.84402E-05	0.009802013	2.205452872	0.084130192	0.646607437
34.11	-0.011366107	5.18679E-05	0.010494434	2.361247613	0.084162843	0.646607437
34.115	-0.01099804	5.00787E-05	0.01013296	2.279916038	0.084193414	0.646607437
34.12	-0.009838867	4.42519E-05	0.008956725	2.015263235	0.08421788	0.646607437
34.125	-0.010528003	4.76958E-05	0.009652416	2.171793513	0.084245894	0.646607437
34.13	-0.010406657	4.71224E-05	0.009536508	2.145714378	0.084273265	0.646607437
34.135	-0.009904741	4.45863E-05	0.009024263	2.030459141	0.08429806	0.646607437
34.14	-0.010856432	4.93558E-05	0.009987658	2.24722309	0.084327849	0.646607437
34.145	-0.010880965	4.95117E-05	0.010019049	2.254285991	0.084357772	0.646607437
34.15	-0.010699621	4.85905E-05	0.009832965	2.212417172	0.084386706	0.646607437
34.155	-0.011513863	5.26814E-05	0.010659157	2.398310433	0.084420212	0.646607437
34.16	-0.011353716	5.19002E-05	0.010501279	2.36278788	0.084452792	0.646607437
34.165	-0.011475958	5.24865E-05	0.010619751	2.38944402	0.084486077	0.646607437
34.17	-0.013005523	6.01573E-05	0.012168049	2.737811069	0.084528827	0.646607437
34.175	-0.013970452	6.50353E-05	0.013151825	2.959160669	0.084578155	0.646607437
34.18	-0.014703131	6.87363E-05	0.013898036	3.127058194	0.084632793	0.646607437
34.185	-0.015828354	7.44307E-05	0.015045527	3.385243502	0.084696114	0.646607437
34.19	-0.015894345	7.48384E-05	0.015124391	3.402987987	0.084759964	0.646607437
34.195	-0.014830844	6.95443E-05	0.01405511	3.162399779	0.084815556	0.646607437
34.2	-0.014190699	6.63191E-05	0.013403931	3.015884478	0.084866452	0.646607437
34.205	-0.015185573	7.12866E-05	0.014407335	3.24165046	0.084924734	0.646607437
34.21	-0.017183297	8.13471E-05	0.01642255	3.695073806	0.08499936	0.646607437
34.215	-0.018059196	8.58492E-05	0.017318679	3.896702845	0.085081788	0.646607437
34.22	-0.016957993	8.04337E-05	0.016224812	3.650582639	0.085154469	0.646607437
34.225	-0.014954013	7.04423E-05	0.014207889	3.196775092	0.085210988	0.646607437
34.23	-0.013333954	6.23506E-05	0.012575485	2.829484135	0.085255924	0.646607437
34.235	-0.011515259	5.32876E-05	0.010748123	2.418327649	0.085289438	0.646607437
34.24	-0.007881215	3.52102E-05	0.007106225	1.598900604	0.085305136	0.646607437
34.245	-0.003745675	1.46314E-05	0.002965011	0.667127458	0.085308682	0.646607437
34.25	-0.00044746	-1.83243E-06	-0.000344757	-0.077570236	0.085308733	0.646607437
34.255	0.002117537	-1.46957E-05	-0.002928671	-0.658950942	0.085309866	0.646607437
34.26	0.002433931	-1.63898E-05	-0.003268094	-0.735321162	0.085311363	0.646607437
34.265	0.002829928	-1.83891E-05	-0.003670261	-0.825808637	0.085313388	0.646607437
34.27	0.005645395	-3.24653E-05	-0.006495305	-1.461443581	0.085321443	0.646607437
34.275	0.005259688	-3.07445E-05	-0.006143899	-1.382377372	0.085328434	0.646607437
34.28	0.001766015	-1.34353E-05	-0.002650422	-0.596344989	0.085329223	0.646607437
34.285	0.001917758	-1.41435E-05	-0.002794248	-0.628705805	0.085330152	0.646607437
34.29	0.00308991	-2.0034E-05	-0.003983713	-0.89633533	0.085332565	0.646607437
34.295	0.001923787	-1.42952E-05	-0.00282456	-0.63552596	0.085333501	0.646607437
34.3	0.001951555	-1.44263E-05	-0.002851198	-0.641519472	0.085334463	0.646607437
34.305	0.003087876	-2.01174E-05	-0.004000552	-0.900124311	0.085336873	0.646607437
34.31	0.003414288	-2.18215E-05	-0.004344557	-0.977525263	0.085339819	0.646607437
34.315	0.002890415	-1.93141E-05	-0.003838034	-0.863557749	0.085341931	0.646607437

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
41.26586914	0.001807867	2.016978087
41.27197266	0.002782577	3.128878201
41.27807617	0.003295701	3.75055071
41.28417969	0.003130458	3.593996532
41.2902832	0.002685238	3.065850071
41.29638672	0.002471341	2.797707407
41.30249023	0.002760415	3.154814227
41.30859375	0.003467886	4.027712178
41.31469727	0.003981861	4.678686033
41.32080078	0.004000609	4.765860898
41.3269043	0.004006732	4.775606895
41.33300781	0.004342417	5.101046527
41.33911133	0.004397594	5.171115981
41.34521484	0.003709853	4.427610388
41.35131836	0.003089511	3.716521982
41.35742188	0.003094193	3.763014384
41.36352539	0.003401393	4.213640311
41.36962891	0.003869454	4.829522149
41.37573242	0.004464763	5.540987045
41.38183594	0.004647783	5.739756725
41.38793945	0.003933364	4.901098939
41.39404297	0.002790208	3.578023888
41.40014648	0.00216571	2.841800612
41.40625	0.002386434	3.099341568
41.41235352	0.00299053	3.812946733
41.41845703	0.003229709	4.093857943
41.42456055	0.002850453	3.589659833
41.43066406	0.002086637	2.625248063
41.43676758	0.001413721	1.789842152
41.44287109	0.001567156	1.972972971
41.44897461	0.002211184	2.76132941
41.45507813	0.002780109	3.446106274
41.46118164	0.003045408	3.712885091
41.46728516	0.003246478	3.942407847
41.47338867	0.003352928	4.11703962
41.47949219	0.003105251	3.824390254
41.4855957	0.003001649	3.683024772
41.49169922	0.003302208	3.989096057
41.49780273	0.003572286	4.200018143
41.50390625	0.003681854	4.2816038
41.51000977	0.003800897	4.440436782
41.51611328	0.003419433	3.993868346
41.5222168	0.002754417	3.200518591
41.52832031	0.002700816	3.108775908
41.53442383	0.002812034	3.209675906
41.54052734	0.002849906	3.26327668
41.54663086	0.002972901	3.435985614
41.55273438	0.003075423	3.598614615
41.55883789	0.002637478	3.143796948
41.56494141	0.001722088	2.073761631
41.57104492	0.001443407	1.733728589
41.57714844	0.001850118	2.230383216
41.58325195	0.002059649	2.509658017
41.58935547	0.002053011	2.518096953
41.59545898	0.001761843	2.177810976
41.6015625	0.001028717	1.282531614
41.60766602	0.00038153	0.474453571
41.61376953	0.00109596	1.351702404
41.61987305	0.001989003	2.447139609
41.62597656	0.002532321	3.13008216
41.63208008	0.002660447	3.335401237
41.63818359	0.002779188	3.553002116
41.64428711	0.002680683	3.46691002
41.65039063	0.002472453	3.206503252
41.65649414	0.002504047	3.252047663
41.66259766	0.002536336	3.311900297
41.66870117	0.002377685	3.160504065
41.67480469	0.002450604	3.341694088
41.6809082	0.002695207	3.734785638
41.68701172	0.002669259	3.728467732
41.69311523	0.00243659	3.444102849
41.69921875	0.002336297	3.334018372
41.70532227	0.0026443	3.781338196
41.71142578	0.003165029	4.56183103
41.7175293	0.003502721	5.127583482
41.72363281	0.003552825	5.26098555
41.72973633	0.003503896	5.247823211
41.73583984	0.003526678	5.344623534
41.74194336	0.003484133	5.270591062
41.74804688	0.003341899	5.02907629
41.75415039	0.003338901	5.078764801
41.76025391	0.00337996	5.215284663
41.76635742	0.00312081	4.809957484
41.77246094	0.002598019	3.946409611
41.77856445	0.002194501	3.271927117
41.78466797	0.002191391	3.229599703
41.79077148	0.002519455	3.717168596
41.796875	0.003054619	4.504935434
41.80297852	0.003736666	5.446283852
41.80908203	0.00421387	6.07304845
41.81518555	0.00424935	6.063057076
41.82128906	0.00413967	5.837040244
41.82739258	0.004021468	5.688629204
41.83349609	0.003591215	5.146529645
41.83959961	0.003048332	4.384017456
41.84570313	0.00295247	4.254210004
41.85180664	0.003203031	4.592726577
41.85791016	0.003152005	4.449263935
41.86401367	0.002554438	3.589811172
41.87011719	0.001859784	2.616142549
41.8762207	0.0018572	2.604119459
41.88232422	0.002298573	3.24578022
41.88842773	0.002707928	3.824079281
41.89453125	0.002820092	3.903013065

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
34.32	0.00118698	-1.09244E-05	-0.002143995	-0.482398897	0.085342287	0.646607437
34.325	2.34153E-05	-5.17295E-06	-0.00098428	-0.221463009	0.085342287	0.646607437
34.33	-0.000590014	-2.19024E-06	-0.000383014	-0.086178243	0.085342375	0.646607437
34.335	-0.00258142	7.63305E-06	0.001596425	0.359195615	0.085344059	0.646607437
34.34	-0.004457993	1.69238E-05	0.003467496	0.780186517	0.085349082	0.646607437
34.345	-0.006399253	2.65131E-05	0.00539765	1.214471165	0.085359432	0.646607437
34.35	-0.009688044	4.28215E-05	0.008677881	1.952523288	0.085383154	0.646607437
34.355	-0.01257879	5.7197E-05	0.011566922	2.602557448	0.085423144	0.646607437
34.36	-0.015688935	7.26641E-05	0.014672904	3.301403451	0.085485355	0.646607437
34.365	-0.019100438	8.96929E-05	0.018083591	4.068808028	0.085577561	0.646607437
34.37	-0.020463619	9.65744E-05	0.019452751	4.376868925	0.085683399	0.646607437
34.375	-0.021418644	0.000101384	0.020409378	4.592110155	0.085799346	0.646607437
34.38	-0.022783653	0.000108254	0.021775667	4.899525053	0.085930543	0.646607437
34.385	-0.022971403	0.000109281	0.021979654	4.945422152	0.086063911	0.646607437
34.39	-0.023291132	0.000110943	0.022310145	5.019782557	0.086201017	0.646607437
34.395	-0.023258288	0.000110888	0.022295904	5.016578333	0.086337737	0.646607437
34.4	-0.021817451	0.000103816	0.020867823	4.695260204	0.086458042	0.646607437
34.405	-0.020657207	9.81146E-05	0.019716894	4.436301079	0.086565891	0.646607437
34.41	-0.018714236	8.85403E-05	0.01778528	4.001687989	0.086654407	0.646607437
34.415	-0.016064192	7.53977E-05	0.015135674	3.405526602	0.086719629	0.646607437
34.42	-0.014552622	6.79031E-05	0.013625678	3.06577745	0.086773154	0.646607437
34.425	-0.011844284	5.44852E-05	0.01092395	2.457888683	0.08680861	0.646607437
34.43	-0.008770114	3.91586E-05	0.007840378	1.764085143	0.08682805	0.646607437
34.435	-0.008293203	3.67296E-05	0.007351925	1.654183226	0.086845433	0.646607437
34.44	-0.007143383	3.10276E-05	0.006205559	1.39625071	0.08685833	0.646607437
34.445	-0.004966317	2.01533E-05	0.004020265	0.904559536	0.086864563	0.646607437
34.45	-0.005380403	2.21289E-05	0.004420104	0.994523411	0.08687188	0.646607437
34.455	-0.006122446	2.58237E-05	0.005166294	1.16241608	0.086881354	0.646607437
34.46	-0.005278355	2.16308E-05	0.004319324	0.971847995	0.086888395	0.646607437
34.465	-0.005334901	2.18739E-05	0.004368514	0.982915719	0.086895589	0.646607437
34.47	-0.006297761	2.66614E-05	0.005335438	1.200473519	0.086905613	0.646607437
34.475	-0.006483014	2.76207E-05	0.005529087	1.244044549	0.086916235	0.646607437
34.48	-0.005855603	2.45298E-05	0.004904725	1.103563177	0.086924901	0.646607437
34.485	-0.005314056	2.18389E-05	0.004361285	0.981289114	0.086932039	0.646607437
34.49	-0.005230152	2.14238E-05	0.00427746	0.962428565	0.086938952	0.646607437
34.495	-0.004679895	1.86951E-05	0.003727324	0.838647957	0.086944488	0.646607437
34.5	-0.004152382	1.60329E-05	0.003192562	0.718326511	0.086948845	0.646607437
34.505	-0.005232741	2.13445E-05	0.004265445	0.959725103	0.086955766	0.646607437
34.51	-0.006961714	2.99187E-05	0.005996387	1.349187018	0.086968015	0.646607437
34.515	-0.008552487	3.78122E-05	0.007588987	1.707522149	0.086986502	0.646607437
34.52	-0.010938467	4.96639E-05	0.009978673	2.245201464	0.087016742	0.646607437
34.525	-0.01358297	6.2843E-05	0.012633964	2.84264187	0.087063372	0.646607437
34.53	-0.015703868	7.34431E-05	0.01476816	3.322836034	0.087125701	0.646607437
34.535	-0.017694428	8.34058E-05	0.016772848	3.773890724	0.087204833	0.646607437
34.54	-0.019601512	9.29735E-05	0.018697039	4.206833805	0.087301941	0.646607437
34.545	-0.021182396	0.000100942	0.020298744	4.567217511	0.087415344	0.646607437
34.55	-0.022101644	0.00010564	0.021242831	4.77963701	0.087538804	0.646607437
34.555	-0.022418561	0.000107337	0.021583893	4.856375922	0.087665829	0.646607437
34.56	-0.02308675	0.000110775	0.022274424	5.011745433	0.08780054	0.646607437
34.565	-0.023900231	0.000114976	0.023111827	5.200161022	0.087944911	0.646607437
34.57	-0.023466562	0.000113016	0.022715875	5.111071841	0.08808409	0.646607437
34.575	-0.02175675	0.000104709	0.02103844	4.733649026	0.088203727	0.646607437
34.58	-0.019187369	9.21191E-05	0.018498082	4.16206855	0.088296775	0.646607437
34.585	-0.015671986	7.47971E-05	0.015006252	3.376406683	0.088358851	0.646607437
34.59	-0.012425936	5.87687E-05	0.011778397	2.650139428	0.088397875	0.646607437
34.595	-0.00980202	4.58534E-05	0.00917961	2.065412324	0.088422158	0.646607437
34.6	-0.005369667	2.3957E-05	0.004777878	1.075022597	0.088429446	0.646607437
34.605	0.000689045	-6.17249E-06	-0.00127063	-0.285891666	0.088429566	0.646607437
34.61	0.005102349	-2.82156E-05	-0.00568993	-1.280234206	0.088436146	0.646607437
34.615	0.008169617	-4.35327E-05	-0.008757922	-1.970532351	0.088453014	0.646607437
34.62	0.011357283	-5.94631E-05	-0.011946347	-2.687928056	0.088485615	0.646607437
34.625	0.01314917	-6.8457E-05	-0.013745376	-3.092709624	0.088529314	0.646607437
34.63	0.014056447	-7.29847E-05	-0.014650755	-3.296419966	0.088579251	0.646607437
34.635	0.016273838	-8.40202E-05	-0.016856613	-3.792737886	0.088646187	0.646607437
34.64	0.019042609	-9.7851E-05	-0.019619629	-4.414416423	0.088737836	0.646607437
34.645	0.02109372	-0.00010814	-0.021673903	-4.876628187	0.088850292	0.646607437
34.65	0.021957909	-0.000112521	-0.022548271	-5.073360923	0.088972151	0.646610097
34.655	0.021687863	-0.00011121	-0.02228349	-5.013785265	0.089091031	0.646633094
34.66	0.021876462	-0.000112145	-0.022472339	-5.056276381	0.089211988	0.646667526
34.665	0.022540376	-0.000115463	-0.023135463	-5.205479184	0.089340398	0.646700864
34.67	0.022660457	-0.000116063	-0.023255094	-5.232396243	0.089470179	0.646717878
34.675	0.023364275	-0.000119554	-0.0239518	-5.389154971	0.089608148	0.646766257
34.68	0.024294368	-0.000124207	-0.024879835	-5.597962798	0.08975732	0.646794565
34.685	0.024333958	-0.00012441	-0.024920125	-5.607028219	0.089906979	0.646804463
34.69	0.024996764	-0.000127698	-0.025576134	-5.75463017	0.090064901	0.646804463
34.695	0.025941479	-0.000132427	-0.02651915	-5.966808697	0.090234986	0.646804463
34.7	0.025893565	-0.000132198	-0.026472562	-5.956326509	0.090404443	0.646804463
34.705	0.026501002	-0.000135209	-0.027073902	-6.091627953	0.090581944	0.646851133
34.71	0.027558107	-0.000140498	-0.028128263	-6.328859128	0.090773888	0.646940725
34.715	0.027682326	-0.000141133	-0.028254836	-6.357338175	0.090967566	0.647002387
34.72	0.028519926	-0.000145295	-0.02908413	-6.543929215	0.091173142	0.647035116
34.725	0.030160113	-0.0001535	-0.030719011	-6.911777368	0.091403044	0.647040559
34.73	0.03077813	-0.000156633	-0.031342979	-7.052170166	0.091642464	0.647040559
34.735	0.031264457	-0.000159078	-0.031830009	-7.161752088	0.09188951	0.647040559
34.74	0.032532076	-0.000165432	-0.033095112	-7.446400148	0.092156995	0.647040559
34.745	0.033415693	-0.000169898	-0.033984359	-7.646480703	0.092439207	0.647040559
34.75	0.033767103	-0.000171697	-0.03434233	-7.727024155	0.092727387	0.647040559
34.755	0.034680315	-0.000176283	-0.035255134	-7.93240525	0.093031365	0.647040559
34.76	0.036072621	-0.000183284	-0.036648073	-8.245816501	0.09336024	0.647040559
34.765	0.03688515	-0.000187413	-0.037469389	-8.430612444	0.093704098	0.647040559
34.77	0.037407935	-0.000190082	-0.03800014	-8.550031468	0.094057773	0.647040559
34.775	0.038482305	-0.000195506	-0.039078795	-8.792728809	0.094432054	0.647040559
34.78	0.039223616	-0.000199297	-0.039832535	-8.962320484	0.094820894	0.647040559
34.785	0.039063651	-0.000198582	-0.039687992	-8.929798168	0.095206569	0.647041091
34.79	0.038913124	-0.000197884	-0.039546898	-8.898052056	0.095589278	0.647052498
34.795	0.039215817	-0.000199424	-0.03985776	-8.967995912	0.095977963	0.64719648
34.8	0.040604305	-0.000206362	-0.041233393	-9.277513523	0.09639466	0.647363878
34.805	0.043483155	-0.000220769	-0.044083565	-9.918802019	0.096872539	0.647501404
34.81	0.046455828	-0.000235721	-0.047039818	-10.58395898	0.097417991	0.647611067
34.815	0.048200589	-0.000244597	-0.048793918	-10.97863162	0.098005183	0.647734391
34.82	0.048366569	-0.0002456	-0.048989828	-11.02271133	0.098596427	0.647831965
34.825	0.04774995	-0.000242651	-0.048394203	-10.88869558	0.099172691	0.647899235
34.83	0.048536784	-0.000246666	-0.049202342	-11.0705269	0.099768104	0.647935408
34.835	0.050489621	-0.000256562	-0.051153791	-11.50960306	0.100412392	0.647982184

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
41.90063477	0.002834303	3.873544529
41.90673828	0.002643549	3.635847499
41.9128418	0.001930117	2.685643945
41.91894531	0.001632842	2.281754417
41.92504883	0.002201482	3.073723303
41.93115234	0.002644743	3.710935855
41.93725586	0.002406755	3.387280965
41.94335938	0.001821448	2.541099146
41.94946289	0.000954181	1.318136988
41.95556641	7.11885E-05	0.098001081
41.96166992	0.000530795	0.734226552
41.96777344	0.000765973	1.067183404
41.97387695	0.000685995	0.950004477
41.97998047	0.000288236	0.395769892
41.98608398	0.000382767	0.529328624
41.9921875	0.001169016	1.643120067
41.99829102	0.001764606	2.532331661
42.00439453	0.001875673	2.745679346
42.01049805	0.001733885	2.547190944
42.01660156	0.001749864	2.566398466
42.02270508	0.001846754	2.74416285
42.02880859	0.001543772	2.341912075
42.03491211	0.00083868	1.29754754
42.04101563	0.000427601	0.673877655
42.04711914	0.000605754	0.967274864
42.05322266	0.000730712	1.182298379
42.05932617	0.001004712	1.653231427
42.06542969	0.000819632	1.365519448
42.0715332	0.001303166	2.20532998
42.07763672	0.002071208	3.598110299
42.08374023	0.002392921	4.233382376
42.08984375	0.002483058	4.392859612
42.09594727	0.002678429	4.689352028
42.10205078	0.00325836	5.647824854
42.1081543	0.003968255	6.946704269
42.11425781	0.004324591	7.787971753
42.12036133	0.004066361	7.446630618
42.12646484	0.003403242	6.256301371
42.13256836	0.002787123	5.135267087
42.13867188	0.002410362	4.376615228
42.14477539	0.002115861	3.787945802
42.15087891	0.002241668	4.055235131
42.15698242	0.002347286	4.247449801
42.16308594	0.001985675	3.535823425
42.16918945	0.001730198	3.071784782
42.17529297	0.00192702	3.344368964
42.18139648	0.001914597	3.171977181
42.1875	0.001655891	2.710649507
42.19360352	0.001958857	3.242176016
42.19970703	0.002813211	4.647344866
42.20581055	0.003457361	5.776203668
42.21191406	0.003591255	6.111460381
42.21801758	0.003437318	5.833580358
42.22412109	0.003233793	5.510862958
42.23022461	0.002841741	4.916784966
42.23632813	0.002036674	3.555306327
42.24243164	0.00099499	1.770444849
42.24853516	0.000395433	0.710117901
42.25463867	0.000573033	1.009087607
42.26074219	0.000500065	0.879430643
42.2668457	0.000228788	0.411647426
42.27294922	0.000524283	0.95383778
42.27905273	0.001253865	2.284309092
42.28515625	0.001825802	3.322653675
42.29125977	0.002163667	3.941398469
42.29736328	0.002511639	4.632180848
42.3034668	0.002858246	5.334404937
42.30957031	0.002887478	5.404585464
42.31567383	0.002420113	4.513535967
42.32177734	0.001587566	2.938053382
42.32788086	0.000721934	1.329749557
42.33398438	0.000263826	0.478917878
42.34008789	0.000962624	1.695259697
42.34619141	0.001613389	2.796515661
42.35229492	0.001738781	3.038130752
42.35839844	0.001930975	3.423127551
42.36450195	0.002420833	4.326216923
42.37060547	0.002681526	4.783310474
42.37670898	0.002628449	4.712387135
42.3828125	0.00247254	4.539809487
42.38891602	0.002532801	4.778815162
42.39501953	0.0029078	5.60220663
42.40112305	0.003189388	6.247187205
42.40722656	0.00280387	5.6213803
42.41333008	0.001797646	3.75172261
42.41943359	0.001098824	2.342849722
42.42553711	0.000970132	2.040179948
42.43164063	0.000838146	1.774219628
42.43774414	0.000888852	1.95002582
42.44384766	0.000719458	1.611283115
42.44995117	0.000437269	0.988777646
42.45605469	0.000626867	1.428098525
42.4621582	0.000581762	1.312595863
42.46826172	0.000891369	1.995560827
42.47436523	0.001567784	3.556299845
42.48046875	0.002507753	5.758225195
42.48657227	0.003189938	7.286006623
42.49267578	0.003257731	7.344778183
42.4987793	0.002956121	6.615259058
42.50488281	0.002666742	5.972897137
42.51098633	0.002662963	5.931675065
42.51708984	0.003155793	6.845966693
42.52319336	0.003910225	8.237356642
42.52929688	0.004075782	8.496010597

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
34.84	0.05051408	-0.000256902	-0.05121288	-11.52289796	0.101057305	0.648019955
34.845	0.048960761	-0.000249309	-0.049679563	-11.17790168	0.101663165	0.648044307
34.85	0.04919483	-0.000250581	-0.049936507	-11.23571407	0.102274831	0.64808395
34.855	0.050580134	-0.000257674	-0.051368844	-11.55798982	0.102921432	0.648317267
34.86	0.04978048	-0.000253922	-0.050611055	-11.38748731	0.103547748	0.648584248
34.865	0.047872683	-0.000244572	-0.048723266	-10.96273494	0.104126979	0.648815695
34.87	0.048107349	-0.000245889	-0.048989617	-11.02266379	0.104711902	0.649193315
34.875	0.04844176	-0.000247814	-0.049378444	-11.11014996	0.105304985	0.649529144
34.88	0.045697685	-0.000234406	-0.04667235	-10.50127869	0.105832779	0.64993159
34.885	0.042785212	-0.000220078	-0.043784187	-9.851442123	0.106295441	0.650453463
34.89	0.040913817	-0.000211009	-0.041957228	-9.440376351	0.106718514	0.650878934
34.895	0.03511338	-0.00018251	-0.0362225	-8.150062468	0.107030131	0.651212557
34.9	0.026148292	-0.000138058	-0.027295151	-6.141409041	0.107202939	0.651462965
34.905	0.017821501	-9.65896E-05	-0.018985026	-4.271630834	0.107283211	0.651632211
34.91	0.008527895	-5.01103E-05	-0.009690687	-2.180404535	0.107301591	0.651726345
34.915	0.001604913	-1.52157E-05	-0.00272619	-0.613392822	0.107302242	0.652142741
34.92	0.001747469	-1.57414E-05	-0.002840842	-0.639189387	0.107303014	0.652988836
34.925	0.002580633	-1.99525E-05	-0.003691164	-0.83051196	0.107304697	0.653789967
34.93	-1.78269E-05	-6.98042E-06	-0.001084161	-0.243936175	0.107304697	0.654545389
34.935	-0.00234904	4.70029E-06	0.001243797	0.279854364	0.107306092	0.655253629
34.94	-0.005258061	1.92536E-05	0.004142541	0.932071713	0.10731308	0.655913178
34.945	-0.00877013	3.69137E-05	0.007657585	1.72295664	0.107332519	0.656522445
34.95	-0.009019528	3.82381E-05	0.007916551	1.781224039	0.10735308	0.657079877
34.955	-0.009089822	3.85264E-05	0.007974836	1.794338062	0.107373963	0.657584756
34.96	-0.012542931	5.58148E-05	0.011416587	2.568732128	0.107413725	0.65803647
34.965	-0.015268803	6.95823E-05	0.014152673	3.184351336	0.107472649	0.6584337
34.97	-0.015803336	7.22922E-05	0.014691017	3.305478734	0.10753577	0.658775331
34.975	-0.017592258	8.12549E-05	0.016471133	3.70600497	0.10761399	0.659060826
34.98	-0.020303222	9.49086E-05	0.019181615	4.315863462	0.107718175	0.659289475
34.985	-0.021872733	0.00010284	0.02075535	4.669953795	0.10783909	0.659460416
34.99	-0.023722449	0.000112146	0.022601139	5.085256277	0.107981322	0.659573089
34.995	-0.02650891	0.000126197	0.025386947	5.712063027	0.108158929	0.659626953
35	-0.028261704	0.000135091	0.027149178	6.108565018	0.108360799	0.659870214
35.005	-0.029383239	0.000140774	0.028275044	6.361884948	0.108579009	0.660394192
35.01	-0.031416602	0.000151039	0.030307662	6.819224044	0.108828465	0.660902864
35.015	-0.033257581	0.00016037	0.032154726	7.234813415	0.109108014	0.661825554
35.02	-0.034539938	0.00016688	0.033442859	7.524643352	0.109409536	0.66265296
35.025	-0.036323028	0.000175901	0.035227484	7.926183985	0.109742993	0.663404974
35.03	-0.038119362	0.000185013	0.037029161	8.331561291	0.110110248	0.66408106
35.035	-0.039607056	0.00019258	0.038524967	8.668117521	0.110506727	0.664679755
35.04	-0.040729101	0.00019832	0.039659411	8.923367467	0.11092599	0.665256597
35.045	-0.040996578	0.000199751	0.03994205	8.986961261	0.111350776	0.665860283
35.05	-0.041569889	0.000202688	0.040522342	9.117527022	0.111787527	0.666429588
35.055	-0.042535704	0.000207623	0.041497208	9.336871835	0.112244808	0.666939244
35.06	-0.042409175	0.000207064	0.041382629	9.311091437	0.112699373	0.667645978
35.065	-0.042624929	0.000208177	0.041606582	9.361480959	0.113158574	0.668312155
35.07	-0.04391115	0.000214701	0.042894984	9.651371424	0.113645907	0.669020014
35.075	-0.044114768	0.000215809	0.043111832	9.70016211	0.11413777	0.669629782
35.08	-0.043925913	0.000214897	0.042927583	9.658706245	0.11462543	0.67054879
35.085	-0.044767228	0.000219164	0.043776112	9.849625272	0.11513195	0.67142872
35.09	-0.045296213	0.000221885	0.044313436	9.970523114	0.115650511	0.672527065
35.095	-0.045494625	0.000222925	0.044518649	10.01669612	0.116173624	0.673544046
35.1	-0.046250417	0.000226765	0.045276532	10.18721968	0.116714263	0.674435893
35.105	-0.047006105	0.000230619	0.046037059	10.35833834	0.117272713	0.675577372
35.11	-0.047774333	0.000234534	0.046809588	10.53215741	0.117849566	0.676697678
35.115	-0.048775613	0.000239632	0.047815404	10.75846599	0.118450853	0.677700321
35.12	-0.049647922	0.000244097	0.048696068	10.95661528	0.119073838	0.678582629
35.125	-0.050457387	0.000248254	0.049515788	11.14105239	0.119717304	0.679350896
35.13	-0.05122384	0.000252206	0.050295031	11.31638207	0.120380467	0.680033203
35.135	-0.051864174	0.000255539	0.050952073	11.46421642	0.121060314	0.680632766
35.14	-0.052101328	0.000256864	0.051213312	11.5229953	0.121746392	0.681682579
35.145	-0.051620455	0.000254574	0.050750679	11.41890282	0.122419864	0.682626291
35.15	-0.051218989	0.000252664	0.050364967	11.33211759	0.123082901	0.683474984
35.155	-0.051044228	0.000251913	0.050213204	11.29797097	0.123741421	0.684237603
35.16	-0.050191992	0.000247763	0.049375367	11.10945755	0.124378136	0.684913202
35.165	-0.049120174	0.000242491	0.048311179	10.87001525	0.124987947	0.685493187
35.17	-0.048043417	0.000237193	0.047242291	10.62951549	0.125571317	0.685984287
35.175	-0.04671855	0.000230632	0.045918958	10.33176554	0.126122956	0.686406751
35.18	-0.045909719	0.000226654	0.045116788	10.15127734	0.126655659	0.686760376
35.185	-0.045004327	0.000222204	0.044219864	9.949469479	0.127167558	0.687043779
35.19	-0.043813674	0.000216289	0.043027885	9.681274213	0.127652729	0.687267271
35.195	-0.043894785	0.000216754	0.043122263	9.702509134	0.128139699	0.687452516
35.2	-0.044357109	0.00021918	0.043612218	9.812749065	0.12863698	0.687599091
35.205	-0.044337205	0.000219176	0.043611486	9.812584276	0.129133816	0.687706828
35.21	-0.04514961	0.000223356	0.044455523	10.00249274	0.129649025	0.687775629
35.215	-0.046143546	0.000228494	0.045492734	10.2358652	0.130187169	0.687805713
35.22	-0.046612882	0.000231005	0.04599955	10.34989876	0.130736315	0.68783362
35.225	-0.047119796	0.000233721	0.046547596	10.47320901	0.131297469	0.688006606
35.23	-0.046915167	0.00023288	0.046377486	10.43493437	0.131853761	0.688147512
35.235	-0.046536474	0.000231141	0.04602638	10.35593547	0.132401108	0.688295766
35.24	-0.046804959	0.000232682	0.046337614	10.42596306	0.132954789	0.68854352
35.245	-0.046320808	0.000230476	0.045891933	10.32568489	0.133497075	0.689403381
35.25	-0.045471767	0.000226433	0.045075445	10.1419751	0.134019663	0.690573966
35.255	-0.044413751	0.000221395	0.044058539	9.913171335	0.134518216	0.69164799
35.26	-0.040581484	0.000202588	0.040268716	9.060460994	0.134934444	0.692633896
35.265	-0.034641872	0.000173303	0.03437814	7.735081423	0.135237748	0.693547286
35.27	-0.028206235	0.00014145	0.027981436	6.295823178	0.135438827	0.694405634
35.275	-0.020636614	0.000103817	0.020437315	4.59839587	0.135546462	0.695205852
35.28	-0.014062027	7.09769E-05	0.01386551	3.119739828	0.135596439	0.695944706
35.285	-0.010126217	5.1299E-05	0.009932544	2.234822458	0.135622355	0.696619357
35.29	-0.006194771	3.16882E-05	0.006016593	1.353733453	0.135632054	0.697478043
35.295	-0.000944288	5.41491E-06	0.000775792	0.174553171	0.13563228	0.698238853
35.3	0.004127549	-2.00535E-05	-0.004298489	-0.967159999	0.135636585	0.698873439
35.305	0.007960148	-3.93454E-05	-0.008138326	-1.831123352	0.1356526	0.699378158
35.31	0.010812553	-5.36988E-05	-0.010993091	-2.473445427	0.135682148	0.699750315
35.315	0.013846017	-6.8935E-05	-0.014021443	-3.15482465	0.135730602	0.700001148
35.32	0.017672144	-8.81919E-05	-0.017846096	-4.015371693	0.135809534	0.700174194
35.325	0.021407182	-0.000107064	-0.02159128	-4.858038067	0.135925357	0.700604725
35.33	0.023837926	-0.000119391	-0.024035815	-5.40805841	0.136068977	0.701621059
35.335	0.025595667	-0.000128289	-0.025799613	-5.804912916	0.136234557	0.702554907
35.34	0.028618303	-0.000143546	-0.028822417	-6.485043815	0.136441554	0.703423439
35.345	0.031915205	-0.000160258	-0.03213119	-7.229517849	0.136698991	0.704224863
35.35	0.033224216	-0.00016698	-0.033461474	-7.528831645	0.136977979	0.704957445
35.355	0.034087269	-0.000171399	-0.034335706	-7.725533771	0.137271649	0.705620023

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
42.53540039	0.003211329	6.629290016
42.54150391	0.002360163	4.765130932
42.54760742	0.002524874	5.01092015
42.55371094	0.002767776	5.434231514
42.55981445	0.002863686	5.622444976
42.56591797	0.002958541	5.902214754
42.57202148	0.003270421	6.549271966
42.578125	0.003704029	7.354369547
42.58422852	0.004000353	8.016190658
42.59033203	0.004167704	8.528182886
42.59643555	0.004152816	8.681851497
42.60253906	0.00400788	8.444978131
42.60864258	0.004267265	8.772519718
42.61474609	0.004630706	9.277655121
42.62084961	0.004131004	8.224031901
42.62695313	0.003085544	6.047203775
42.63305664	0.00242581	4.674815648
42.63916016	0.002272267	4.400352366
42.64526367	0.002543646	4.94016881
42.65136719	0.003055869	5.863658117
42.6574707	0.003389625	6.452098733
42.66357422	0.003500831	6.644573024
42.66967773	0.003358184	6.3631034
42.67578125	0.002981414	5.722920939
42.68188477	0.002928859	5.730648173
42.68798828	0.003367488	6.602286383
42.6940918	0.003451959	6.754813844
42.70019531	0.002634805	5.195357633
42.70629883	0.001698836	3.363559526
42.71240234	0.001538578	3.06986722
42.71850586	0.001963702	3.997921739
42.72460938	0.002317508	4.773543376
42.73071289	0.002293669	4.739667467
42.73681641	0.002065611	4.314105605
42.74291992	0.001875181	3.941995732
42.74902344	0.001626318	3.426349511
42.75512695	0.001539921	3.285234056
42.76123047	0.001593696	3.439208182
42.76733398	0.001676605	3.667626057
42.7734375	0.001555272	3.506668766
42.77954102	0.001258734	2.895954318
42.78564453	0.001149052	2.66855577
42.79174805	0.0012817	3.072837211
42.79785156	0.001091571	2.699366501
42.80395508	0.000629941	1.57816669
42.81005859	0.000177118	0.452610895
42.81616211	0.000449018	1.150653379
42.82226563	0.000866338	2.17622745
42.82836914	0.000901616	2.274944722
42.83447266	0.000692731	1.780775128
42.84057617	0.000324647	0.832672158
42.84667969	0.000534143	1.351719588
42.8527832	0.000663122	1.650549578
42.85888672	0.000180046	0.440140043
42.86499023	0.00075604	1.840465672
42.87109375	0.000730826	1.78509362
42.87719727	0.000107222	0.259487185
42.88330078	0.000681685	1.623963152
42.8894043	0.001356382	3.214022906
42.89550781	0.00188104	4.463969833
42.90161133	0.002052227	4.814327799
42.90771484	0.001653804	3.756658627
42.91381836	0.001024664	2.256329732
42.91992188	0.000973526	2.113378756
42.92602539	0.00128551	2.774672318
42.93212891	0.000978781	2.108395808
42.93823242	0.000455282	0.97756011
42.94433594	0.000726509	1.539473938
42.95043945	0.001086943	2.286980503
42.95654297	0.001549514	3.298478103
42.96264648	0.001933292	4.143960683
42.96875	0.001881871	3.987867555
42.97485352	0.001845147	3.87965695
42.98095703	0.002310218	4.88663755
42.98706055	0.002536408	5.37916924
42.99316406	0.002160522	4.526594917
42.99926758	0.001720442	3.529888057
43.00537109	0.001936955	3.908725795
43.01147461	0.002403576	4.871231449
43.01757813	0.002679721	5.535097565
43.02368164	0.002799733	5.776557257
43.02978516	0.002793894	5.659031748
43.03588867	0.002617746	5.300106914
43.04199219	0.002441173	4.948040905
43.0480957	0.002475765	5.008843074
43.05419922	0.002726886	5.409080654
43.06030273	0.003011774	5.904236505
43.06640625	0.002935987	5.73125169
43.07250977	0.002404789	4.718989401
43.07861328	0.001742176	3.434048396
43.0847168	0.001175584	2.293985472
43.09082031	0.001076866	2.088688096
43.09692383	0.001112893	2.191500648
43.10302734	0.000980326	1.969981609
43.10913086	0.001026778	2.082675604
43.11523438	0.001412911	2.877943597
43.12133789	0.002210826	4.577427035
43.12744141	0.00284062	6.099713097
43.13354492	0.002836222	6.337883467
43.13964844	0.002857636	6.528823655
43.14575195	0.002810598	6.429724289
43.15185547	0.002092431	4.811625317
43.15795898	0.001143967	2.724676773
43.1640625	0.000836363	2.058676667

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
35.36	0.035904994	-0.000180623	-0.036160207	-8.136046524	0.137597475	0.706223722
35.365	0.037507828	-0.000188783	-0.037773514	-8.499040666	0.137953041	0.706748668
35.37	0.039302931	-0.000197903	-0.039576123	-8.904627653	0.138343455	0.7071955
35.375	0.041221541	-0.000207673	-0.041506375	-9.33893441	0.138772917	0.707588667
35.38	0.042159306	-0.000212498	-0.042459303	-9.553343128	0.139222141	0.707919535
35.385	0.043658739	-0.000220117	-0.043963779	-9.891850163	0.139703887	0.708157979
35.39	0.045817962	-0.000231096	-0.046130965	-10.37946723	0.140234463	0.708320334
35.395	0.046797056	-0.000236142	-0.047126655	-10.60349729	0.140787957	0.708401367
35.4	0.047994528	-0.000242248	-0.048331044	-10.87448486	0.14137014	0.708936079
35.405	0.049958133	-0.000252241	-0.050301892	-11.31792578	0.142000935	0.709492749
35.41	0.050796636	-0.000256589	-0.051158975	-11.51076937	0.142653082	0.710373393
35.415	0.051432598	-0.000259877	-0.051807094	-11.65659615	0.143321661	0.711429625
35.42	0.052755213	-0.000266634	-0.053138304	-11.95611847	0.144025068	0.712436992
35.425	0.053406543	-0.000270029	-0.05380697	-12.10656818	0.144745952	0.71331472
35.43	0.053748323	-0.000271841	-0.054163717	-12.18683635	0.145476091	0.714153941
35.435	0.054512211	-0.000275779	-0.054938802	-12.36123034	0.146227132	0.714895139
35.44	0.055061927	-0.00027865	-0.055503742	-12.48834201	0.146993396	0.715485159
35.445	0.05550131	-0.000280959	-0.055958094	-12.59057116	0.147771939	0.715945769
35.45	0.05607482	-0.000283947	-0.056545774	-12.72279926	0.148566654	0.716316038
35.455	0.056606948	-0.000286728	-0.057092797	-12.84587927	0.149376525	0.716894271
35.46	0.057405695	-0.000290855	-0.057904182	-13.02844094	0.150209411	0.717378735
35.465	0.058447454	-0.000296229	-0.058960235	-13.26605278	0.151072801	0.717941227
35.47	0.059099857	-0.000299664	-0.059635122	-13.41790248	0.151955574	0.718777893
35.475	0.05923094	-0.000300473	-0.059793946	-13.45363777	0.152842267	0.719506441
35.48	0.059571173	-0.000302328	-0.060158352	-13.53562918	0.153739175	0.720139646
35.485	0.060178372	-0.000305557	-0.060792355	-13.67827983	0.154654461	0.72110353
35.49	0.059825415	-0.00030398	-0.060473292	-13.60649072	0.155559042	0.722313265
35.495	0.058690464	-0.000298445	-0.059355488	-13.3549848	0.156429627	0.723379655
35.5	0.057736082	-0.000293823	-0.058422548	-13.14507339	0.157272128	0.724319022
35.505	0.05564178	-0.00028349	-0.05633764	-12.67596891	0.158054616	0.725521753
35.51	0.052209711	-0.000266384	-0.052889228	-11.9000762	0.158743552	0.727049753
35.515	0.048525006	-0.000247984	-0.049183988	-11.06639726	0.159338675	0.728428636
35.52	0.043202072	-0.000221649	-0.043887416	-9.874668679	0.159810396	0.729656361
35.525	0.037255696	-0.000192061	-0.037945402	-8.537715396	0.160161197	0.730733928
35.53	0.032939014	-0.0001705	-0.0336212	-7.564770002	0.160435416	0.731685997
35.535	0.029141238	-0.000151499	-0.029814292	-6.708215675	0.160650047	0.732528629
35.54	0.026827581	-0.000139823	-0.027476735	-6.182265263	0.16083195	0.733257724
35.545	0.027488918	-0.000142995	-0.028117493	-6.326435908	0.161022931	0.733870513
35.55	0.028494884	-0.000147947	-0.029117473	-6.551431354	0.161228146	0.734366115
35.555	0.030083795	-0.000155789	-0.030700235	-6.907552954	0.161456886	0.735122273
35.56	0.033663094	-0.000173607	-0.034293379	-7.716010317	0.161743293	0.73629462
35.565	0.036447234	-0.000187542	-0.037100986	-8.347721899	0.162079035	0.73734453
35.57	0.038715822	-0.000198895	-0.039386529	-8.861969028	0.162457872	0.738281455
35.575	0.042246927	-0.000216587	-0.042945315	-9.662695796	0.162908965	0.739105256
35.58	0.044588795	-0.00022843	-0.045325578	-10.19825501	0.163411455	0.740482855
35.585	0.045725559	-0.000234255	-0.046495823	-10.46156015	0.163939893	0.741934357
35.59	0.047345941	-0.000242519	-0.048155439	-10.83497377	0.164506447	0.743276004
35.595	0.047696285	-0.000244511	-0.04855503	-10.92488184	0.165081417	0.744506538
35.6	0.04660669	-0.000239325	-0.047507444	-10.68917495	0.165630417	0.745624267
35.605	0.044810957	-0.00023065	-0.045756341	-10.29517682	0.166137927	0.746630656
35.61	0.040145401	-0.000207777	-0.041143754	-9.257344542	0.166545258	0.747529824
35.615	0.031996114	-0.000167542	-0.033045501	-7.435237663	0.166804002	0.748299877
35.62	0.021662083	-0.000116132	-0.022737679	-5.115977809	0.1669226	0.748935201
35.625	0.010909683	-6.22365E-05	-0.011976381	-2.694685624	0.166952681	0.749435287
35.63	0.003084052	-2.27644E-05	-0.004111794	-0.925153703	0.166955085	0.749793648
35.635	-0.001022243	-1.92241E-06	3.52639E-05	0.007934385	0.166955349	0.750015006
35.64	-0.003607594	1.12409E-05	0.00265247	0.596805857	0.166958639	0.750153485
35.645	-0.004994973	1.83732E-05	0.004069937	0.915735758	0.166964944	0.750217504
35.65	-0.005098392	1.90063E-05	0.004195383	0.943961142	0.166971514	0.750221496
35.655	-0.005456356	2.08532E-05	0.004562708	1.02660937	0.166979039	0.750496918
35.66	-0.007145118	2.93717E-05	0.006254899	1.407352227	0.166991942	0.751570529
35.665	-0.009455664	4.1071E-05	0.008577923	1.930032754	0.167014539	0.752564795
35.67	-0.009726498	4.25706E-05	0.008871046	1.995985388	0.16703845	0.753477947
35.675	-0.007807806	3.29792E-05	0.006934296	1.560216491	0.167053857	0.754308897
35.68	-0.007969076	3.37437E-05	0.007089046	1.595035452	0.167069908	0.755057201
35.685	-0.010057462	4.42722E-05	0.009213342	2.073002041	0.167095473	0.755722041
35.69	-0.009784825	4.29861E-05	0.008949299	2.013592198	0.167119671	0.756302278
35.695	-0.008829441	3.8179E-05	0.007978538	1.795170995	0.167139375	0.756797414
35.7	-0.009722302	4.26567E-05	0.008882983	1.998671284	0.167163265	0.757207259
35.705	-0.009951454	4.38438E-05	0.009122669	2.052600561	0.167188294	0.757531363
35.71	-0.009808828	4.31197E-05	0.008976382	2.019685876	0.167212611	0.757769498
35.715	-0.010863297	4.84224E-05	0.010037023	2.258330287	0.167242437	0.757921629
35.72	-0.010887301	4.85789E-05	0.010064364	2.264481843	0.167272396	0.757987618
35.725	-0.010735386	4.77914E-05	0.009905315	2.228695902	0.167301524	0.757988355
35.73	-0.012457122	5.64356E-05	0.011626946	2.616062776	0.167340744	0.757988355
35.735	-0.013143495	5.99402E-05	0.012322151	2.772483887	0.167384405	0.757988355
35.74	-0.012918968	5.88077E-05	0.012093362	2.721006554	0.167426588	0.757988355
35.745	-0.014876982	6.86382E-05	0.014047075	3.160591839	0.167482526	0.757988355
35.75	-0.016260939	7.56794E-05	0.015442974	3.47466908	0.167549355	0.757988355
35.755	-0.015413414	7.14721E-05	0.014593132	3.283454697	0.1676094	0.758292349
35.76	-0.01597524	7.42837E-05	0.015161081	3.411243168	0.167673901	0.758870292
35.765	-0.017524599	8.21201E-05	0.016719448	3.761875846	0.167751521	0.75937874
35.77	-0.017504241	8.20907E-05	0.016710191	3.75979298	0.16782896	0.759816901
35.775	-0.017418563	8.16896E-05	0.016629181	3.741565646	0.167905644	0.760184413
35.78	-0.017895068	8.41233E-05	0.017116397	3.851189324	0.16798658	0.760481062
35.785	-0.017754036	8.34613E-05	0.016982324	3.821022929	0.168066245	0.76070662
35.79	-0.01750848	8.22486E-05	0.016737365	3.76590719	0.168143722	0.760861074
35.795	-0.017557737	8.2505E-05	0.016789163	3.777561672	0.168221636	0.760944545
35.8	-0.017903353	8.42426E-05	0.017140022	3.856505056	0.168302647	0.760959703
35.805	-0.018699555	8.82515E-05	0.017934307	4.035219168	0.168391024	0.760959703
35.81	-0.019328016	9.14214E-05	0.018562257	4.176507828	0.168485441	0.760959703
35.815	-0.020364514	9.66218E-05	0.019592259	4.408258222	0.168590256	0.760959703
35.82	-0.022454601	0.000107142	0.021675156	4.876910035	0.16871769	0.76098533
35.825	-0.024144132	0.000115687	0.023366345	5.25742754	0.168865023	0.761228545
35.83	-0.025644619	0.000123266	0.024865998	5.594849444	0.169031237	0.761440931
35.835	-0.028152878	0.000135931	0.02737067	6.158400714	0.169231556	0.761621875
35.84	-0.030199533	0.000146328	0.029425882	6.620823524	0.169462059	0.761770579
35.845	-0.031535514	0.000153145	0.030772925	6.923908161	0.169713407	0.761886374
35.85	-0.033573378	0.000163499	0.032818169	7.384087928	0.16999829	0.761968782
35.855	-0.035111587	0.000171396	0.03437739	7.734912841	0.170309875	0.762017235
35.86	-0.035402958	0.000173025	0.03469904	7.807283889	0.170626653	0.762031336
35.865	-0.035633815	0.00017434	0.034958738	7.865716021	0.170947576	0.762031336
35.87	-0.03526009	0.000172638	0.034614752	7.788319308	0.171261802	0.762031336
35.875	-0.033880896	0.000165864	0.033246936	7.480560532	0.171551928	0.762031336

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
43.17016602	0.001447284	3.529513822
43.17626953	0.002110609	5.099836632
43.18237305	0.002556109	6.304876989
43.18847656	0.00289279	7.244095161
43.19458008	0.003382601	8.427850561
43.20068359	0.00361386	8.882974267
43.20678711	0.003144137	7.571593692
43.21289063	0.002576912	6.124933282
43.21899414	0.002713292	6.504943789
43.22509766	0.003200513	7.738688476
43.23120117	0.003300098	7.890213252
43.23730469	0.002812411	6.67017521
43.2434082	0.00178368	4.264862992
43.24951172	0.000790685	1.901678407
43.25561523	0.000260573	0.623500561
43.26171875	0.000867584	2.036433609
43.26782227	0.001260479	2.870446018
43.27392578	0.001240399	2.770598548
43.2800293	0.001243907	2.755593406
43.28613281	0.001067655	2.33530176
43.29223633	0.000759559	1.644853293
43.29833984	0.000426102	0.919695076
43.30444336	0.000538594	1.156162379
43.31054688	0.00087172	1.859966942
43.31665039	0.001538227	3.28012585
43.32275391	0.0021757	4.659760719
43.32885742	0.001746963	3.749545837
43.33496094	0.000774382	1.656528122
43.34106445	0.0006325	1.340932307
43.34716797	0.001435781	2.969087488
43.35327148	0.00187416	3.744612888
43.359375	0.001139943	2.223842741
43.36547852	0.000117204	0.223490795
43.37158203	0.000633003	1.176581253
43.37768555	0.000608968	1.118455669
43.38378906	0.001104911	2.002648115
43.38989258	0.001635467	2.882119048
43.39599609	0.001459368	2.52741138
43.40209961	0.001017822	1.767017378
43.40820313	0.001239361	2.158929569
43.41430664	0.001760618	3.050949917
43.42041016	0.002067508	3.550158753
43.42651367	0.001806555	3.081193703
43.43261719	0.001134629	1.93360326
43.4387207	0.000701925	1.204131728
43.44482422	0.000756255	1.304448752
43.45092773	0.000834552	1.428828396
43.45703125	0.000462304	0.787927189
43.46313477	0.00030251	0.524885506
43.46923828	0.000711527	1.260867157
43.4753418	0.00072687	1.297770753
43.48144531	0.000499051	0.905306605
43.48754883	0.000420324	0.789930332
43.49365234	0.000483686	0.939413551
43.49975586	0.000172075	0.340924755
43.50585938	0.000263546	0.531479064
43.51196289	0.000347543	0.710235513
43.51806641	0.000704399	1.463112511
43.52416992	0.000882735	1.904140281
43.53027344	0.000830595	1.838843419
43.53637695	0.001056553	2.309934306
43.54248047	0.000773537	1.674726884
43.54858398	0.000650234	1.412944569
43.5546875	0.00134603	2.937910918
43.56079102	0.001561835	3.443343347
43.56689453	0.001168059	2.565198595
43.57299805	0.000684683	1.486346971
43.57910156	0.000456802	1.00226723
43.58520508	0.001413212	3.118499625
43.59130859	0.001974197	4.276924838
43.59741211	0.00165669	3.550277977
43.60351563	0.000935398	2.015775103
43.60961914	0.00026786	0.583472953
43.61572266	0.000219924	0.484023502
43.62182617	0.000387024	0.849861334
43.62792969	0.001338937	2.888000513
43.6340332	0.001856613	3.949827722
43.64013672	0.001360912	2.903814974
43.64624023	0.001442134	3.079667214
43.65234375	0.001942493	4.038387262
43.65844727	0.001928234	3.868420668
43.66455078	0.001944446	3.866964732
43.6706543	0.002308349	4.615922375
43.67675781	0.002496432	4.935043878
43.68286133	0.002190257	4.260775396
43.68896484	0.001847696	3.565115578
43.69506836	0.001879194	3.601286706
43.70117188	0.002335424	4.482256702
43.70727539	0.002579878	4.943781768
43.71337891	0.002411419	4.548599978
43.71948242	0.002143771	4.017059319
43.72558594	0.001923788	3.611213213
43.73168945	0.001694224	3.144095715
43.73779297	0.001369139	2.486370804
43.74389648	0.001074691	1.903567278
43.75	0.001078748	1.868749854
43.75610352	0.001208067	2.063255844
43.76220703	0.001169829	1.973220807
43.76831055	0.000947087	1.579182629
43.77441406	0.001000972	1.645558016
43.78051758	0.001187518	1.916053584
43.78662109	0.001331716	2.140117709
43.79272461	0.001341466	2.17084579
43.79882813	0.001167358	1.872514783

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
35.88	-0.032282539	0.000157969	0.031653333	7.121999916	0.171815325	0.762031336
35.885	-0.030122702	0.000147231	0.029487608	6.634711874	0.172044656	0.762031336
35.89	-0.028202448	0.00013765	0.02755623	6.200151673	0.172245681	0.762031336
35.895	-0.027375548	0.000133561	0.026732367	6.014782486	0.172435091	0.762037451
35.9	-0.026455577	0.00012902	0.025817725	5.808988188	0.172611984	0.762038058
35.905	-0.025704155	0.000125304	0.02506937	5.640608274	0.172778971	0.762038058
35.91	-0.026032979	0.000127031	0.025418257	5.719107873	0.172950257	0.762038058
35.915	-0.026316426	0.000128576	0.025730278	5.789312633	0.173125294	0.762038058
35.92	-0.025932432	0.000126784	0.025368203	5.707845781	0.17329526	0.762038058
35.925	-0.025012956	0.000122313	0.02446712	5.505102042	0.173453387	0.762038058
35.93	-0.023257766	0.000113644	0.022722203	5.11249559	0.173590101	0.762038058
35.935	-0.021060886	0.000102743	0.020529136	4.619055671	0.173702207	0.762038058
35.94	-0.018256011	8.87912E-05	0.017724322	3.987972431	0.173786441	0.762038058
35.945	-0.014119862	6.82243E-05	0.013593406	3.058516406	0.17383683	0.76210252
35.95	-0.009697977	4.62422E-05	0.009183112	2.066200115	0.173860601	0.762300482
35.955	-0.005720299	2.64454E-05	0.005215401	1.173465266	0.173868871	0.76242486
35.96	-0.001472075	5.24912E-06	0.000971495	0.218586449	0.173869419	0.762474441
35.965	0.00304179	-1.73259E-05	-0.003543707	-0.797334178	0.173871757	0.762474441
35.97	0.008043501	-4.23969E-05	-0.008552477	-1.924307259	0.173888109	0.762474441
35.975	0.013465675	-6.96861E-05	-0.013997785	-3.149501691	0.173933937	0.762474441
35.98	0.016628446	-8.57599E-05	-0.017202008	-3.870451815	0.174003821	0.762474441
35.985	0.016274479	-8.4153E-05	-0.016875442	-3.796974441	0.174070762	0.762474441
35.99	0.015948866	-8.25611E-05	-0.016553969	-3.724643037	0.174135051	0.762474441
35.995	0.01832355	-9.45013E-05	-0.01894357	-4.262303184	0.174219909	0.762474441
36	0.020972102	-0.00010791	-0.021613687	-4.863079678	0.174331072	0.762474441
36.005	0.02122299	-0.000109315	-0.02189087	-4.925445656	0.174444911	0.762474441
36.01	0.020461165	-0.000105561	-0.021132606	-4.754836402	0.174550723	0.762474441
36.015	0.021181844	-0.000109194	-0.02186663	-4.919991855	0.174664121	0.762474441
36.02	0.023183385	-0.000119296	-0.023879735	-5.372940355	0.174799961	0.762490138
36.025	0.024273995	-0.000124884	-0.024991506	-5.623088866	0.174948883	0.762586441
36.03	0.023659709	-0.000121896	-0.024387876	-5.487271989	0.175090363	0.762604183
36.035	0.023417418	-0.000120704	-0.024147202	-5.433120437	0.17522896	0.762604183
36.04	0.024978108	-0.000128564	-0.025723369	-5.787758017	0.175386647	0.762604183
36.045	0.026500818	-0.000136297	-0.027261159	-6.133760733	0.175564145	0.762604183
36.05	0.026832488	-0.000138057	-0.027611169	-6.212513012	0.175746114	0.762604183
36.055	0.027431107	-0.00014113	-0.028222075	-6.34996693	0.175936293	0.762604183
36.06	0.028602507	-0.000147103	-0.029409115	-6.617050865	0.176143062	0.762604183
36.065	0.029213238	-0.000150296	-0.030043721	-6.759837332	0.176358754	0.762604183
36.07	0.028980081	-0.000149256	-0.029833639	-6.712568735	0.176571018	0.762604183
36.075	0.028407887	-0.000146495	-0.029275851	-6.587066571	0.176774982	0.762604183
36.08	0.02838302	-0.000146473	-0.029271576	-6.586104691	0.176978589	0.762604183
36.085	0.028386894	-0.000146643	-0.029305899	-6.593827383	0.177182252	0.762604183
36.09	0.026514184	-0.000137421	-0.027443991	-6.174897927	0.177359929	0.762604183
36.095	0.023598566	-0.000122907	-0.024516023	-5.516105181	0.177500679	0.762604183
36.1	0.021364671	-0.000111792	-0.022275753	-5.012044491	0.177616042	0.762604183
36.105	0.018136377	-9.57049E-05	-0.019035861	-4.283068617	0.177699176	0.762604183
36.11	0.013859486	-7.44797E-05	-0.014765703	-3.322283182	0.177747724	0.762604183
36.115	0.010766703	-5.9085E-05	-0.011671632	-2.626117297	0.177777022	0.762604183
36.12	0.007765106	-4.41463E-05	-0.008671604	-1.951110924	0.177792262	0.762604183
36.125	0.004747617	-2.90737E-05	-0.00564704	-1.270583997	0.177797958	0.762604183
36.13	0.003326979	-2.19181E-05	-0.004211965	-0.947692157	0.177800756	0.762604183
36.135	0.002066808	-1.55784E-05	-0.002940938	-0.661711015	0.177801836	0.762604183
36.14	0.001037357	-1.03388E-05	-0.001890773	-0.425423963	0.177802107	0.762604183
36.145	0.002023835	-1.51173E-05	-0.002855983	-0.642596181	0.177803143	0.762604183
36.15	0.003539203	-2.25743E-05	-0.004361457	-0.981327848	0.177806309	0.762604183
36.155	0.005137295	-3.04364E-05	-0.005947851	-1.338266414	0.177812979	0.762604183
36.16	0.008023376	-4.47246E-05	-0.00882882	-1.986484588	0.177829249	0.762604183
36.165	0.010831666	-5.86893E-05	-0.011642114	-2.619475627	0.177858902	0.762604183
36.17	0.012801761	-6.84984E-05	-0.013616882	-3.063798498	0.177900322	0.762604183
36.175	0.014829148	-7.85959E-05	-0.015648558	-3.520925479	0.177955901	0.762604183
36.18	0.016807817	-8.84824E-05	-0.017636677	-3.968252325	0.178027301	0.762604183
36.185	0.017948248	-9.42329E-05	-0.018792589	-4.228332514	0.178108719	0.762604183
36.19	0.017683636	-9.29952E-05	-0.018542368	-4.172032768	0.178187754	0.762604183
36.195	0.017089118	-9.00818E-05	-0.017953934	-4.039635242	0.178261564	0.762604183
36.2	0.016819634	-8.88039E-05	-0.017695875	-3.981571982	0.178333064	0.762604183
36.205	0.01469589	-7.83306E-05	-0.0155818	-3.505904914	0.178387649	0.762604183
36.21	0.011141749	-6.0665E-05	-0.012019293	-2.704340947	0.178419024	0.762604183
36.215	0.008861932	-4.92862E-05	-0.009726688	-2.188504803	0.178438872	0.762604183
36.22	0.006499303	-3.75171E-05	-0.007357043	-1.655334681	0.178449548	0.762604183
36.225	0.003294399	-2.15097E-05	-0.00413654	-0.930721581	0.178452291	0.762604183
36.23	0.001404894	-1.19943E-05	-0.002223503	-0.500288066	0.17845279	0.762725344
36.235	0.000353615	-6.66377E-06	-0.001154364	-0.259731852	0.178452822	0.762842629
36.24	-0.000635936	-1.6327E-06	-0.000146438	-0.032948531	0.178452924	0.76295521
36.245	-0.000860527	-4.03047E-07	9.98736E-05	0.022471564	0.178453111	0.763062791
36.25	-0.000814159	-5.39036E-07	7.23991E-05	0.016289807	0.178453279	0.763165265
36.255	-0.000538691	-1.8213E-06	-0.000186641	-0.041994286	0.178453352	0.763262634
36.26	-0.00029653	-2.96541E-06	-0.000417746	-0.093992746	0.178453374	0.763354966
36.265	-0.000970682	4.53589E-07	0.000271457	0.061077866	0.178453612	0.76344229
36.27	-0.000967587	5.47862E-07	0.000288514	0.064915732	0.178453849	0.763524443
36.275	0.000394592	-6.14576E-06	-0.001063282	-0.239238474	0.178453888	0.763601441
36.28	0.001195892	-1.00974E-05	-0.001860988	-0.418722247	0.17845425	0.763673634
36.285	0.001406617	-1.11046E-05	-0.002064279	-0.464462721	0.17845475	0.763741267
36.29	0.001653126	-1.22868E-05	-0.002302865	-0.518144643	0.178455441	0.763804424
36.295	0.001548711	-1.17163E-05	-0.002187605	-0.492211101	0.178456047	0.763863158
36.3	0.001670135	-1.22392E-05	-0.00229326	-0.515983532	0.178456752	0.763917452
36.305	0.002632788	-1.69265E-05	-0.003239062	-0.728788957	0.178458504	0.763967361
36.31	0.004807033	-2.76324E-05	-0.00539817	-1.214588294	0.178464344	0.764013194
36.315	0.008371322	-4.52787E-05	-0.008953876	-2.014622168	0.178482056	0.76405564
36.32	0.012618658	-6.635E-05	-0.013194928	-2.968858748	0.1785223	0.764095787
36.325	0.017677289	-9.15331E-05	-0.018257121	-4.107852226	0.178601278	0.764134972
36.33	0.022541093	-0.000115876	-0.023143992	-5.207398165	0.178729696	0.764174747
36.335	0.024958378	-0.000128078	-0.025591373	-5.758058876	0.178887134	0.764216546
36.34	0.026425605	-0.000135494	-0.02707808	-6.09256795	0.179063626	0.764261174
36.345	0.028789397	-0.000147379	-0.029459336	-6.628350501	0.179273105	0.764309145
36.35	0.030936167	-0.000158219	-0.031617682	-7.11397847	0.17951499	0.764361142
36.355	0.032693643	-0.000167138	-0.033388952	-7.512514149	0.179785139	0.764417822
36.36	0.033506603	-0.000171384	-0.0342319	-7.702177393	0.180068889	0.764479701
36.365	0.032632256	-0.000167192	-0.033385287	-7.511689479	0.180338024	0.764546982
36.37	0.032459324	-0.000166434	-0.033232253	-7.477256887	0.180604314	0.764619459
36.375	0.033556091	-0.000172034	-0.034361037	-7.731233268	0.180888904	0.764697075
36.38	0.033898466	-0.00017391	-0.034733461	-7.815028809	0.18117933	0.764780076
36.385	0.033946272	-0.000174309	-0.034812589	-7.832832545	0.181470576	0.765070924
36.39	0.033982474	-0.000174667	-0.034882902	-7.848653001	0.181762444	0.765397424
36.395	0.033284831	-0.000171368	-0.034216565	-7.698727133	0.182042451	0.765735379

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
43.80493164	0.000947065	1.504478494
43.81103516	0.001513758	2.426429178
43.81731867	0.001993761	3.217475588
43.82324219	0.001868082	2.997533904
43.8293457	0.001753711	2.794913685
43.83544922	0.001855787	2.942978629
43.84155273	0.001531257	2.438896458
43.84765625	0.000867912	1.405769447
43.85375977	0.000930565	1.525793722
43.85986328	0.001556411	2.569121794
43.8659668	0.00181926	3.051215905
43.87207031	0.001735997	2.970198243
43.87817383	0.001583215	2.746378483
43.88427734	0.001407515	2.478439995
43.89038086	0.001219367	2.195186035
43.89648438	0.000826954	1.524266149
43.90258789	0.000542119	1.024820275
43.90869141	0.000895412	1.740315572
43.91479492	0.000924473	1.830687968
43.92089844	0.000154595	0.30921762
43.92700195	0.000787083	1.592303294
43.93310547	0.000760261	1.551056883
43.93920898	0.000275899	0.565483386
43.9453125	0.000662062	1.361932088
43.95141602	0.001674966	3.433524717
43.95751953	0.001529967	3.116639589
43.96362305	0.000366275	0.744596399
43.96972656	0.001487556	3.011692296
43.97583008	0.001829537	3.673207859
43.98193359	0.001200194	2.387026044
43.98803711	0.000469588	0.922683036
43.99414063	0.000403797	0.784915944
44.00024414	0.000396785	0.769772772
44.00634766	0.000724147	1.402543048
44.01245117	0.001124311	2.150422838
44.01855469	0.001253566	2.361112381
44.0246582	0.001279686	2.385215261
44.03076172	0.001422478	2.624454674
44.03686523	0.001327912	2.416129098
44.04296875	0.000956596	1.714231199
44.04907227	0.000421465	0.749925966
44.05517578	0.000239189	0.426063694
44.0612793	0.000599011	1.063948278
44.06738281	0.000405929	0.716018892
44.07348633	0.000263171	0.45930817
44.07958984	0.000565988	0.965991112
44.08569336	0.000422486	0.705376069
44.09179688	0.000225711	0.373573147
44.09790039	0.000726947	1.189845398
44.10400391	0.000923455	1.472911652
44.11010742	0.001239059	1.929587911
44.11621094	0.00125071	1.933796721
44.12231445	0.00167417	2.587892611
44.12841797	0.002253482	3.463640533
44.13452148	0.002412407	3.683250338
44.140625	0.002335791	3.558295194
44.14672852	0.002256653	3.458360597
44.15283203	0.002372837	3.709429381
44.15893555	0.002510379	3.997781805
44.16503906	0.002343692	3.722510076
44.17114258	0.001864864	2.950815985
44.17724609	0.001389588	2.239696295
44.18334961	0.000923524	1.517314925
44.18945313	0.000149027	0.244609405
44.19555664	0.000933293	1.533054731
44.20166016	0.00161535	2.70671608
44.20776367	0.001396344	2.409249444
44.21386719	0.000638664	1.134460848
44.2199707	0.000439527	0.792429158
44.22607422	0.000963454	1.728153892
44.23217773	0.00124535	2.259077315
44.23828125	0.001316302	2.497666756
44.24438477	0.001607707	3.141495888
44.25048828	0.001519997	2.971302226
44.2565918	0.000778372	1.544290536
44.26269531	0.000714756	1.446297831
44.26879883	0.000867065	1.774312814
44.27490234	0.000494974	1.03689142
44.28100586	0.000664909	1.404097953
44.28710938	0.001545591	3.228219239
44.29321289	0.001774166	3.790066256
44.29931641	0.001454321	3.210376687
44.30541992	0.0009945	2.182817771
44.31152344	0.000866035	1.8694531
44.31762695	0.000661405	1.410971579
44.32373047	0.00036798	0.775143969
44.32983398	0.000220991	0.468373906
44.3359375	0.000655668	1.412576811
44.34204102	0.001115746	2.382991958
44.34814453	0.000805722	1.689777693
44.35424805	0.00134773	2.854677627
44.36035156	0.001920122	4.135471694
44.36645508	0.001518331	3.221318612
44.37255859	0.000820334	1.688276437
44.37866211	0.00083843	1.67990005
44.38476563	0.000973642	1.899762257
44.39086914	0.000987707	1.876607527
44.39697266	0.001403586	2.579035172
44.40307617	0.001745398	3.07410229
44.40917969	0.001667084	2.838475219
44.4152832	0.001466889	2.458311242
44.42138672	0.001118719	1.852123381
44.42749023	0.001386369	2.240693093
44.43359375	0.001940453	3.064216211

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
36.4	0.032704486	-0.000168641	-0.033665912	-7.57483019	0.182312778	0.766084338
36.405	0.03213551	-0.000165993	-0.033131189	-7.454517531	0.182573782	0.766443851
36.41	0.030755365	-0.000159314	-0.031783326	-7.151248296	0.182812848	0.766813419
36.415	0.028571246	-0.000148627	-0.029627498	-6.666187143	0.183019164	0.767192101
36.42	0.025513086	-0.000133557	-0.02659019	-5.982792822	0.183183678	0.767578432
36.425	0.022516114	-0.000118745	-0.023607495	-5.311686368	0.183311811	0.767970476
36.43	0.020172756	-0.000107178	-0.021279984	-4.787996441	0.183414662	0.768366314
36.435	0.018043311	-9.6665E-05	-0.019165753	-4.312294512	0.183496945	0.768764355
36.44	0.017327033	-9.31871E-05	-0.018466623	-4.15499018	0.183572824	0.769163276
36.445	0.017558347	-9.45352E-05	-0.018738961	-4.216266186	0.183650743	0.769562531
36.45	0.014435031	-7.92839E-05	-0.015673084	-3.526443906	0.183703407	0.769961888
36.455	0.006688085	-4.08998E-05	-0.007971076	-1.79349213	0.183714712	0.770359222
36.46	-0.002221129	3.54305E-06	0.000928285	0.208864203	0.183715959	0.770749842
36.465	-0.00929656	3.90256E-05	0.008019808	1.804456689	0.183737802	0.771128286
36.47	-0.013424328	5.98306E-05	0.012172432	2.738797249	0.18378335	0.771490129
36.475	-0.015485157	7.02436E-05	0.014249335	3.206100336	0.183843954	0.771832676
36.48	-0.017524354	8.04994E-05	0.016293944	3.666137439	0.183921572	0.772154454
36.485	-0.020049482	9.31816E-05	0.018820953	4.234714388	0.184023169	0.772454123
36.49	-0.023137649	0.000108689	0.021908906	4.929503803	0.184158474	0.77273007
36.495	-0.026845748	0.000127349	0.025621809	5.764907045	0.184340624	0.772980323
36.5	-0.029040465	0.000138484	0.02783601	6.26310217	0.184553772	0.773202695
36.505	-0.029401798	0.00014038	0.028213018	6.347929073	0.184772258	0.773397417
36.51	-0.031358574	0.000150203	0.030165211	6.787172545	0.185020794	0.773687165
36.515	-0.034921054	0.00016814	0.033727854	7.588767086	0.185329007	0.77394576
36.52	-0.036584205	0.000176629	0.03541045	7.967351184	0.185667277	0.774180556
36.525	-0.036712745	0.000177376	0.035557874	8.000521573	0.186007927	0.774390744
36.53	-0.038003125	0.000183902	0.036845825	8.290310591	0.186372946	0.774576119
36.535	-0.040003151	0.000194028	0.038843619	8.739814175	0.186777395	0.774736107
36.54	-0.040780998	0.000198062	0.039639228	8.918826315	0.187197726	0.774869885
36.545	-0.040703891	0.000197772	0.039580477	8.905607403	0.18761647	0.775080377
36.55	-0.041801248	0.000203334	0.040678756	9.152720131	0.188058095	0.775256293
36.555	-0.043657052	0.000212753	0.042535493	9.570485996	0.188539804	0.775385384
36.56	-0.043803918	0.000213643	0.042706572	9.608978601	0.18902476	0.775480561
36.565	-0.043435554	0.000211888	0.042352017	9.5292039	0.189501593	0.775542388
36.57	-0.044870736	0.000219171	0.04380023	9.855051841	0.190010458	0.775598126
36.575	-0.045658619	0.000223289	0.044611684	10.03762894	0.19053735	0.775891233
36.58	-0.044472595	0.000217489	0.043440209	9.774047106	0.191037224	0.776146298
36.585	-0.044311962	0.00021677	0.04329512	9.741401888	0.191533494	0.776372247
36.59	-0.044961345	0.00022016	0.043979833	9.895462423	0.192044416	0.776843948
36.595	-0.043958407	0.000215295	0.042997121	9.674352327	0.192532798	0.777226246
36.6	-0.042596232	0.000208576	0.041640998	9.369224637	0.192991381	0.777541245
36.605	-0.042207558	0.000206733	0.041268969	9.285518132	0.193441634	0.778003349
36.61	-0.041469431	0.000203172	0.04055072	9.123911939	0.193876276	0.778492514
36.615	-0.039835908	0.000195123	0.038927462	8.758678863	0.194277351	0.778923775
36.62	-0.037661453	0.000184345	0.036755063	8.269889087	0.194635835	0.779292951
36.625	-0.03532085	0.00017271	0.034411433	7.742572432	0.194951146	0.779782982
36.63	-0.033144183	0.000161887	0.032232947	7.252413053	0.195228791	0.78029311
36.635	-0.03037524	0.000148095	0.029458847	6.628240484	0.195461984	0.780706355
36.64	-0.02699847	0.000131217	0.026066664	5.864999405	0.195646212	0.781095563
36.645	-0.024168644	0.000117035	0.023218603	5.224185781	0.195793844	0.781592367
36.65	-0.021864513	0.00010547	0.020897638	4.701968623	0.195914668	0.781994169
36.655	-0.020090397	9.65306E-05	0.019104631	4.298541911	0.196016681	0.782302813
36.66	-0.019661697	9.4322E-05	0.018661755	4.19889497	0.196114386	0.782544377
36.665	-0.02000251	9.60033E-05	0.01900141	4.275317214	0.196215508	0.782721095
36.67	-0.020149933	9.67332E-05	0.019148836	4.308488066	0.196318126	0.782832461
36.675	-0.020550301	9.87262E-05	0.019551363	4.399056691	0.196424862	0.782887993
36.68	-0.021505676	0.000103518	0.020518924	4.616757815	0.196541753	0.782913054
36.685	-0.022495971	0.000108511	0.021526627	4.843491093	0.196669658	0.782914262
36.69	-0.023435766	0.000113266	0.02248603	5.059356707	0.196808472	0.782914262
36.695	-0.02441654	0.000118251	0.02349161	5.285612239	0.196959148	0.782914262
36.7	-0.024933648	0.00012094	0.024033847	5.407615492	0.197116274	0.782914262
36.705	-0.024867276	0.000120714	0.023988143	5.397332211	0.197272564	0.782914262
36.71	-0.024407527	0.000118528	0.023546645	5.297995094	0.197423129	0.782914262
36.715	-0.023132461	0.000112263	0.022281472	5.013331124	0.197558373	0.782914262
36.72	-0.021322494	0.000103299	0.020472485	4.606309197	0.197673282	0.782914262
36.725	-0.019311778	9.33313E-05	0.018463118	4.154201442	0.19776754	0.782914262
36.73	-0.016134869	7.75082E-05	0.015291804	3.440655882	0.197833338	0.782914262
36.735	-0.012674692	6.01922E-05	0.011824135	2.66043032	0.19787394	0.782914262
36.74	-0.010742959	5.05039E-05	0.009885223	2.224175229	0.197903109	0.782914262
36.745	-0.009017507	4.187E-05	0.008158099	1.835572374	0.197923661	0.782914262
36.75	-0.007256771	3.30211E-05	0.006388712	1.437460111	0.19793697	0.782914262
36.755	-0.007356138	3.34884E-05	0.006485008	1.459126848	0.197950647	0.782914262
36.76	-0.00748157	3.41622E-05	0.006621094	1.489746077	0.197964794	0.782914262
36.765	-0.005850803	2.60331E-05	0.00499194	1.123186388	0.197973446	0.782914262
36.77	-0.004461288	1.9063E-05	0.003599209	0.809822136	0.197978476	0.782914262
36.775	-0.00358738	1.46763E-05	0.002722915	0.612655977	0.197981728	0.782952456
36.78	-0.002843678	1.09221E-05	0.001973103	0.443948193	0.197983772	0.783366522
36.785	-0.003528298	1.43288E-05	0.002661249	0.598781013	0.197986919	0.783705983
36.79	-0.004275628	1.81202E-05	0.003426885	0.771049148	0.197991539	0.783970749
36.795	-0.003420148	1.38962E-05	0.002573653	0.579071881	0.197994495	0.784160863
36.8	-0.002192337	7.7836E-06	0.001346366	0.302932274	0.19799571	0.784276094
36.805	-0.000615607	-6.8091E-08	-0.000221161	-0.049761114	0.197995806	0.78431617
36.81	0.001911511	-1.26987E-05	-0.002741559	-0.616850733	0.197996729	0.78431617
36.815	0.00460457	-2.61877E-05	-0.005431646	-1.222120272	0.198002088	0.78431617
36.82	0.007780764	-4.2107E-05	-0.0086043	-1.935967537	0.198017389	0.78431617
36.825	0.011554564	-6.10692E-05	-0.012380407	-2.785591508	0.198051132	0.784382219
36.83	0.01454808	-7.61773E-05	-0.015386718	-3.462011528	0.198104624	0.784719171
36.835	0.016325214	-8.52024E-05	-0.017181648	-3.865870703	0.198171982	0.785043238
36.84	0.017118345	-8.92799E-05	-0.017992365	-4.048282201	0.198246045	0.785353744
36.845	0.017777929	-9.2637E-05	-0.018659717	-4.198436421	0.198325925	0.785650313
36.85	0.020070542	-0.000104151	-0.020947953	-4.713289429	0.198427736	0.786206631
36.855	0.023349185	-0.00012067	-0.024228585	-5.451431613	0.198565527	0.786849299
36.86	0.025249255	-0.000130329	-0.026145872	-5.882821226	0.198726655	0.787461356
36.865	0.026147867	-0.000134938	-0.027060489	-6.088610004	0.198899457	0.788041398
36.87	0.027639019	-0.000142494	-0.028559417	-6.425868805	0.19909253	0.788588585
36.875	0.02944314	-0.000151638	-0.030372708	-6.83385922	0.199311631	0.789101857
36.88	0.03095712	-0.00015934	-0.031899632	-7.17741713	0.199553844	0.789579993
36.885	0.032335821	-0.000166371	-0.033292935	-7.490910322	0.199818111	0.790335074
36.89	0.033453779	-0.000172109	-0.034429822	-7.746709918	0.200100968	0.791084018
36.895	0.034059101	-0.000175284	-0.035058793	-7.888228484	0.200394153	0.791778659
36.9	0.034329035	-0.000176777	-0.03535433	-7.954724234	0.200692004	0.792647821
36.905	0.034458056	-0.000177563	-0.035510103	-7.989773154	0.200992098	0.793680179
36.91	0.034429823	-0.000177571	-0.035511233	-7.990027422	0.201291701	0.794623404
36.915	0.033887158	-0.000175028	-0.034997406	-7.874416295	0.201581933	0.795477465

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
44.43969727	0.002404288	3.776415986
44.44580078	0.002820413	4.43947084
44.4519043	0.002785276	4.360296268
44.45800781	0.002460703	3.80367469
44.46411133	0.002287996	3.483542268
44.47021484	0.002279641	3.426373921
44.47631836	0.002640694	3.927523951
44.48242188	0.003364411	4.96138721
44.48852539	0.003741839	5.509474287
44.49462891	0.004171664	6.165208832
44.50073242	0.004507682	6.691730506
44.50683594	0.004135428	6.18625875
44.51293945	0.003413753	5.152597609
44.51904297	0.003210653	4.884685212
44.52514648	0.003306653	5.108244835
44.53125	0.002967008	4.689862077
44.53735352	0.002387969	3.842267382
44.54345703	0.00184468	3.006178476
44.54956055	0.001331132	2.20442368
44.55566406	0.000659342	1.108094281
44.56176758	0.000656782	1.121576711
44.56787109	0.000839717	1.471665944
44.57397461	0.000469157	0.842436141
44.58007813	0.000109543	0.199992195
44.58618164	0.000207082	0.385520817
44.59228516	0.000743353	1.41757525
44.59838867	0.001344696	2.633970083
44.60449219	0.001638897	3.277658265
44.6105957	0.001650037	3.311187197
44.61669922	0.001800192	3.613228894
44.62280273	0.002009543	4.064456437
44.62890625	0.00172162	3.499258742
44.63500977	0.000808087	1.645812685
44.64111328	0.000318088	0.649294838
44.6472168	0.001028838	2.105086784
44.65332031	0.001353631	2.799763668
44.65942383	0.001569844	3.282166762
44.66552734	0.001846146	3.817090185
44.67163086	0.001969566	3.98105197
44.67773438	0.001861669	3.73507808
44.68383789	0.001903445	3.835816008
44.68994141	0.002460959	4.930489507
44.69604492	0.003070987	6.040724727
44.70214844	0.003026535	5.85824614
44.70825195	0.002677133	5.124601861
44.71435547	0.00279637	5.2910308
44.72045898	0.003153741	5.91655438
44.7265625	0.003349755	6.285269674
44.73266602	0.003859902	7.2548599
44.73876953	0.004280189	7.990495972
44.74487305	0.00400449	7.400439243
44.75097656	0.003465618	6.343797904
44.75708008	0.003107006	5.609514115
44.76318359	0.003191672	5.680714467
44.76928711	0.00387134	6.77553502
44.77539063	0.004428146	7.552701732
44.78149414	0.004408689	7.345438278
44.78759766	0.00464256	7.614350883
44.79370117	0.005437254	8.784337858
44.79980469	0.005887328	9.386627533
44.8059082	0.0056842	8.973183165
44.81201172	0.005198955	8.173771953
44.81811523	0.004605069	7.23230918
44.82421875	0.003778994	5.870705589
44.83032227	0.002927308	4.517271325
44.83642578	0.002492036	3.906213688
44.8425293	0.002782492	4.444557711
44.84863281	0.003277898	5.266647321
44.85473633	0.003198314	5.119130419
44.86083984	0.002633743	4.199171146
44.86694336	0.002335856	3.776983576
44.87304688	0.002453344	4.071702799
44.87915039	0.002792739	4.721320716
44.88525391	0.003086545	5.318961985
44.89135742	0.002906046	5.114986022
44.89746094	0.002303517	4.135369479
44.90356445	0.001853091	3.326864636
44.90966797	0.001704834	3.232682462
44.91577148	0.001503113	2.891143407
44.921875	0.001221088	2.424532881
44.92797852	0.000854238	1.764215668
44.93408203	0.000650438	1.362721777
44.94018555	0.001175121	2.471977313
44.94628906	0.001476315	3.155213729
44.95239258	0.001461621	3.195510379
44.95849609	0.001535254	3.42412414
44.96459961	0.001688855	3.804799573
44.97070313	0.00189894	4.26663724
44.97680664	0.002136893	4.781340655
44.98291016	0.002221397	5.030610753
44.98901367	0.001741054	4.048199286
44.99511719	0.001002637	2.359409755
45.0012207	0.002329991	5.450853207
45.00732422	0.003061782	7.176159414
45.01342773	0.002258611	5.355842176
45.01953125	0.001155317	2.76095677
45.02563477	0.000760187	1.815219551
45.03173828	0.000557869	1.321215609
45.0378418	0.000879322	2.07166864
45.04394531	0.00161753	3.81247709
45.05004883	0.002078655	4.827065342
45.05615234	0.002452652	5.486378359
45.06225586	0.002949471	6.356110069
45.06835938	0.003116489	6.576498828

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
36.92	0.031969636	-0.000165608	-0.033095492	-7.446485665	0.201840249	0.796243263
36.925	0.028945352	-0.000150598	-0.03006741	-6.765167142	0.202052004	0.796923705
36.93	0.02674613	-0.000139689	-0.0278687	-6.270457498	0.202232804	0.797536613
36.935	0.024653853	-0.000129373	-0.02579059	-5.802882695	0.202386423	0.798089479
36.94	0.020122415	-0.00010695	-0.021277993	-4.787548493	0.202488761	0.798878797
36.945	0.014471715	-7.8917E-05	-0.015644238	-3.519953545	0.202541693	0.799633849
36.95	0.010056325	-5.6962E-05	-0.011237712	-2.528485141	0.202567253	0.80033389
36.955	0.005651415	-3.5065E-05	-0.006847716	-1.54073614	0.202575325	0.800985992
36.96	-0.00050348	-4.38263E-06	-0.000704344	-0.158477494	0.202575389	0.801597293
36.965	-0.007547583	3.08915E-05	0.00634724	1.428129095	0.202589786	0.802177221
36.97	-0.013261457	5.96419E-05	0.012086097	2.719371861	0.202634235	0.802736349
36.975	-0.017528879	8.11912E-05	0.016382585	3.686081714	0.202711893	0.803283527
36.98	-0.021476008	0.000101189	0.020365965	4.582342074	0.202828462	0.803825565
36.985	-0.02312595	0.00010973	0.022066213	4.964897972	0.20296363	0.804368177
36.99	-0.021189854	0.000100221	0.020145954	4.5328397	0.203077113	0.80491356
36.995	-0.019326765	9.09608E-05	0.018277113	4.112350531	0.203171518	0.805459193
37	-0.019142774	9.01399E-05	0.018111497	4.075086781	0.203264134	0.806002297
37.005	-0.017496152	8.20338E-05	0.016476669	3.707250443	0.203341502	0.806541873
37.01	-0.013704321	6.30985E-05	0.012661047	2.848735594	0.203388969	0.807075085
37.015	-0.010763337	4.835E-05	0.009692023	2.180705112	0.203418249	0.80759646
37.02	-0.009059249	3.98319E-05	0.007978355	1.795129942	0.203438991	0.808104873
37.025	-0.006053181	2.48044E-05	0.004957088	1.115344781	0.203448252	0.808598704
37.03	-0.002093205	5.08353E-06	0.000995892	0.224075733	0.203449359	0.809074126
37.035	0.000337754	-7.07147E-06	-0.001443579	-0.324805172	0.203449388	0.809526444
37.04	0.0023138	-1.69282E-05	-0.003420684	-0.769653846	0.203450741	0.809952366
37.045	0.005302503	-3.1847E-05	-0.006411299	-1.442542318	0.203457848	0.810349128
37.05	0.007461891	-4.26969E-05	-0.008584893	-1.931600936	0.20347192	0.810713204
37.055	0.008272353	-4.68267E-05	-0.009411905	-2.117678636	0.203489216	0.811041916
37.06	0.008984149	-5.04553E-05	-0.010138425	-2.281145597	0.203509616	0.811334667
37.065	0.009177135	-5.1516E-05	-0.010350698	-2.328907071	0.203530901	0.811599218
37.07	0.008744161	-4.94537E-05	-0.00993409	-2.235170301	0.203550226	0.811843796
37.075	0.008131391	-4.65025E-05	-0.009338059	-2.101063252	0.203566937	0.812069274
37.08	0.006549076	-3.87397E-05	-0.007770886	-1.748449377	0.203577777	0.812276075
37.085	0.003984903	-2.60714E-05	-0.005215209	-1.173422122	0.203581791	0.812465175
37.09	0.000874685	-1.0674E-05	-0.002111751	-0.475144002	0.203581984	0.812638133
37.095	-0.003588061	1.14293E-05	0.002338412	0.526142794	0.203585238	0.812796951
37.1	-0.008832781	3.75259E-05	0.007585503	1.706738126	0.203604956	0.812945703
37.105	-0.013016593	5.84314E-05	0.011783604	2.651310949	0.203647779	0.813090248
37.11	-0.016169154	7.42142E-05	0.014950008	3.363751731	0.203713856	0.813231878
37.115	-0.019152614	8.916E-05	0.017946184	4.037891512	0.203806567	0.813371586
37.12	-0.021612486	0.000101522	0.020422607	4.595086682	0.203924622	0.813510268
37.125	-0.023240132	0.000109747	0.02206968	4.965677907	0.204061129	0.813648654
37.13	-0.024491079	0.000116093	0.023332355	5.249779883	0.204212726	0.813787243
37.135	-0.025357437	0.000120526	0.024214352	5.448229248	0.204375238	0.813926395
37.14	-0.025600384	0.000121846	0.024477031	5.507332007	0.20454088	0.814066341
37.145	-0.025772208	0.000122792	0.024665068	5.549640207	0.204708752	0.814207144
37.15	-0.026054786	0.000124287	0.024962518	5.616566573	0.204880326	0.814392889
37.155	-0.026058761	0.000124381	0.024981258	5.62078314	0.205051952	0.814750819
37.16	-0.027001223	0.000129114	0.025922582	5.83258088	0.205236217	0.815248844
37.165	-0.02990451	0.000143663	0.028814752	6.483319186	0.205462238	0.815755519
37.17	-0.031893311	0.000153792	0.030827296	6.936141572	0.205719322	0.816245218
37.175	-0.029517272	0.000142215	0.028489385	6.410111562	0.205939528	0.81674896
37.18	-0.024812466	0.000118988	0.023804841	5.356089232	0.20609513	0.817266154
37.185	-0.023345995	0.000111708	0.02233812	5.02607708	0.206232883	0.817778227
37.19	-0.024164952	0.000115894	0.023183599	5.216309801	0.20638047	0.818318399
37.195	-0.0203733	9.72762E-05	0.019431964	4.372191879	0.206485376	0.818850057
37.2	-0.014108237	6.61316E-05	0.013168534	2.962920089	0.206535682	0.81935319
37.205	-0.012419968	5.76648E-05	0.01146761	2.580212256	0.206574669	0.819831471
37.21	-0.01058954	4.86439E-05	0.009656207	2.17264668	0.206603011	0.820303231
37.215	-0.004282295	1.7195E-05	0.003347762	0.753246351	0.206607645	0.820766902
37.22	-0.001079247	1.01863E-06	0.000106741	0.024016826	0.20660794	0.821219008
37.225	-0.001478324	2.93356E-06	0.000493584	0.111056332	0.206608492	0.821657495
37.23	0.001392845	-1.14199E-05	-0.00238364	-0.536319068	0.206608982	0.822082021
37.235	0.003978666	-2.44869E-05	-0.004998218	-1.124599027	0.206612983	0.822490996
37.24	0.003563476	-2.25268E-05	-0.00460225	-1.035506342	0.206616193	0.82288294
37.245	0.005344411	-3.14739E-05	-0.006395585	-1.43900659	0.206623412	0.823257653
37.25	0.006908585	-3.94514E-05	-0.007990479	-1.797857862	0.206635475	0.823614152
37.255	0.005382482	-3.19443E-05	-0.006474322	-1.456722493	0.206642797	0.823951634
37.26	0.006279783	-3.64412E-05	-0.007382662	-1.661099039	0.206652764	0.824270591
37.265	0.008363995	-4.69698E-05	-0.009493047	-2.135935489	0.206670445	0.824570522
37.27	0.007746469	-4.39981E-05	-0.008892741	-2.000866647	0.206685611	0.824850382
37.275	0.008924812	-4.99069E-05	-0.010079882	-2.267973389	0.206705742	0.825110183
37.28	0.011485952	-6.28155E-05	-0.01265808	-2.848067987	0.206739086	0.825349195
37.285	0.011666791	-6.38492E-05	-0.012863743	-2.894342238	0.206773487	0.825566085
37.29	0.013502156	-7.30804E-05	-0.014707177	-3.309114809	0.206819564	0.825762029
37.295	0.016483586	-8.81578E-05	-0.017715179	-3.985915281	0.206888236	0.825945001
37.3	0.015824925	-8.51093E-05	-0.017098043	-3.847059702	0.20695153	0.826115502
37.305	0.014892197	-8.06112E-05	-0.016189741	-3.642691743	0.207007582	0.82627359
37.31	0.014472379	-7.87323E-05	-0.015810427	-3.557346036	0.207060519	0.826419514
37.315	0.010826297	-6.08193E-05	-0.012196616	-2.744238709	0.207090142	0.826553542
37.32	0.007455612	-4.42004E-05	-0.008847566	-1.990702424	0.207104191	0.826676674
37.325	0.005386981	-3.40858E-05	-0.006810874	-1.532446716	0.207111525	0.82678992
37.33	0.000574162	-1.0318E-05	-0.002029508	-0.456639189	0.207111609	0.826894081
37.335	-0.00421364	1.34655E-05	0.002748855	0.618492438	0.207116096	0.82699055
37.34	-0.007361563	2.90783E-05	0.005882434	1.323547664	0.207129793	0.827080765
37.345	-0.01220722	5.31721E-05	0.010713315	2.410495908	0.207167455	0.827228729
37.35	-0.01720917	7.81516E-05	0.015715706	3.536033883	0.207242306	0.827553162
37.355	-0.021358973	9.89012E-05	0.019866442	4.469949412	0.207357608	0.827874957
37.36	-0.026810207	0.00012621	0.02532313	5.697704353	0.207539275	0.828196841
37.365	-0.031778629	0.000151216	0.030313508	6.820539386	0.207794514	0.82852204
37.37	-0.035456132	0.000169773	0.034000674	7.650151604	0.208112244	0.828853554
37.375	-0.039212251	0.000188746	0.037765272	8.497186162	0.208500859	0.829193738
37.38	-0.041782871	0.00020181	0.040355663	9.080024245	0.208942096	0.829544774
37.385	-0.043677892	0.000211463	0.042268799	9.510479808	0.209424265	0.829908236
37.39	-0.046145647	0.000224007	0.044753054	10.06943724	0.209962457	0.830295142
37.395	-0.047424088	0.00023062	0.046055616	10.36251362	0.210530883	0.830706602
37.4	-0.048150045	0.000234433	0.046806527	10.53146853	0.211116845	0.831218236
37.405	-0.049484971	0.000241327	0.048163944	10.83688731	0.211735748	0.831757279
37.41	-0.049309488	0.000240694	0.048030338	10.80682597	0.212350269	0.832274545
37.415	-0.047533954	0.000232019	0.046278524	10.41266796	0.212921332	0.832803615
37.42	-0.044578287	0.000217413	0.043331804	9.749655992	0.213423585	0.83355814
37.425	-0.039625604	0.000192969	0.038406001	8.641350198	0.213820437	0.834266024
37.43	-0.035636208	0.000173154	0.034418189	7.74409259	0.214141402	0.834901048
37.435	-0.034926998	0.000169608	0.033705085	7.583644191	0.21444972	0.835489714

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
45.07446289	0.002920528	6.104640556
45.08056641	0.002579348	5.318822266
45.08666992	0.002723664	5.458398184
45.09277344	0.003482061	6.727242218
45.09887695	0.003900259	7.354065522
45.10498047	0.003636756	6.789748269
45.11108398	0.003070816	5.633639107
45.1171875	0.002231141	3.981583347
45.12329102	0.001494757	2.610425384
45.12939453	0.001434069	2.466783814
45.13549805	0.00207072	3.522488892
45.14160156	0.003318811	5.576067299
45.14770508	0.003843489	6.333760039
45.15380859	0.003536023	5.800201902
45.15991211	0.002974744	4.968683183
45.16601563	0.00255527	4.317356899
45.17211914	0.002492011	4.228193917
45.17822266	0.002650142	4.567637523
45.18432617	0.002490548	4.358906411
45.19042969	0.001953379	3.459228931
45.1965332	0.001695092	3.046450343
45.20263672	0.001584575	2.861778645
45.20874023	0.001846578	3.339516243
45.21484375	0.002343086	4.278886706
45.22094727	0.002446887	4.507934026
45.22705078	0.002250387	4.195773314
45.2331543	0.002146018	4.072323914
45.23925781	0.002532571	4.860989065
45.24536133	0.003441237	6.722059745
45.25146484	0.003910688	7.856872617
45.25756836	0.003522401	7.227105926
45.26367188	0.002864322	6.00669058
45.26977539	0.002643996	5.694009158
45.27587891	0.003176481	6.981664873
45.28198242	0.003978907	8.990657247
45.28808594	0.003959326	9.241632518
45.29418945	0.003176217	7.519176151
45.30029297	0.002703847	6.45584337
45.30639648	0.002827836	6.896645918
45.3125	0.003355748	8.418223706
45.31860352	0.003795271	9.817572143
45.32470703	0.003732903	9.882390176
45.33081055	0.003213861	8.55404601
45.33691406	0.002754112	7.344782344
45.34301758	0.001959466	5.253395197
45.34912109	0.001316928	3.530253048
45.35522461	0.001898344	5.105675797
45.36132813	0.002037664	5.518376478
45.36743164	0.001560572	4.219631643
45.37353516	0.001028717	2.789049192
45.37963867	0.001296588	3.540032651
45.38574219	0.00230752	6.262952458
45.3918457	0.002637686	7.139803781
45.39794922	0.002405412	6.552876335
45.40405273	0.002148658	5.848736942
45.41015625	0.00143984	3.908057087
45.41625977	0.00052479	1.412880962
45.42236328	0.00042449	1.111984405
45.4284668	0.0009839	2.490329909
45.43457031	0.002210189	5.417069439
45.44067383	0.002744246	6.528012501
45.44677734	0.002469103	5.722092374
45.45288086	0.001966356	4.416198747
45.45898438	0.001375759	2.980588685
45.46508789	0.001058546	2.236593623
45.47119141	0.001850061	3.855793778
45.47729492	0.002861341	5.921468769
45.48339844	0.003461198	7.124398594
45.48950195	0.003786241	7.654805334
45.49560547	0.003655019	7.235022315
45.50170898	0.003017033	5.893789109
45.5078125	0.002344971	4.474172992
45.51391602	0.002248336	4.17921133
45.52001953	0.002757423	5.075900346
45.52612305	0.003188069	5.813821648
45.53222656	0.00325792	5.874740738
45.53833008	0.003280614	5.880956846
45.54443359	0.002792299	4.955462045
45.55053711	0.002008648	3.593365443
45.55664063	0.001929639	3.602435734
45.56274414	0.002607452	5.077984182
45.56884766	0.003010389	6.021052067
45.57495117	0.003090311	6.331892051
45.58105469	0.00296286	6.218918204
45.5871582	0.002324284	5.075816443
45.59326172	0.001933144	4.43716135
45.59936523	0.002291509	5.461010333
45.60546875	0.003093872	7.671797753
45.61157227	0.003678821	9.441156571
45.61767578	0.004008812	10.42359323
45.6237793	0.004374461	11.59088294
45.62988281	0.004459602	12.0574661
45.63598633	0.003905807	10.71336937
45.64208984	0.003260372	9.278329813
45.64819336	0.003380973	9.887437849
45.65429688	0.003872217	11.1383279
45.66040039	0.003727565	10.52617262
45.66650391	0.002958797	8.280341325
45.67260742	0.002156445	6.00587065
45.67871094	0.001414703	3.988845018
45.68481445	0.000735979	2.073409298
45.69091797	0.000515451	1.409893268
45.69702148	0.000804834	2.177302727
45.703125	0.000634619	1.743596625

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
37.44	-0.036199479	0.000175975	0.034991087	7.872994655	0.214780913	0.836343147
37.445	-0.037453845	0.000182369	0.036281903	8.163428202	0.215135456	0.837256926
37.45	-0.035019276	0.000170518	0.033888782	7.624976015	0.215445405	0.838144171
37.455	-0.028586281	0.000138616	0.027477765	6.182497215	0.215651938	0.83900644
37.46	-0.024599002	0.000118672	0.023475838	5.282063644	0.215804875	0.839835596
37.465	-0.025008099	0.000120687	0.02388328	5.373737925	0.21596294	0.840626404
37.47	-0.02436453	0.000117585	0.023257812	5.233007693	0.216112975	0.84139989
37.475	-0.020834176	0.000100047	0.019742082	4.441968396	0.216222681	0.842199721
37.48	-0.018842222	9.00519E-05	0.017739702	3.99143304	0.216312411	0.842968747
37.485	-0.020956973	0.000100567	0.019863114	4.469200573	0.216423414	0.843719398
37.49	-0.022384642	0.000107842	0.021331175	4.799514391	0.216550055	0.844467854
37.495	-0.018490541	8.86522E-05	0.017459388	3.928362292	0.216636468	0.845214677
37.5	-0.014692204	6.96326E-05	0.013652186	3.071741788	0.216691025	0.845957186
37.505	-0.015824264	7.52572E-05	0.014788241	3.327354135	0.216754313	0.8467355
37.51	-0.015581928	7.41918E-05	0.014572778	3.278875086	0.216815677	0.847583743
37.515	-0.010875544	5.07689E-05	0.009879616	2.222913626	0.216845571	0.848390697
37.52	-0.008325356	3.7926E-05	0.007313077	1.645442357	0.216863089	0.849151677
37.525	-0.008603466	3.93115E-05	0.007592985	1.708421539	0.216881797	0.849863826
37.53	-0.005887208	2.57862E-05	0.004888481	1.099908302	0.216890556	0.850549118
37.535	-0.001807912	5.26004E-06	0.00079201	0.178202188	0.216891383	0.851437963
37.54	-0.00159363	4.03305E-06	0.000552475	0.124306955	0.216892024	0.85227676
37.545	-0.002701395	9.5491E-06	0.001666419	0.374944242	0.216893869	0.853055637
37.55	-0.001286427	2.4357E-06	0.000229742	0.051691886	0.216894287	0.853774716
37.555	-0.001070251	1.22608E-06	-7.74878E-06	-0.001743476	0.216894577	0.854432579
37.56	-0.004224702	1.69778E-05	0.00317207	0.713715822	0.216899088	0.855029175
37.565	-0.005408483	2.29934E-05	0.004385522	0.986742458	0.216906481	0.855590657
37.57	-0.003810378	1.49997E-05	0.002771104	0.623498498	0.21691015	0.856135987
37.575	-0.0048392	2.01056E-05	0.003802418	0.855544094	0.216916069	0.856664347
37.58	-0.006897971	3.04937E-05	0.005897807	1.327006524	0.216928095	0.85717632
37.585	-0.005929895	2.57481E-05	0.004939253	1.111332008	0.216936982	0.857673075
37.59	-0.00478837	2.00616E-05	0.003791132	0.853004786	0.216942777	0.858154069
37.595	-0.004571252	1.90289E-05	0.003582685	0.806104169	0.216948058	0.858618442
37.6	-0.003272167	1.2582E-05	0.002281713	0.513385529	0.216950765	0.859065773
37.605	-0.002378018	8.13223E-06	0.001384084	0.311418879	0.216952194	0.859495145
37.61	-0.001823334	5.41838E-06	0.000836763	0.188271675	0.216953034	0.859905805
37.615	-5.75021E-05	-3.37044E-06	-0.000929246	-0.209080441	0.216953035	0.860297124
37.62	0.001121686	-9.25716E-06	-0.002102902	-0.473153015	0.216953353	0.860671375
37.625	0.001888097	-1.30376E-05	-0.002856456	-0.642702624	0.216954254	0.861033037
37.63	0.004108734	-2.41031E-05	-0.005061397	-1.13881433	0.216958521	0.861381603
37.635	0.006418274	-3.56684E-05	-0.007364762	-1.657071502	0.216968932	0.861716077
37.64	0.008067122	-4.39352E-05	-0.009010463	-2.027354218	0.21698538	0.86203538
37.645	0.009635686	-5.18098E-05	-0.01057752	-2.379941914	0.217008846	0.862338676
37.65	0.010542541	-5.63738E-05	-0.011485512	-2.584240256	0.217036937	0.86262524
37.655	0.011628857	-6.18148E-05	-0.012567741	-2.827741656	0.217071115	0.862894578
37.66	0.013477089	-7.11003E-05	-0.014414063	-3.243164275	0.217117021	0.863146128
37.665	0.014493154	-7.62508E-05	-0.015437842	-3.47351449	0.21717011	0.863379098
37.67	0.01471567	-7.74095E-05	-0.015668135	-3.52533048	0.217224841	0.863592995
37.675	0.015087317	-7.93066E-05	-0.016045149	-3.610158637	0.217282372	0.863787654
37.68	0.015357419	-8.06942E-05	-0.016320892	-3.672200708	0.217341981	0.863962912
37.685	0.015535768	-8.16221E-05	-0.01650529	-3.713690189	0.217402983	0.864118636
37.69	0.015343529	-8.07027E-05	-0.016319544	-3.671897487	0.217462484	0.86425476
37.695	0.014522364	-7.66124E-05	-0.015493394	-3.486013592	0.217515787	0.86437139
37.7	0.013652782	-7.22502E-05	-0.014612627	-3.287841185	0.217562897	0.864468884
37.705	0.012864827	-6.82731E-05	-0.013809878	-3.107222554	0.217604727	0.864549859
37.71	0.012895965	-6.83633E-05	-0.013828287	-3.111364676	0.217646759	0.864624223
37.715	0.014358163	-7.56366E-05	-0.015297135	-3.441855368	0.217698864	0.864692968
37.72	0.015683879	-8.22643E-05	-0.016632889	-3.74239999	0.217761034	0.864755898
37.725	0.016863289	-8.81355E-05	-0.017799356	-4.004855178	0.217832906	0.864812807
37.73	0.019494001	-0.000101276	-0.020409012	-4.592027746	0.217928952	0.864863487
37.735	0.02275402	-0.000117626	-0.023653942	-5.322137019	0.218059807	0.864907552
37.74	0.02569822	-0.000132426	-0.026589268	-5.98258541	0.218226717	0.864944524
37.745	0.028702534	-0.000147553	-0.029587611	-6.657212426	0.218434934	0.864973948
37.75	0.031142941	-0.000159895	-0.032032332	-7.207274795	0.218680064	0.864995385
37.755	0.03270784	-0.000167855	-0.033608608	-7.561936836	0.218950447	0.865008474
37.76	0.034050379	-0.000174696	-0.034962707	-7.866609085	0.219243482	0.865012975
37.765	0.035160377	-0.000180376	-0.036086776	-8.119524665	0.219555934	0.865012975
37.77	0.036127569	-0.00018534	-0.037068824	-8.340485509	0.219885812	0.865042679
37.775	0.037117175	-0.000190428	-0.03807522	-8.56692449	0.220234009	0.865110783
37.78	0.037535689	-0.000192672	-0.038519072	-8.666791131	0.220590103	0.865146872
37.785	0.037211097	-0.000191192	-0.038219986	-8.599496864	0.220940065	0.865152964
37.79	0.036418525	-0.000187356	-0.03744524	-8.425179082	0.221275278	0.865152964
37.795	0.034982321	-0.000180281	-0.036017008	-8.103826849	0.221584573	0.865152964
37.8	0.032956318	-0.000170215	-0.033986133	-7.646880035	0.22185908	0.865152964
37.805	0.031858322	-0.000164744	-0.032882892	-7.398650662	0.222115601	0.865152964
37.81	0.032796576	-0.000169501	-0.033843752	-7.614844155	0.222387453	0.865152964
37.815	0.033250163	-0.00017194	-0.034336137	-7.725630767	0.222666877	0.865152964
37.82	0.030226153	-0.000156976	-0.031316983	-7.04632121	0.222897786	0.865152964
37.825	0.025323252	-0.000132693	-0.026426809	-5.946032036	0.223059861	0.865152964
37.83	0.022214531	-0.000117217	-0.023313654	-5.245572254	0.223184585	0.865152964
37.835	0.021381266	-0.000113056	-0.02247712	-5.057352056	0.223300127	0.865152964
37.84	0.021027141	-0.000111342	-0.022132544	-4.979822447	0.223411875	0.865152964
37.845	0.0189508	-0.000101116	-0.020077795	-4.5175039	0.223502642	0.865152964
37.85	0.014759841	-8.0279E-05	-0.015893881	-3.57612329	0.223557703	0.865152964
37.855	0.012737414	-7.00936E-05	-0.013850407	-3.116341664	0.223598708	0.865152964
37.86	0.014755951	-8.0126E-05	-0.015876384	-3.572186421	0.223653739	0.865152964
37.865	0.014255168	-7.77767E-05	-0.015401502	-3.465337949	0.223705099	0.865152964
37.87	0.009158495	-5.24538E-05	-0.010313846	-2.320615455	0.223726298	0.865152964
37.875	0.00662782	-3.97217E-05	-0.00776315	-1.746708836	0.2237374	0.865152964
37.88	0.006819457	-4.06625E-05	-0.007953216	-1.789473663	0.223749154	0.865152964
37.885	0.004111412	-2.71857E-05	-0.005253292	-1.181990605	0.223753426	0.865152964
37.89	0.001075664	-1.19479E-05	-0.002204546	-0.496022868	0.223753719	0.865152964
37.895	0.001147988	-1.22124E-05	-0.002260352	-0.508579267	0.223754052	0.865152964
37.9	0.000807849	-1.05075E-05	-0.001916461	-0.43120366	0.223754217	0.865152964
37.905	-0.001130654	-7.90132E-07	2.6473E-05	0.005956423	0.22375454	0.865152964
37.91	-0.001595302	1.62984E-06	0.00050958	0.114655579	0.223755183	0.865152964
37.915	-0.000767076	-2.45264E-06	-0.000315034	-0.070882692	0.223755332	0.865152964
37.92	-0.001101594	-7.64562E-07	2.59887E-05	0.005847458	0.223755639	0.865152964
37.925	-0.001356535	5.8215E-07	0.000297977	0.067044876	0.223756104	0.865152964
37.93	0.000570188	-8.98199E-06	-0.001633317	-0.367496245	0.223756186	0.865152964
37.935	0.001564719	-1.3994E-05	-0.002644828	-0.595086383	0.223756805	0.865152964
37.94	0.000286528	-7.61205E-06	-0.001355833	-0.305062506	0.223756825	0.865152964
37.945	0.001503786	-1.36177E-05	-0.002568844	-0.577989967	0.223757397	0.865152964
37.95	0.003907127	-2.56687E-05	-0.004999636	-1.124918095	0.223761255	0.865152964
37.955	0.002763929	-2.00444E-05	-0.003863641	-0.869319179	0.223763186	0.865152964

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
45.70922852	0.000303589	0.846862073
45.71533203	0.000400979	1.141596149
45.72143555	0.00076572	2.238358853
45.72753906	0.001986827	5.89341716
45.73364258	0.002868524	8.655238579
45.73974609	0.002759128	8.458766132
45.74584961	0.001962225	5.894083603
45.75195313	0.001349531	3.966951852
45.75805664	0.001451453	4.356149464
45.76416016	0.002360084	7.233539902
45.77026367	0.002857669	8.588258381
45.77636719	0.002628946	7.587228386
45.7824707	0.002285323	6.359972322
45.78857422	0.001557938	4.252138587
45.79467773	0.000860479	2.319182976
45.80078125	0.001297321	3.401450611
45.80688477	0.001699524	4.28453079
45.81298828	0.001615896	3.916778301
45.8190918	0.002539825	5.940302599
45.82519531	0.003094358	6.977076478
45.83129883	0.003054153	6.610404618
45.83740234	0.002692129	5.671643592
45.84350586	0.002082427	4.358142015
45.84960938	0.002054127	4.265523886
45.85571289	0.002830681	5.796773028
45.86181641	0.003437276	6.950097614
45.86791992	0.003399803	6.802835483
45.87402344	0.003520938	7.077507357
45.88012695	0.00385572	7.869714757
45.88623047	0.003618544	7.384968526
45.89233398	0.003014523	6.119035766
45.8984375	0.002790399	5.690202186
45.90454102	0.003075456	6.31156215
45.91064453	0.003580915	7.468627615
45.91674805	0.004238045	9.066179305
45.92285156	0.004606188	10.03580808
45.92895508	0.004054643	9.08819474
45.93505859	0.003246999	7.539289215
45.94116211	0.003172327	7.481771687
45.94726563	0.003501645	8.494783477
45.95336914	0.003604922	9.241878607
45.95947266	0.003988892	10.67278473
45.96557617	0.004435173	12.25295767
45.97167969	0.004173263	11.77046076
45.9777832	0.003422284	9.636053655
45.98388672	0.002591715	7.44627051
45.98999023	0.001905642	5.735838041
45.99609375	0.001593425	4.94665042
46.00219727	0.001642776	5.277470697
46.00830078	0.00191177	6.434241291
46.0144043	0.002162996	7.552275979
46.02050781	0.002121161	7.739608353
46.02661133	0.001763061	6.646338281
46.03271484	0.001316098	5.004342311
46.03881836	0.001409497	5.645487844
46.04492188	0.00145083	6.2794384
46.05102539	0.000976662	4.260983264
46.05712891	0.000871087	3.707795506
46.06323242	0.001380518	5.753043072
46.06933594	0.002158407	8.723594108
46.07543945	0.002540296	10.24290825
46.08154297	0.002146144	8.717199337
46.08764648	0.001420819	5.570748776
46.09375	0.001050562	3.964113196
46.09985352	0.001299401	4.774296255
46.10595703	0.001930014	6.860595922
46.11206055	0.002504687	8.755506821
46.11816406	0.002696878	9.328970458
46.12426758	0.002786429	9.421538546
46.13037109	0.003027361	10.11949035
46.13647461	0.003063821	10.18915112
46.14257813	0.002465726	8.054138559
46.14868164	0.001796125	5.74794428
46.15478516	0.001913583	6.058494472
46.16088867	0.001898267	6.03873216
46.16699219	0.001522021	4.822785586
46.1730957	0.00131305	3.979484052
46.17919922	0.001135819	3.284586309
46.18530273	0.000822778	2.336104271
46.19140625	0.001197683	3.342582347
46.19750977	0.001740343	4.742583284
46.20361328	0.001948897	5.196465097
46.2097168	0.002053666	5.320491288
46.21582031	0.002270739	5.741026464
46.22192383	0.002174875	5.416641195
46.22802734	0.002155614	5.257422467
46.23413086	0.002659789	6.398266399
46.24023438	0.003143979	7.581279432
46.24633789	0.002983491	7.194354542
46.25244141	0.002608207	6.247367662
46.25854492	0.002974876	7.02252837
46.26464844	0.003795288	8.797210302
46.27075195	0.004399279	10.2290812
46.27685547	0.004454957	10.62477744
46.28295898	0.003893484	9.547506472
46.2890625	0.003242013	8.169408583
46.29516602	0.003091797	7.956380712
46.30126953	0.003140015	8.243927672
46.30737305	0.002740487	7.457451699
46.31347656	0.001993898	5.612364489
46.31958008	0.001780981	5.15599572
46.32568359	0.001857393	5.646057469
46.33178711	0.001954682	6.191333262
46.33789063	0.001962354	6.261408944

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
37.96	0.002165954	-1.70243E-05	-0.00325396	-0.73214108	0.223764372	0.865152964
37.965	0.004026712	-2.63288E-05	-0.005132744	-1.154867511	0.22376847	0.865152964
37.97	0.0038742	-2.56461E-05	-0.004994275	-1.123711953	0.223772263	0.865152964
37.975	0.003287262	-2.27259E-05	-0.004404491	-0.991010412	0.223774994	0.865152964
37.98	0.004121251	-2.69194E-05	-0.005251536	-1.181595686	0.223779287	0.865152964
37.985	0.003704489	-2.48981E-05	-0.004843221	-1.089724712	0.223782756	0.865152964
37.99	0.003475514	-2.37632E-05	-0.004614022	-1.038154925	0.223785808	0.865152964
37.995	0.004461256	-2.87322E-05	-0.005617267	-1.263885099	0.223790839	0.865152964
38	0.003843132	-2.574E-05	-0.005012826	-1.127885756	0.223794572	0.865152964
38.005	0.002385802	-1.85023E-05	-0.003551413	-0.799067882	0.22379601	0.865152964
38.01	0.00212869	-1.72366E-05	-0.00329594	-0.741586514	0.223797156	0.865152964
38.015	0.00208491	-1.70693E-05	-0.003262167	-0.733987468	0.223798254	0.865152964
38.02	0.00141081	-1.37584E-05	-0.002593975	-0.583644329	0.223798757	0.865152964
38.025	0.000806113	-1.07782E-05	-0.001992643	-0.448344601	0.223798921	0.865152964
38.03	0.000807731	-1.08359E-05	-0.002004364	-0.450981917	0.223799086	0.865152964
38.035	0.000483388	-9.29781E-06	-0.001693987	-0.381147036	0.223799145	0.865152964
38.04	-0.000681064	-3.56387E-06	-0.000537477	-0.120932292	0.223799263	0.865152964
38.045	-0.001846833	2.19235E-06	0.000622626	0.140090913	0.223800125	0.865152964
38.05	-0.002953408	7.65532E-06	0.001714376	0.38573458	0.223802329	0.865152964
38.055	-0.00389231	1.22817E-05	0.002638724	0.593712927	0.223806158	0.865152964
38.06	-0.005042396	1.79362E-05	0.003768199	0.847844817	0.223812584	0.865152964
38.065	-0.007291673	2.90828E-05	0.005993866	1.348619949	0.223826022	0.865152964
38.07	-0.009398035	3.95406E-05	0.008080948	1.81821319	0.223848345	0.865152964
38.075	-0.012443815	5.46623E-05	0.011097061	2.496838741	0.223887482	0.865152964
38.08	-0.017211699	7.86159E-05	0.015870493	3.570860856	0.223962354	0.865152964
38.085	-0.018396016	8.46806E-05	0.017077079	3.842342839	0.224047885	0.865152964
38.09	-0.017800525	8.16487E-05	0.016464676	3.704552041	0.224127969	0.865152964
38.095	-0.022327914	0.000104331	0.020989239	4.722578803	0.224253969	0.865388779
38.1	-0.026098418	0.000123437	0.024788656	5.577447621	0.224426118	0.865614177
38.105	-0.025455137	0.000120288	0.024152516	5.434316133	0.224589885	0.865824484
38.11	-0.027556585	0.000130845	0.026261017	5.908728729	0.224781808	0.866019585
38.115	-0.030399001	0.000145263	0.029125082	6.553143486	0.225015366	0.866198866
38.12	-0.029999278	0.000143366	0.028741886	6.466924355	0.225242822	0.866449895
38.125	-0.030726496	0.000147074	0.02948477	6.63407328	0.225481439	0.866807407
38.13	-0.031166298	0.000149408	0.029945925	6.737833181	0.225726936	0.86713185
38.135	-0.029574476	0.000141466	0.028341984	6.376946291	0.225947996	0.86742305
38.14	-0.030054632	0.000143897	0.028833077	6.487442233	0.226176293	0.867681654
38.145	-0.030242036	0.000144943	0.029044296	6.534966662	0.226407445	0.867907523
38.15	-0.028362515	0.000135538	0.027145567	6.107752537	0.226610758	0.86810067
38.155	-0.028568279	0.000136567	0.027353582	6.154555951	0.226817032	0.868261949
38.16	-0.028796927	0.000137795	0.027601584	6.210356468	0.227026621	0.868391401
38.165	-0.026976107	0.000128672	0.02576015	5.79603383	0.227210543	0.868489062
38.17	-0.027258123	0.000130051	0.026039242	5.85882951	0.227398331	0.868700899
38.175	-0.028728052	0.000137488	0.027540962	6.196716486	0.227606918	0.868895817
38.18	-0.028229561	0.000135038	0.027045958	6.085340544	0.22780833	0.869059108
38.185	-0.028721293	0.000137497	0.027542708	6.197109321	0.228016819	0.869190866
38.19	-0.031016191	0.000149085	0.029880929	6.723208987	0.228259957	0.869298044
38.195	-0.031661044	0.000152433	0.030548616	6.873438635	0.22851331	0.86940472
38.2	-0.031993402	0.000154157	0.030891007	6.95047652	0.228772011	0.869469504
38.205	-0.033837536	0.000163521	0.032749333	7.368599987	0.229061394	0.86951202
38.21	-0.033925081	0.000164115	0.032861582	7.393855949	0.229352276	0.869536932
38.215	-0.03279541	0.000158519	0.031731404	7.13956589	0.229624109	0.869544215
38.22	-0.0336003	0.000162646	0.032564971	7.327118548	0.229909449	0.869544215
38.225	-0.033442102	0.000162013	0.03243716	7.298360934	0.230192108	0.869544215
38.23	-0.031179115	0.000150751	0.030163368	6.786757732	0.230437807	0.869544215
38.235	-0.029933539	0.000144567	0.028915909	6.50607959	0.230664268	0.869544215
38.24	-0.027580025	0.000132856	0.026554534	5.974770216	0.230856517	0.869544215
38.245	-0.023343587	0.000111841	0.022321258	5.022282974	0.230994242	0.869544215
38.25	-0.022285557	0.000106509	0.021248107	4.78082418	0.231119764	0.869544215
38.255	-0.023354764	0.000111837	0.022324397	5.022989303	0.231257621	0.869544215
38.26	-0.022464286	0.000107479	0.021444079	4.824917785	0.231385165	0.869544215
38.265	-0.021099635	0.000100705	0.020080129	4.518028957	0.231497684	0.869544215
38.27	-0.021049747	0.000100438	0.020027044	4.506084985	0.231609672	0.869544215
38.275	-0.022196727	0.000106141	0.02117888	4.765248101	0.231734196	0.869544215
38.28	-0.023526899	0.000112819	0.022526909	5.068554441	0.231874092	0.869544215
38.285	-0.023254894	0.000111566	0.022273745	5.011592575	0.232010772	0.869544215
38.29	-0.022790174	0.000109314	0.021818878	4.90924753	0.232142044	0.869544215
38.295	-0.023382329	0.000112343	0.022430763	5.046921772	0.232280225	0.869544215
38.3	-0.022448939	0.000107847	0.021522684	4.842603801	0.232407596	0.869544215
38.305	-0.020270124	9.71184E-05	0.019358697	4.355706769	0.232511441	0.869544215
38.31	-0.018928387	9.05318E-05	0.01803407	4.057665811	0.232601994	0.869544215
38.315	-0.016844636	8.02906E-05	0.015975423	3.594470249	0.232673708	0.869544215
38.32	-0.013639366	6.44395E-05	0.012791265	2.878034691	0.232720726	0.869544215
38.325	-0.011112281	5.19192E-05	0.010278081	2.31256822	0.232751935	0.869544215
38.33	-0.008701837	3.99861E-05	0.007884237	1.773953394	0.232771073	0.869544215
38.335	-0.005881905	2.59996E-05	0.005080311	1.143070014	0.232779817	0.869544215
38.34	-0.003439659	1.38681E-05	0.002649839	0.596213772	0.232782807	0.869544215
38.345	-0.000980772	1.64716E-06	0.000202904	0.04565334	0.23278305	0.869544215
38.35	0.001369961	-1.00683E-05	-0.002141458	-0.481828012	0.232783525	0.869544215
38.355	0.002694292	-1.66977E-05	-0.003467477	-0.780182317	0.232785359	0.869544215
38.36	0.003707841	-2.17649E-05	-0.004480743	-1.008167266	0.232788834	0.869544215
38.365	0.004796455	-2.72113E-05	-0.005569565	-1.253152204	0.232794649	0.869544215
38.37	0.005278416	-2.96419E-05	-0.006055376	-1.362459557	0.23280169	0.869544215
38.375	0.005939515	-3.29392E-05	-0.006714345	-1.510727518	0.232810607	0.869544215
38.38	0.007007049	-3.82723E-05	-0.007779959	-1.75049078	0.232823016	0.869544215
38.385	0.007303315	-3.97796E-05	-0.008081082	-1.818243396	0.232836497	0.869544215
38.39	0.007766831	-4.20824E-05	-0.008541089	-1.921744964	0.232851743	0.869544215
38.395	0.009113607	-4.87909E-05	-0.009880912	-2.223205144	0.232872735	0.869544215
38.4	0.009592848	-5.12183E-05	-0.010365601	-2.332260218	0.232895993	0.869544215
38.405	0.009490077	-5.07141E-05	-0.010263732	-2.309339797	0.232918755	0.869544215
38.41	0.010283127	-5.46406E-05	-0.011048865	-2.485994633	0.232945481	0.869544215
38.415	0.011209065	-5.92454E-05	-0.01196804	-2.692808931	0.232977236	0.869544215
38.42	0.011945497	-6.29024E-05	-0.012697879	-2.857022778	0.233013301	0.869544215
38.425	0.012735133	-6.68199E-05	-0.013479565	-3.032902159	0.233054291	0.869544215
38.43	0.013312651	-6.96701E-05	-0.01404821	-3.16084721	0.233099084	0.869544215
38.435	0.014631987	-7.61887E-05	-0.015348444	-3.453399937	0.233153194	0.869544215
38.44	0.016267031	-8.4312E-05	-0.016968222	-3.817849876	0.233220074	0.869544215
38.445	0.016581055	-8.58743E-05	-0.017279664	-3.887924488	0.23328956	0.869544215
38.45	0.01731944	-8.94891E-05	-0.018000223	-4.050050236	0.233365373	0.869544215
38.455	0.019575022	-0.000100669	-0.020227923	-4.551282705	0.233462219	0.869544215
38.46	0.020749631	-0.000106535	-0.021396443	-4.814199599	0.233571036	0.869544215
38.465	0.020684322	-0.000106206	-0.021330018	-4.799253959	0.233679169	0.869544215
38.47	0.021582779	-0.000110631	-0.022212193	-4.997743485	0.2337969	0.869544215
38.475	0.023053486	-0.000117934	-0.02366599	-5.324847789	0.233931223	0.869544215

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
46.34399414	0.001830314	5.925628895
46.35009766	0.00137279	4.590515316
46.35620117	0.000692581	2.410106477
46.36230469	0.000246727	0.910016247
46.3684082	0.000271031	1.044090535
46.37451172	0.000648206	2.512627496
46.38061523	0.000730035	2.879405083
46.38671875	0.0004419	1.801647152
46.39282227	0.000392345	1.650713355
46.39892578	0.001089063	4.737963587
46.4050293	0.002055273	8.988247794
46.41113281	0.002700422	11.69011858
46.41723633	0.002466852	10.83234608
46.42333984	0.001378559	6.084838064
46.42944336	0.000682873	3.012637634
46.43554688	0.001159075	5.289982143
46.44165039	0.001930211	9.17187383
46.44775391	0.001940513	9.422483435
46.45385742	0.00118156	5.731149319
46.45996094	0.00126313	5.873666243
46.46606445	0.001699495	7.546172919
46.47216797	0.001896668	8.342904613
46.47827148	0.0015036	6.526122031
46.484375	0.001019319	4.217781082
46.49047852	0.001340039	5.249779487
46.49658203	0.001932175	7.152647129
46.50268555	0.002234648	7.836779117
46.50878906	0.002256543	7.59994687
46.51489258	0.002158669	6.957644775
46.52099609	0.002088177	6.49876473
46.52709961	0.002283284	7.074927515
46.53320313	0.002348971	7.156343626
46.53930664	0.001897496	5.491868821
46.54541016	0.001336025	3.670511267
46.55151367	0.001421493	3.756647041
46.55761719	0.001403641	3.640079061
46.5637207	0.000958049	2.465204934
46.56982422	0.000547541	1.366588386
46.57592773	0.000685476	1.647655025
46.58203125	0.000868776	2.06635746
46.58813477	0.001129735	2.71852851
46.59423828	0.0014333	3.515449689
46.6003418	0.001252826	3.117153767
46.60644531	0.000703484	1.762930495
46.61254883	0.001087745	2.760792055
46.61865234	0.001130092	2.878054413
46.62475586	0.001425882	3.563891528
46.63085938	0.001642457	4.049855901
46.63696289	0.001177311	2.897207067
46.64306641	0.000896595	2.213875738
46.64916992	0.001024812	2.546521965
46.65527344	0.001111581	2.729663102
46.66137695	0.001137054	2.75907979
46.66748047	0.001049496	2.629166178
46.67358398	0.000884097	2.338303308
46.6796875	0.001178533	3.225897071
46.68579102	0.001700363	4.76410826
46.69189453	0.002056649	5.857266703
46.69799805	0.002312802	6.676461781
46.70410156	0.002492175	7.424449162
46.71020508	0.002497438	7.641299271
46.71630859	0.002266819	6.940157526
46.72241211	0.00184001	5.695770814
46.72851563	0.001500774	4.873287642
46.73461914	0.001763182	6.039480853
46.74072266	0.002263173	7.868064864
46.74682617	0.002338284	8.176334377
46.75292969	0.001947477	7.217185833
46.7590332	0.001800961	7.3194601
46.76513672	0.002074847	8.947275361
46.77124023	0.002117095	9.205319734
46.77734375	0.001901888	8.144416707
46.78344727	0.001796408	7.742321787
46.78955078	0.001765926	7.977207006
46.7956543	0.001084344	5.03839762
46.80175781	0.000367575	1.662583502
46.80786133	0.000820325	3.668938797
46.81396484	0.000962409	4.413568387
46.82006836	0.001331171	6.132111203
46.82617188	0.002089793	9.346496585
46.83227539	0.002200417	9.513149492
46.83837891	0.001298092	5.388657616
46.84448242	0.000614929	2.468663448
46.85058594	0.001012232	3.990093788
46.85668945	0.001908684	7.162199412
46.86279297	0.002381966	8.23949274
46.86889648	0.002050168	6.668508066
46.875	0.001322237	4.126837627
46.88110352	0.000964565	2.889226877
46.88720703	0.001187251	3.411213133
46.89331055	0.001147517	3.155474469
46.89941406	0.000828433	2.189084042
46.90551758	0.000514337	1.319461903
46.91162109	0.000545698	1.361077194
46.91772461	0.001119612	2.720863286
46.92382813	0.001593986	3.77566577
46.92993164	0.001480312	3.396306056
46.93603516	0.001334383	2.9862086
46.94213867	0.001941434	4.26284001
46.94824219	0.002497181	5.338836848
46.9543457	0.002750622	5.799850423
46.96044922	0.002718708	5.797586995
46.96655273	0.002444394	5.281690694
46.97265625	0.002510465	5.472574759

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
38.48	0.023685084	-0.000121091	-0.024294477	-5.466257336	0.234073006	0.869544215
38.485	0.02388238	-0.000122073	-0.02448988	-5.51022307	0.234217162	0.869544215
38.49	0.024466682	-0.000124975	-0.025067535	-5.640195479	0.234368457	0.869544215
38.495	0.0246243	-0.000125785	-0.025227724	-5.676237983	0.234521708	0.869544215
38.5	0.023814628	-0.000121771	-0.024416932	-5.49380975	0.234665047	0.869544215
38.505	0.023630805	-0.000120831	-0.024227233	-5.451127313	0.234806181	0.869544215
38.51	0.023990633	-0.000122628	-0.024590214	-5.532798199	0.234951647	0.869544215
38.515	0.02295809	-0.000117526	-0.023559814	-5.300958224	0.23508486	0.869544215
38.52	0.021565922	-0.000110586	-0.022159065	-4.985789699	0.235202407	0.869544215
38.525	0.021126702	-0.000108373	-0.021712549	-4.885323491	0.235315215	0.869544215
38.53	0.02035238	-0.000104514	-0.020934087	-4.710169599	0.235419905	0.869544215
38.535	0.01927756	-9.91409E-05	-0.019850464	-4.466354298	0.23551383	0.869544215
38.54	0.018578418	-9.56243E-05	-0.01914148	-4.306832981	0.235601065	0.869544215
38.545	0.017783913	-9.16242E-05	-0.018335189	-4.125417585	0.235680999	0.869544215
38.55	0.017531196	-9.02923E-05	-0.018066772	-4.065023754	0.235758677	0.869544215
38.555	0.018075531	-9.29279E-05	-0.018599178	-4.184815102	0.235841254	0.869544215
38.56	0.018729022	-9.61094E-05	-0.019241708	-4.329384342	0.23592991	0.869544215
38.565	0.019907708	-0.000101893	-0.020409244	-4.59207993	0.236030075	0.869544215
38.57	0.021728674	-0.000110879	-0.02222257	-5.000078151	0.236149403	0.869544215
38.575	0.024136898	-0.000122792	-0.024624677	-5.540552264	0.236296648	0.869544215
38.58	0.027251596	-0.000138243	-0.027706955	-6.234064829	0.236484346	0.869544215
38.585	0.030109641	-0.000152462	-0.030533984	-6.870146337	0.236713479	0.869544215
38.59	0.032690095	-0.000165308	-0.033086541	-7.444471749	0.236983568	0.869544215
38.595	0.035524709	-0.000179421	-0.035889124	-8.075052978	0.237302529	0.869544215
38.6	0.038517862	-0.000194317	-0.038844303	-8.73996811	0.237677502	0.869544215
38.605	0.043301146	-0.000218549	-0.043634054	-9.817662215	0.238151389	0.869544215
38.61	0.049896735	-0.00025212	-0.050261428	-11.30882122	0.238780635	0.869544215
38.615	0.053610841	-0.000271259	-0.054035798	-12.15805466	0.239507044	0.869544215
38.62	0.053132351	-0.000269085	-0.053594607	-12.05878653	0.240220544	0.869544215
38.625	0.052957171	-0.000268315	-0.05343922	-12.02382452	0.240929347	0.869544215
38.63	0.055162971	-0.000279615	-0.055682697	-12.52860685	0.241698426	0.869544215
38.635	0.057521026	-0.000291735	-0.058070605	-13.06588603	0.242534663	0.869544215
38.64	0.0596812	-0.000302832	-0.06025582	-13.55755949	0.243434887	0.8695471
38.645	0.064139039	-0.000325677	-0.064739437	-14.56637338	0.244474618	0.869570075
38.65	0.06893817	-0.00035053	-0.069606543	-15.66147227	0.245675763	0.869584962
38.655	0.068333182	-0.000347879	-0.069052289	-15.53676504	0.246855918	0.869592245
38.66	0.063886877	-0.000326101	-0.064658128	-14.54807874	0.24788749	0.86959294
38.665	0.06243597	-0.000319041	-0.063234929	-14.22785912	0.248872738	0.86959294
38.67	0.062805337	-0.000321096	-0.063650113	-14.32127537	0.249869678	0.869598864
38.675	0.060875771	-0.000311794	-0.061774806	-13.89933124	0.250806301	0.869630898
38.68	0.058343073	-0.000299454	-0.059289718	-13.34018651	0.25166661	0.869641501
38.685	0.055993554	-0.000288032	-0.056991224	-12.82302543	0.252459024	0.869641501
38.69	0.052755372	-0.000272207	-0.053808919	-12.10700686	0.253162435	0.869641501
38.695	0.049208061	-0.000254846	-0.050321016	-11.32222863	0.253774431	0.869641501
38.7	0.044260877	-0.000230429	-0.045420655	-10.21964732	0.254269557	0.869641501
38.705	0.038606439	-0.000202394	-0.039801744	-8.955392382	0.254646257	0.869641501
38.71	0.033824793	-0.000178718	-0.035062336	-7.889025596	0.254935422	0.869641501
38.715	0.025167933	-0.000135674	-0.026460003	-5.953500783	0.255095515	0.869641501
38.72	0.01201966	-6.98008E-05	-0.013327925	-2.998783159	0.255132029	0.869990183
38.725	0.00099107	-1.41883E-05	-0.002271454	-0.511077045	0.255132277	0.870556892
38.73	-0.007439229	2.85308E-05	0.006203527	1.395793516	0.255146264	0.871011843
38.735	-0.012144235	5.26357E-05	0.010978838	2.470238496	0.255183539	0.871378813
38.74	-0.008666674	3.55799E-05	0.007535513	1.6954905	0.255202523	0.871662625
38.745	-0.006251085	2.34602E-05	0.005091199	1.145519736	0.255212399	0.871863917
38.75	-0.014562432	6.47414E-05	0.013375224	3.009425428	0.255265996	0.871983096
38.755	-0.023429704	0.000109828	0.022289738	5.015191133	0.255404739	0.872018065
38.76	-0.024897652	0.000117567	0.023818083	5.359068777	0.255561411	0.872018065
38.765	-0.023813435	0.000112223	0.02273868	5.116202985	0.255704736	0.872018065
38.77	-0.024448435	0.000115469	0.023394391	5.263738039	0.255855806	0.872018065
38.775	-0.028387507	0.000135465	0.02735119	6.15401786	0.256059477	0.872018065
38.78	-0.032465327	0.000156364	0.031473355	7.081504985	0.256325866	0.872018065
38.785	-0.030499865	0.000146662	0.029514114	6.640675672	0.256560976	0.872018065
38.79	-0.027256822	0.000130607	0.02627489	5.911850284	0.256748746	0.872018065
38.795	-0.029764174	0.000143039	0.028785115	6.476650986	0.256972651	0.872018065
38.8	-0.030685772	0.000147822	0.029749943	6.693737153	0.257210636	0.87201838
38.805	-0.025811669	0.000123788	0.024900224	5.602550324	0.257379023	0.872019575
38.81	-0.023489759	0.000112206	0.022566534	5.077470156	0.257518478	0.872019575
38.815	-0.024154762	0.000115542	0.023240366	5.229082353	0.25766594	0.872019575
38.82	-0.021015476	0.000100045	0.020117852	4.52651674	0.257777564	0.872019575
38.825	-0.017746272	8.3721E-05	0.016833729	3.78758913	0.257857159	0.872057575
38.83	-0.01797749	8.48171E-05	0.017055418	3.837469003	0.257938843	0.872196952
38.835	-0.01628625	7.64445E-05	0.015370743	3.458417069	0.25800588	0.872302951
38.84	-0.013547581	6.27542E-05	0.012619759	2.839445735	0.258052268	0.872374032
38.845	-0.014077632	6.52982E-05	0.013133937	2.955135736	0.258102356	0.872545634
38.85	-0.013868248	6.42686E-05	0.012925889	2.908325121	0.258150965	0.872730346
38.855	-0.011789369	5.38871E-05	0.010839031	2.438781918	0.258186093	0.872873471
38.86	-0.011938425	5.45344E-05	0.010971498	2.468587139	0.258222116	0.872977077
38.865	-0.012644053	5.80273E-05	0.011676919	2.627306777	0.258262522	0.87304034
38.87	-0.011586446	5.27519E-05	0.010611399	2.387564871	0.258296451	0.87306308
38.875	-0.011140929	5.04635E-05	0.010151716	2.284136212	0.258327822	0.87306308
38.88	-0.011938178	5.4384E-05	0.010943624	2.462315395	0.258363842	0.87306308
38.885	-0.011690316	5.31424E-05	0.010692776	2.405874665	0.258398383	0.87306308
38.89	-0.010610516	4.77041E-05	0.009597827	2.15951102	0.258426837	0.87306308
38.895	-0.011479751	5.19136E-05	0.010448094	2.350821218	0.258460144	0.87306308
38.9	-0.013169986	6.02641E-05	0.012133934	2.730135049	0.258503982	0.873163063
38.905	-0.013277501	6.07339E-05	0.012228699	2.751457337	0.258548538	0.873254935
38.91	-0.015193706	7.01092E-05	0.014120234	3.177052698	0.258606883	0.873333698
38.915	-0.019567781	9.17392E-05	0.01847984	4.157964027	0.258703657	0.873398728
38.92	-0.022511223	0.000106328	0.021417053	4.818836962	0.258831735	0.873448807
38.925	-0.026497806	0.000126059	0.025385942	5.711837043	0.259009193	0.873524673
38.93	-0.032683432	0.000156875	0.031574105	7.10417355	0.259279173	0.87366524
38.935	-0.036551862	0.000176614	0.035464144	7.979432298	0.259616845	0.873781633
38.94	-0.039514189	0.000191723	0.038439533	8.648894844	0.260011468	0.873887284
38.945	-0.043057066	0.000209824	0.042001952	9.450439145	0.260480027	0.873983118
38.95	-0.044004482	0.000214789	0.042978546	9.670172757	0.260969434	0.874068652
38.955	-0.043402346	0.000211803	0.042375511	9.534490082	0.261445538	0.874143721
38.96	-0.043017079	0.000209845	0.041979908	9.445479409	0.261913228	0.874208389
38.965	-0.044160424	0.0002155	0.043118537	9.701670847	0.262406109	0.874262703
38.97	-0.05264314	0.000258463	0.051561431	11.60132203	0.263106531	0.874306391
38.975	-0.067733434	0.00033556	0.066676727	15.00226363	0.264266061	0.874384122
38.98	-0.078366711	0.000390541	0.077422084	17.41996879	0.265818231	0.874465084
38.985	-0.077434615	0.000386416	0.076552986	17.22442177	0.267333697	0.874516594
38.99	-0.069745674	0.00034857	0.068922807	15.50763158	0.268563146	0.874561628
38.995	-0.068069026	0.000340208	0.067241242	15.12927935	0.269734194	0.874585982

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
46.97875977	0.002764958	6.072887355
46.98486328	0.002831247	6.186087832
46.9909668	0.002481473	5.40921038
46.99707031	0.0018817	4.192545596
47.00317383	0.001809737	4.147457684
47.00927734	0.002106438	4.890639374
47.01538086	0.002590605	6.02038457
47.02148438	0.002976933	6.89314884
47.02758789	0.002845793	6.615107543
47.03369141	0.00248769	5.898703645
47.03979492	0.002475596	6.017439758
47.04589844	0.002669345	6.63106298
47.05200195	0.00277194	7.027679085
47.05810547	0.003313404	8.527681053
47.06420898	0.004092782	10.61271417
47.0703125	0.004310197	11.20247683
47.07641602	0.004014807	10.5120426
47.08251953	0.003472589	9.297260785
47.08862305	0.002622839	7.195555289
47.09472656	0.001724244	4.81692269
47.10083008	0.001220797	3.444034204
47.10693359	0.00102892	2.885553014
47.11303711	0.000855584	2.427831318
47.11914063	0.001045751	3.114956646
47.12524414	0.001544985	4.789768702
47.13134766	0.001846809	5.882994771
47.13745117	0.001761766	5.793356407
47.14355469	0.001438425	4.805791532
47.1496582	0.00158758	5.494696366
47.15576172	0.001947309	7.238788223
47.16186523	0.002060003	7.892680617
47.16796875	0.002083235	7.836146469
47.17407227	0.001913042	7.131873604
47.18017578	0.001268127	4.711048253
47.1862793	0.000474746	1.740707055
47.19238281	0.000494215	1.775987466
47.19848633	0.00107293	3.740396355
47.20458984	0.001342787	4.504295408
47.21069336	0.001210703	3.878959805
47.21679688	0.001276417	3.854106097
47.22290039	0.001730321	4.879973648
47.22900391	0.002018459	5.33306808
47.23510742	0.001625434	4.094918077
47.24121094	0.000837812	2.070500596
47.24731445	0.000237243	0.578403404
47.25341797	0.000525902	1.224438125
47.25952148	0.001482406	3.238334437
47.265625	0.002070557	4.340942922
47.27172852	0.001920898	3.989997256
47.27783203	0.00130556	2.700325066
47.28393555	0.000900167	1.811396561
47.29003906	0.000896941	1.738940892
47.29614258	0.000858548	1.636083403
47.30224609	0.000513213	0.971736761
47.30834961	0.000920241	1.708162575
47.31445313	0.00162073	2.941085178
47.32055664	0.001848266	3.345238533
47.32666016	0.002094379	3.841799834
47.33276367	0.002795773	5.172595665
47.33886719	0.003587651	6.581578345
47.3449707	0.004409787	7.960738678
47.35107422	0.005362212	9.678742367
47.35717773	0.006032961	11.09142508
47.36328125	0.006026061	11.20492548
47.36938477	0.00548068	10.14504236
47.37548828	0.004642754	8.581344832
47.3815918	0.003846681	7.189115334
47.38769531	0.00331509	6.323102347
47.39379883	0.00304409	5.906690311
47.39990234	0.003461439	6.748871632
47.40600586	0.003855069	7.569674071
47.41210938	0.003188501	6.427085881
47.41821289	0.002161664	4.527111401
47.42431641	0.002085781	4.500694809
47.43041992	0.002980825	6.535363334
47.43652344	0.003636284	8.146732671
47.44262695	0.003278091	7.615591579
47.44873047	0.002349144	5.632120896
47.45483398	0.001621517	3.948834669
47.4609375	0.001281173	3.155588131
47.46704102	0.001290432	3.244589085
47.47314453	0.001717921	4.490710493
47.47924805	0.002429414	6.610879148
47.48535156	0.003040377	8.330769469
47.49145508	0.003318559	8.995803399
47.49755859	0.003445752	9.446117027
47.50366211	0.003557962	9.981045056
47.50976563	0.003435354	9.708700641
47.51586914	0.003074475	8.616765147
47.52197266	0.002789358	7.675128253
47.52807617	0.002748739	7.451898124
47.53417969	0.002740155	7.430097777
47.5402832	0.002330328	6.230848152
47.54638672	0.001617318	4.122734117
47.55249023	0.001308101	3.176079084
47.55859375	0.001491229	3.519495738
47.56469727	0.001306413	3.025263155
47.57080078	0.000844889	1.914999873
47.5769043	0.001109753	2.44207538
47.58300781	0.000559037	1.185509209
47.58911133	0.00041471	0.844512147
47.59521484	0.00040964	0.799458635
47.60131836	0.001067814	2.004954233
47.60742188	0.002313453	4.212455617

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
39	-0.075532855	0.000377361	0.074735282	16.81543835	0.271176136	0.874707401
39.005	-0.07869299	0.000393584	0.078002092	17.5504708	0.272741258	0.87486531
39.01	-0.071334549	0.000357538	0.07072977	15.91419821	0.274027361	0.874995196
39.015	-0.064695595	0.00032464	0.064107035	14.42408291	0.275085214	0.875066505
39.02	-0.065270275	0.000327586	0.064703439	14.55827376	0.276161944	0.875095084
39.025	-0.064860723	0.000325875	0.064357759	14.48049571	0.277225204	0.875326816
39.03	-0.05758962	0.000289954	0.057137715	12.85598582	0.278063436	0.875623292
39.035	-0.05353696	0.00026973	0.05308015	11.94303379	0.278787844	0.875842211
39.04	-0.057808472	0.000291113	0.057396334	12.91417509	0.279632459	0.876095298
39.045	-0.05534731	0.000279463	0.055043536	12.38479549	0.280406687	0.87649167
39.05	-0.042957758	0.000218006	0.04272097	9.612218178	0.280873088	0.876932679
39.055	-0.033683876	0.000171673	0.033463333	7.529250013	0.281159849	0.877266751
39.06	-0.023944738	0.000122998	0.02375905	5.345786225	0.281304758	0.877521803
39.065	-0.00870437	4.63007E-05	0.008510595	1.914883843	0.281323907	0.877746335
39.07	0.000595193	-9.84834E-07	-0.000865158	-0.194660593	0.281323997	0.878018299
39.075	0.002131548	-9.0511E-06	-0.002462653	-0.554096983	0.281325145	0.8781759
39.08	0.002646877	-1.1865E-05	-0.00301981	-0.679457342	0.281326916	0.878276267
39.085	-0.000487978	3.58413E-06	9.92737E-05	0.02233658	0.281326976	0.878327872
39.09	-0.004089335	2.15554E-05	0.003723358	0.837755511	0.281331203	0.878549905
39.095	0.001218223	-4.58793E-06	-0.001552817	-0.349383929	0.281331578	0.879421239
39.1	0.007458547	-3.61979E-05	-0.007835	-1.76287493	0.281345638	0.880207641
39.105	0.002613422	-1.23042E-05	-0.003012462	-0.677803926	0.281347364	0.880906649
39.11	-0.002465988	1.31287E-05	0.002112464	0.475304489	0.281348901	0.881518601
39.115	0.004772933	-2.25511E-05	-0.005086053	-1.14436192	0.281354659	0.882043976
39.12	0.009684415	-4.73499E-05	-0.010040208	-2.259046894	0.281378363	0.882480525
39.125	0.002530856	-1.20216E-05	-0.002912543	-0.655322225	0.281379981	0.882826711
39.13	-0.000337236	2.4821E-06	8.8655E-06	0.001994737	0.28138001	0.883083969
39.135	0.004732554	-2.25506E-05	-0.005043284	-1.134738893	0.281385671	0.883253011
39.14	0.004861348	-2.33024E-05	-0.005193242	-1.168479387	0.281391644	0.883332808
39.145	0.001685932	-7.52276E-06	-0.002008514	-0.451915611	0.281392362	0.883339208
39.15	0.001303208	-5.52266E-06	-0.001605259	-0.361183346	0.281392791	0.883339208
39.155	0.001213697	-5.03638E-06	-0.001507021	-0.339079769	0.281393164	0.883339208
39.16	-0.000343415	2.72853E-06	5.86327E-05	0.01319235	0.281393194	0.883339208
39.165	-0.00187627	1.04458E-05	0.001612134	0.362730136	0.281394083	0.883339208
39.17	-0.000819944	5.33794E-06	0.000580473	0.130606396	0.281394253	0.883339208
39.175	-0.000189837	2.22491E-06	-4.79473E-05	-0.010788153	0.281394262	0.883339208
39.18	-0.003191572	1.71945E-05	0.002970105	0.66827373	0.281396837	0.883339208
39.185	-0.001942884	1.12387E-05	0.00176582	0.397309511	0.281397791	0.883339208
39.19	0.002584321	-1.11706E-05	-0.002754833	-0.619837325	0.281399479	0.883339208
39.195	0.000976855	-3.20861E-06	-0.001146899	-0.258052302	0.28139972	0.883339208
39.2	0.002004333	-8.07858E-06	-0.002130684	-0.479403891	0.281400735	0.883339208
39.205	0.008557016	-4.05932E-05	-0.008680778	-1.95317504	0.281419242	0.883339208
39.21	0.008015604	-3.80078E-05	-0.008155682	-1.835028545	0.28143548	0.883339208
39.215	0.007779919	-3.66565E-05	-0.007883461	-1.773778672	0.281450778	0.883339208
39.22	0.014424172	-7.00187E-05	-0.014519641	-3.266919313	0.281503362	0.883339208
39.225	0.014848012	-7.22871E-05	-0.014946037	-3.362858217	0.281559083	0.883339208
39.23	0.014428476	-6.99553E-05	-0.01447571	-3.257034813	0.281611699	0.883339208
39.235	0.024182665	-0.000119097	-0.024203372	-5.445758689	0.281759502	0.883339208
39.24	0.03064831	-0.000152157	-0.030715588	-6.911007395	0.281996906	0.883339208
39.245	0.029805765	-0.000147958	-0.029867485	-6.720184064	0.282221438	0.883339208
39.25	0.03416923	-0.000170026	-0.034231923	-7.702182655	0.282516522	0.883339208
39.255	0.040782705	-0.000203777	-0.040866453	-9.19495188	0.282936888	0.883339208
39.26	0.043170229	-0.000216042	-0.043275295	-9.736941325	0.283407914	0.883483078
39.265	0.047675801	-0.000238979	-0.047776942	-10.74981194	0.28398239	0.88391319
39.27	0.055097109	-0.000276956	-0.055221578	-12.42485511	0.284749634	0.884298794
39.275	0.059514762	-0.000299741	-0.059682666	-13.42859984	0.285644845	0.884637537
39.28	0.062845369	-0.000316897	-0.063039214	-14.18382305	0.286643056	0.884927767
39.285	0.068078912	-0.000343839	-0.068305786	-15.36880184	0.287814445	0.885225663
39.29	0.072286587	-0.000365637	-0.072562851	-16.32664148	0.289135106	0.885471213
39.295	0.074980933	-0.000379685	-0.075304332	-16.94347476	0.290556052	0.885658304
39.3	0.077464625	-0.000392666	-0.077836502	-17.51321296	0.292072693	0.885823543
39.305	0.077979171	-0.000395566	-0.078402072	-17.6404663	0.293609549	0.886022244
39.31	0.078500263	-0.000398411	-0.078956554	-17.76522454	0.295167014	0.886194035
39.315	0.081497386	-0.000413969	-0.081987348	-18.44715335	0.296845676	0.886369891
39.32	0.082381114	-0.000418806	-0.082926678	-18.65850244	0.298560941	0.886634622
39.325	0.081388674	-0.000413942	-0.081944242	-18.43745437	0.300235127	0.886820201
39.33	0.083318836	-0.000424039	-0.083947209	-18.88812208	0.301989664	0.886932234
39.335	0.083621452	-0.000425949	-0.084301337	-18.96780089	0.303756968	0.887242132
39.34	0.080432944	-0.000409914	-0.081064688	-18.23955484	0.305392066	0.887488736
39.345	0.079266342	-0.000404202	-0.079912626	-17.9803409	0.306980077	0.88766978
39.35	0.075493301	-0.000385717	-0.076186961	-17.14206624	0.308420509	0.887796182
39.355	0.066844757	-0.000342975	-0.067587821	-15.20725969	0.309549813	0.8878661
39.36	0.061842389	-0.000318196	-0.06261172	-14.08763693	0.310516416	0.887996402
39.365	0.056305102	-0.000290898	-0.057136933	-12.85580988	0.311317673	0.888214612
39.37	0.044102069	-0.000230142	-0.044978441	-10.1201493	0.311809252	0.888375777
39.375	0.032868963	-0.00017386	-0.033746256	-7.592907623	0.312082306	0.888474026
39.38	0.022381713	-0.000121208	-0.023264476	-5.234507158	0.312208914	0.888504801
39.385	0.007701708	-4.71498E-05	-0.008562143	-1.926482286	0.312223906	0.88854028
39.39	-0.004471039	1.4765E-05	0.003693889	0.831125007	0.312228958	0.888779537
39.395	-0.010062233	4.35784E-05	0.009386718	2.112011588	0.312254548	0.889650985
39.4	-0.010481521	4.62012E-05	0.009894424	2.226245378	0.312282315	0.890402856
39.405	-0.005295813	2.0849E-05	0.004778677	1.075202297	0.312289403	0.891077612
39.41	-0.001065075	-9.38363E-08	0.000558965	0.125767054	0.31228969	0.891680501
39.415	-0.004061943	1.47955E-05	0.003565049	0.802136046	0.31229386	0.892211811
39.42	-0.007334853	3.13446E-05	0.006902551	1.553073989	0.312307457	0.892670172
39.425	-0.002428287	7.4113E-06	0.002072108	0.4662243	0.312308947	0.893054317
39.43	0.006947387	-3.91002E-05	-0.007286841	-1.639539117	0.312321146	0.893365262
39.435	0.010421295	-5.65287E-05	-0.010787127	-2.427103599	0.312348595	0.893605319
39.44	0.008901125	-4.89151E-05	-0.009249546	-2.081147962	0.312368619	0.893775465
39.445	0.012926375	-6.87863E-05	-0.013247004	-2.980575878	0.31241085	0.893875594
39.45	0.019583509	-0.000102093	-0.019923418	-4.482769098	0.31250778	0.89390698
39.455	0.018222456	-9.55017E-05	-0.018588386	-4.182386902	0.312591705	0.89390698
39.46	0.014049869	-7.47286E-05	-0.014397947	-3.239537972	0.312641595	0.89390698
39.465	0.017225835	-9.02754E-05	-0.017536692	-3.945755589	0.312716591	0.89390698
39.47	0.021326557	-0.000110677	-0.021642234	-4.869502676	0.312831543	0.89390698
39.475	0.018233523	-9.53676E-05	-0.018551454	-4.174077163	0.31291557	0.894253745
39.48	0.018915634	-9.84112E-05	-0.01916728	-4.312637977	0.313006001	0.895150892
39.485	0.03147511	-0.000160921	-0.031689141	-7.130056613	0.313256387	0.895961321
39.49	0.042288733	-0.00021541	-0.042558343	-9.575627173	0.313708374	0.896687495
39.495	0.044823118	-0.000228416	-0.045148665	-10.15844973	0.314216159	0.897331728
39.5	0.047986483	-0.000244477	-0.048345577	-10.87775483	0.314798147	0.897894433
39.505	0.049755347	-0.000253655	-0.05017122	-11.2885245	0.315423831	0.89842637
39.51	0.047440483	-0.000242202	-0.047858592	-10.76818322	0.31599265	0.898857386
39.515	0.051088799	-0.000260445	-0.051521542	-11.59234685	0.316652321	0.899184798

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
47.61352539	0.002687803	4.767720489
47.61962891	0.002468799	4.297231483
47.62573242	0.00212305	3.646136888
47.63183594	0.001740698	2.922388741
47.63793945	0.00161898	2.645182828
47.64404297	0.001979395	3.186192538
47.65014648	0.00260243	4.159896726
47.65625	0.003040479	4.828318453
47.66235352	0.003201701	5.050256278
47.66845703	0.003406117	5.305405484
47.67456055	0.003920678	6.007792453
47.68066406	0.004430935	6.710114689
47.68676758	0.004578441	6.906197072
47.69287109	0.004744919	7.18291562
47.69897461	0.00512725	7.776567975
47.70507813	0.005157396	7.802568142
47.71118164	0.004812771	7.317180024
47.71728516	0.004700788	7.239561192
47.72338867	0.005534241	8.64895054
47.72949219	0.006477684	10.29589028
47.7355957	0.006668064	10.71078551
47.74169922	0.006342536	10.20234465
47.74780273	0.005783297	9.332468843
47.75390625	0.004980276	8.063793839
47.76000977	0.004148049	6.73591667
47.76611328	0.003657432	6.007435388
47.7722168	0.003494317	5.826212791
47.77832031	0.003345634	5.653404813
47.78442383	0.00317083	5.432313
47.79052734	0.003304895	5.695006803
47.79663086	0.003253289	5.638453447
47.80273438	0.00277456	4.945767926
47.80883789	0.002776486	5.154115986
47.81494141	0.003487729	6.62642252
47.82104492	0.003789494	7.205518218
47.82714844	0.003885057	7.341480692
47.83325195	0.003696171	7.021624709
47.83935547	0.002695667	5.230566585
47.84545898	0.001840696	3.645113126
47.8515625	0.00203919	4.071705235
47.85766602	0.002472819	4.95832517
47.86376953	0.002548505	5.179458148
47.86987305	0.002510598	5.21675161
47.87597656	0.002152284	4.521794068
47.88208008	0.001878425	3.906307602
47.88818359	0.002325861	4.773161819
47.89428711	0.002698339	5.522277438
47.90039063	0.002417309	4.911129576
47.90649414	0.001852215	3.655272093
47.91259766	0.001582359	2.980392936
47.91870117	0.001637869	2.948159786
47.92480469	0.001634402	2.860115894
47.9309082	0.001558993	2.663851224
47.93701172	0.001449402	2.374734932
47.94311523	0.001226194	1.916123034
47.94921875	0.000938443	1.421265435
47.95532227	0.000646325	0.963890647
47.96142578	0.000368472	0.544265259
47.9675293	0.000648276	0.940854562
47.97363281	0.001296918	1.831647785
47.97973633	0.001387311	1.916015123
47.98583984	0.000870011	1.188231458
47.99194336	0.00044452	0.602503561
47.99804688	0.000560119	0.749102729
48.00415039	0.001247077	1.643670061
48.01025391	0.002212629	2.915357323
48.01635742	0.002899904	3.860181007
48.02246094	0.002915642	3.888091223
48.02856445	0.002411084	3.197621277
48.03466797	0.002037799	2.701547928
48.04077148	0.002185246	2.920236729
48.046875	0.002545857	3.458866106
48.05297852	0.00273733	3.773660862
48.05908203	0.002835477	3.905073665
48.06518555	0.002638584	3.624761208
48.07128906	0.002041274	2.839691582
48.07739258	0.001814656	2.5573208
48.08349609	0.001559905	2.203475432
48.08959961	0.00097878	1.390337613
48.09570313	0.001216841	1.756347262
48.10180664	0.002533799	3.749348546
48.10791016	0.00360447	5.47976388
48.11401367	0.003359797	5.160859128
48.12011719	0.002602863	3.972124073
48.1262207	0.002169444	3.319536118
48.13232422	0.002129321	3.317930805
48.13842773	0.002528536	4.001245611
48.14453125	0.003134452	4.995423316
48.15063477	0.003593192	5.771471656
48.15673828	0.003293459	5.333990584
48.1628418	0.002746908	4.488507315
48.16894531	0.002231642	3.699612907
48.17504883	0.001641505	2.756579508
48.18115234	0.001542358	2.617783736
48.18725586	0.0022908	3.969306505
48.19335938	0.003056785	5.414519766
48.19946289	0.003133845	5.59461096
48.20556641	0.002904478	5.193631961
48.21166992	0.00306338	5.490901758
48.21777344	0.002927412	5.24451726
48.22387695	0.002204979	3.93903243
48.22998047	0.001687089	2.982171963
48.23608398	0.001956147	3.374029791
48.2421875	0.002667611	4.471309925

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
39.52	0.058330266	-0.000297232	-0.058829929	-13.23673403	0.317512252	0.899422084
39.525	0.05750415	-0.000293575	-0.058077075	-13.0673418	0.318347998	0.899595244
39.53	0.052527827	-0.000269194	-0.053158909	-11.96075457	0.319045355	0.899683375
39.535	0.051029542	-0.000262	-0.051709269	-11.63458551	0.319703496	0.899692621
39.54	0.047742425	-0.000246048	-0.048497046	-10.91183528	0.320279579	0.899692621
39.545	0.039253081	-0.00020409	-0.040061261	-9.013783832	0.320669004	0.899692621
39.55	0.033174532	-0.000173879	-0.033998855	-7.649742483	0.320947158	0.899726924
39.555	0.029855685	-0.000157526	-0.0307212	-6.912269895	0.321172442	0.89973207
39.56	0.020708036	-0.000112031	-0.02161633	-4.863674224	0.321280823	0.89973207
39.565	0.011897088	-6.78244E-05	-0.012787935	-2.877285463	0.321316596	0.899856713
39.57	0.010779838	-6.21776E-05	-0.011661538	-2.623846105	0.321345966	0.899908176
39.575	0.00643824	-4.05603E-05	-0.007352104	-1.654223387	0.321356442	0.899908176
39.58	-0.001094175	-2.66212E-06	0.000192867	0.043395115	0.321356745	0.899908176
39.585	-0.00146775	-6.7522E-07	0.000578633	0.130192369	0.321357289	0.899908176
39.59	-0.002901065	6.39012E-06	0.001993156	0.448460084	0.321359416	0.899908176
39.595	-0.009375216	3.89675E-05	0.00846616	1.904886039	0.321381631	0.899908176
39.6	-0.011293611	4.87554E-05	0.010408863	2.341994089	0.321413867	0.899908176
39.605	-0.011615596	5.03543E-05	0.010724492	2.413010695	0.321447967	0.899993426
39.61	-0.014550688	6.5122E-05	0.013638795	3.068728832	0.321501478	0.90078808
39.615	-0.016099533	7.29698E-05	0.01518679	3.417027671	0.321566988	0.901534129
39.62	-0.017270462	7.88891E-05	0.016354059	3.679663211	0.321642372	0.902230356
39.625	-0.017698144	8.10861E-05	0.016785616	3.776763613	0.321721537	0.902875791
39.63	-0.017189605	7.84891E-05	0.016261034	3.658732669	0.321796218	0.903469759
39.635	-0.019382106	8.94908E-05	0.018443991	4.149897901	0.321891164	0.904011773
39.64	-0.019455418	8.99175E-05	0.018512143	4.165232092	0.32198683	0.904836598
39.645	-0.017475355	7.97988E-05	0.016469378	3.705610062	0.322064014	0.905734938
39.65	-0.023899248	0.000111987	0.02287576	5.147045949	0.322208373	0.906564914
39.655	-0.034590498	0.000166446	0.033587381	7.557160791	0.322510778	0.907322412
39.66	-0.039132832	0.000189898	0.038193254	8.593482153	0.322897821	0.908048063
39.665	-0.038722708	0.00018808	0.037820667	8.509649975	0.323276793	0.909209441
39.67	-0.035841548	0.000173571	0.034891851	7.850666481	0.323601468	0.910244602
39.675	-0.034042269	0.000164373	0.033036843	7.433289752	0.323894364	0.911554647
39.68	-0.038839546	0.000188347	0.037875376	8.521959529	0.324275627	0.912816357
39.685	-0.043179223	0.000210633	0.042261769	9.508898038	0.324746849	0.913960595
39.69	-0.039881082	0.00019445	0.038994685	8.773804211	0.325148834	0.915013176
39.695	-0.036511475	0.000177735	0.035624107	8.015424128	0.32548576	0.916096173
39.7	-0.039300641	0.000191532	0.038409667	8.642174986	0.325876129	0.91722302
39.705	-0.042408693	0.000207137	0.041557139	9.350356326	0.326330683	0.918379212
39.71	-0.039653767	0.000193697	0.03884352	8.73979196	0.326728098	0.919485473
39.715	-0.036668548	0.000178905	0.035859944	8.06848739	0.32706793	0.920422787
39.72	-0.037804637	0.000184586	0.03700721	8.326622288	0.327429145	0.921220707
39.725	-0.035016023	0.000170923	0.034251415	7.706568425	0.327739036	0.921953059
39.73	-0.029451786	0.00014321	0.028672506	6.451313901	0.327958266	0.922584335
39.735	-0.030149838	0.000146488	0.029336762	6.600771522	0.328188011	0.923081315
39.74	-0.032583586	0.000158551	0.03177131	7.148544798	0.328456344	0.923490658
39.745	-0.033300589	0.000162049	0.032477039	7.307333699	0.328736616	0.92383573
39.75	-0.0376504	0.000183546	0.036809949	8.282238507	0.329094889	0.924100292
39.755	-0.04331405	0.000211782	0.042487103	9.559598263	0.329569059	0.924504743
39.76	-0.045498728	0.000222807	0.044648921	10.04600718	0.330092267	0.924890799
39.765	-0.046623591	0.000228483	0.045761725	10.29638822	0.330641665	0.925231969
39.77	-0.048832865	0.00023957	0.047934223	10.78520013	0.331244364	0.925527371
39.775	-0.050104612	0.000246027	0.049199059	11.06978831	0.331878864	0.925775764
39.78	-0.050746281	0.000249287	0.049837677	11.21347735	0.332529719	0.925976341
39.785	-0.054148456	0.000266562	0.053219602	11.9744104	0.33327077	0.926128472
39.79	-0.058028564	0.000286628	0.057145283	12.85768864	0.334121829	0.926234905
39.795	-0.056791326	0.000280593	0.055923938	12.58288598	0.334936983	0.926314105
39.8	-0.054570427	0.000269343	0.053653371	12.07200854	0.335689629	0.926368338
39.805	-0.056692547	0.000280308	0.055867441	12.5701742	0.33650195	0.926402573
39.81	-0.056948317	0.000281929	0.056193948	12.64363823	0.337321618	0.926415792
39.815	-0.052367079	0.000259166	0.0516008	11.61017992	0.338014712	0.92641651
39.82	-0.048115277	0.000238199	0.047376384	10.65968641	0.338599828	0.92641651
39.825	-0.043617785	0.000216009	0.042911063	9.654989199	0.339080671	0.92641651
39.83	-0.037274791	0.0001845	0.036579669	8.230425436	0.339431832	0.92641651
39.835	-0.033120414	0.000163739	0.032413821	7.293109825	0.33970908	0.92641651
39.84	-0.031098465	0.000153638	0.030388313	6.837370448	0.339953509	0.92641651
39.845	-0.028604487	0.000141182	0.027892214	6.275748053	0.340160306	0.92641651
39.85	-0.027899787	0.000137584	0.027172142	6.113731928	0.340357039	0.926482502
39.855	-0.029502892	0.000145577	0.028786275	6.476911801	0.340577031	0.926510881
39.86	-0.028429384	0.000140328	0.027726157	6.238385394	0.340781304	0.926510881
39.865	-0.025047298	0.000123443	0.024340061	5.476513673	0.340939865	0.926510881
39.87	-0.025711905	0.000126628	0.02498679	5.62202772	0.341106953	0.926510881
39.875	-0.02867863	0.000141423	0.027972656	6.293847693	0.341314823	0.926510881
39.88	-0.029350269	0.000144822	0.028658271	6.448110992	0.341532544	0.926510881
39.885	-0.030889144	0.000152498	0.030205779	6.796300352	0.341773694	0.926510881
39.89	-0.033235012	0.000164277	0.032579416	7.330368667	0.342052863	0.92686108
39.895	-0.033914006	0.00016777	0.033282898	7.488652063	0.342343556	0.927610675
39.9	-0.035167236	0.000174125	0.034562379	7.776535207	0.34265613	0.928269392
39.905	-0.034906401	0.000173003	0.034334622	7.725289888	0.342964084	0.928836829
39.91	-0.03291659	0.000163188	0.032353164	7.279461967	0.343237929	0.929312328
39.915	-0.033415717	0.000165766	0.032873947	7.396638008	0.343520143	0.929695025
39.92	-0.032541736	0.000161607	0.032034108	7.207674239	0.343787787	0.929984671
39.925	-0.029610701	0.000147141	0.029116393	6.55118839	0.344009388	0.930180871
39.93	-0.027442091	0.00013649	0.026969746	6.068192868	0.34419972	0.93028288
39.935	-0.021894335	0.000109005	0.021451186	4.826516914	0.344320874	0.930298385
39.94	-0.017349403	8.62385E-05	0.016899982	3.802495922	0.34439695	0.930298385
39.945	-0.016910852	8.41087E-05	0.016474448	3.706750838	0.344469228	0.930298385
39.95	-0.011876094	5.90604E-05	0.011473109	2.581449514	0.344504875	0.930298385
39.955	-0.005506843	2.70723E-05	0.005094457	1.146252884	0.344512539	0.930298385
39.96	-0.002812212	1.34948E-05	0.00238981	0.537707261	0.344514538	0.930298385
39.965	0.000803865	-4.69673E-06	-0.001231384	-0.277061423	0.344514702	0.930298385
39.97	0.001483632	-8.22841E-06	-0.001928886	-0.433999462	0.344515258	0.930298385
39.975	0.000815607	-4.81655E-06	-0.001239914	-0.27898057	0.344515426	0.930298385
39.98	0.005003463	-2.58182E-05	-0.005432154	-1.222234541	0.344521753	0.930298385
39.985	0.006060688	-3.12338E-05	-0.006504346	-1.463477774	0.344531037	0.930298385
39.99	0.006359537	-3.26412E-05	-0.006788316	-1.527371045	0.344541259	0.930298385
39.995	0.012627917	-6.42045E-05	-0.013056729	-2.937764093	0.344581562	0.930298385
40	0.013734122	-6.9985E-05	-0.014192841	-3.193389258	0.344629236	0.930298385
40.005	0.011869683	-6.05585E-05	-0.012289743	-2.765192124	0.344664844	0.930298385
40.01	0.016577309	-8.4203E-05	-0.017023973	-3.830393973	0.344734299	0.930298385
40.015	0.018459361	-9.3848E-05	-0.018936118	-4.260626551	0.34482042	0.930298385
40.02	0.017134896	-8.72638E-05	-0.017606369	-3.961433044	0.344894626	0.930298385
40.025	0.018305636	-9.32317E-05	-0.018811677	-4.232627349	0.344979319	0.930298385
40.03	0.015088358	-7.73671E-05	-0.015608904	-3.512003374	0.345036857	0.930298385
40.035	0.012035628	-6.21164E-05	-0.012533445	-2.820025084	0.345073469	0.930298385

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
48.24829102	0.002966426	4.868626632
48.25439453	0.002582569	4.188126671
48.26049805	0.002043536	3.272999076
48.26660156	0.001894168	2.952911771
48.27270508	0.002063899	3.110104971
48.27880859	0.002171348	3.19395894
48.28491211	0.001989442	2.86814015
48.29101563	0.001741176	2.459158398
48.29711914	0.001911169	2.659438597
48.30322266	0.002532482	3.470084155
48.30932617	0.003197915	4.304917902
48.31542969	0.003216507	4.267893844
48.3215332	0.002568919	3.346247559
48.32763672	0.002138816	2.724753727
48.33374023	0.002371636	2.98563372
48.33984375	0.002689968	3.386488976
48.34594727	0.002552408	3.211493505
48.35205078	0.002148252	2.678050838
48.3581543	0.00187017	2.300078114
48.36425781	0.001734465	2.109843422
48.37036133	0.001589891	1.923577531
48.37646484	0.001504807	1.825689441
48.38256836	0.0013843	1.688780071
48.38867188	0.001227306	1.496926862
48.39477539	0.001986399	2.418076567
48.40087891	0.002737756	3.333068403
48.40698242	0.002413703	2.941762614
48.41308594	0.001509631	1.851475036
48.41918945	0.000961194	1.190125736
48.42529297	0.001184956	1.474198581
48.43139648	0.001634104	2.043874957
48.4375	0.001556939	1.975112234
48.44360352	0.001607553	2.069705057
48.44970703	0.00179107	2.325957318
48.45581055	0.001632951	2.147716702
48.46191406	0.00160666	2.157315185
48.46801758	0.001426584	1.95301665
48.47412109	0.001304473	1.808743659
48.48022461	0.001945085	2.708638674
48.48632813	0.003446593	4.821982849
48.49243164	0.004331926	6.194809737
48.49853516	0.00414726	6.111716212
48.50463867	0.003665808	5.474464539
48.51074219	0.002899928	4.328251227
48.5168457	0.002409449	3.601226688
48.52294922	0.002464394	3.71202331
48.52905273	0.003343015	5.107701899
48.53515625	0.004296776	6.656982557
48.54125977	0.003962864	6.189615892
48.54736328	0.002570592	4.040477339
48.5534668	0.0015845	2.492357551
48.55957031	0.001919658	2.991370098
48.56567383	0.003008712	4.621125479
48.57177734	0.003729573	5.634707958
48.57788086	0.003810504	5.694342179
48.58398438	0.003411158	5.086864043
48.59008789	0.003003621	4.433026185
48.59619141	0.00304149	4.372195016
48.60229492	0.003193608	4.453300324
48.60839844	0.0027447	3.730957109
48.61450195	0.001740111	2.331645917
48.62060547	0.001775985	2.362951587
48.62670898	0.002535708	3.321161763
48.6328125	0.002845902	3.640447382
48.63891602	0.002988648	3.754877241
48.64501953	0.003238951	4.014050186
48.65112305	0.003362796	4.10646239
48.65722656	0.003175003	3.822074858
48.66333008	0.002827114	3.35122316
48.66943359	0.00240807	2.819783116
48.67553711	0.002325427	2.71311996
48.68164063	0.002879909	3.333393066
48.68774414	0.003498183	3.981492771
48.69384766	0.003448659	3.888948449
48.69995117	0.002862048	3.231558479
48.70605469	0.002466344	2.793077044
48.7121582	0.002683082	3.035917607
48.71826172	0.003161252	3.543064378
48.72436523	0.003380351	3.759404819
48.73046875	0.003391879	3.796617752
48.73657227	0.003937825	4.455403807
48.74267578	0.004180012	4.766669802
48.7487793	0.003362974	3.871967035
48.75488281	0.002611054	3.033353199
48.76098633	0.002692575	3.154870396
48.76708984	0.002867306	3.395462245
48.77319336	0.00293355	3.513599628
48.77929688	0.003255121	3.967414218
48.78540039	0.003545506	4.416714372
48.79150391	0.003265788	4.117777335
48.79760742	0.003111591	3.926838333
48.80371094	0.003029037	3.8108173
48.80981445	0.003163817	3.978298966
48.81591797	0.003201049	4.069607088
48.82202148	0.003347858	4.336766895
48.828125	0.004175978	5.495015514
48.83422852	0.004236192	5.646581674
48.84033203	0.003512486	4.713298956
48.84643555	0.002913709	3.913908644
48.85253906	0.002776797	3.777413262
48.85864258	0.002869026	3.99725729
48.86474609	0.003036514	4.305190997
48.87084961	0.002972489	4.248716151
48.87695313	0.002461072	3.525366703

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
40.04	0.015538529	-7.94107E-05	-0.016024764	-3.605571985	0.345134492	0.930298385
40.045	0.017095895	-8.72514E-05	-0.017606198	-3.961394549	0.34520836	0.930817999
40.05	0.015777624	-8.07904E-05	-0.016301333	-3.66779996	0.345271276	0.931493185
40.055	0.014298651	-7.34988E-05	-0.014829508	-3.336639338	0.345322949	0.93211204
40.06	0.011837099	-6.12549E-05	-0.012359792	-2.780953162	0.345358363	0.932674572
40.065	0.013083284	-6.73113E-05	-0.013583057	-3.056187901	0.345401625	0.933180925
40.07	0.015999747	-8.17876E-05	-0.016504433	-3.713497317	0.345466325	0.933630396
40.075	0.015349562	-7.85959E-05	-0.015859739	-3.568441239	0.345525873	0.934021954
40.08	0.01629046	-8.31734E-05	-0.016783937	-3.77638582	0.345592945	0.934355356
40.085	0.019965955	-0.000101389	-0.020430636	-4.596893132	0.345693698	0.934630085
40.09	0.021264724	-0.000107895	-0.021719517	-4.886891249	0.345807984	0.934845067
40.095	0.022123308	-0.000112131	-0.022558626	-5.075690878	0.345931686	0.934999777
40.1	0.0260638	-0.000131868	-0.026466119	-5.954876871	0.346103379	0.935093846
40.105	0.030521085	-0.000154532	-0.030948973	-6.963518996	0.346338816	0.93515344
40.11	0.031370865	-0.000159025	-0.031834777	-7.162824781	0.346587547	0.93555478
40.115	0.030154603	-0.000152937	-0.030605173	-6.886163918	0.346817364	0.935911033
40.12	0.032847228	-0.000166472	-0.033308886	-7.494499256	0.347090057	0.936298597
40.125	0.037541995	-0.000190398	-0.038034565	-8.557777123	0.34744627	0.936751109
40.13	0.037730095	-0.000191585	-0.038256621	-8.607739751	0.347806063	0.937123275
40.135	0.036436882	-0.000185112	-0.036949787	-8.313702119	0.348141613	0.937414656
40.14	0.038771836	-0.000196986	-0.039334936	-8.850360513	0.348521548	0.937625671
40.145	0.04140756	-0.000210509	-0.042003046	-9.450685446	0.348954894	0.937755156
40.15	0.041291321	-0.000210109	-0.041916872	-9.431296193	0.349385811	0.937819723
40.155	0.040850545	-0.000207997	-0.041490275	-9.335311907	0.349807577	0.938219053
40.16	0.041474308	-0.000211281	-0.042153589	-9.484557534	0.350242322	0.938703787
40.165	0.041278389	-0.000210452	-0.041984637	-9.446543319	0.350672969	0.939192038
40.17	0.039790969	-0.000203054	-0.040490764	-9.110421866	0.351073139	0.939603402
40.175	0.038806378	-0.000198168	-0.039504663	-8.888549135	0.351453751	0.939939029
40.18	0.03773488	-0.000192873	-0.03843617	-8.648138316	0.351813634	0.940199904
40.185	0.035044238	-0.000179362	-0.035711922	-8.035182526	0.352124025	0.940430744
40.19	0.032342417	-0.000165726	-0.032964644	-7.417044821	0.352388401	0.940647496
40.195	0.030812329	-0.000158009	-0.03141102	-7.067479515	0.352628353	0.940785057
40.2	0.029375665	-0.000150798	-0.02995968	-6.740927911	0.352846451	0.940867287
40.205	0.026626202	-0.000136936	-0.027171406	-6.113566454	0.353025633	0.940912913
40.21	0.023785764	-0.000122536	-0.024277256	-5.462382515	0.353168624	0.940938803
40.215	0.023183676	-0.000119477	-0.023662804	-5.324130918	0.353304468	0.940947883
40.22	0.021293963	-0.000109988	-0.021757062	-4.895338982	0.353419069	0.940947883
40.225	0.016886589	-8.8001E-05	-0.017345147	-3.90265804	0.35349114	0.940947883
40.23	0.016079182	-8.38692E-05	-0.016518049	-3.716561051	0.353556484	0.940947883
40.235	0.016454316	-8.57721E-05	-0.016902361	-3.803031302	0.353624912	0.940947883
40.24	0.01385525	-7.28529E-05	-0.014308324	-3.219372858	0.353673431	0.940947883
40.245	0.012099162	-6.40932E-05	-0.012553273	-2.824486482	0.353710429	0.940947883
40.25	0.009029827	-4.88293E-05	-0.00949688	-2.136797936	0.353731037	0.940947883
40.255	0.003686603	-2.20669E-05	-0.004143484	-0.932284001	0.353734472	0.940947883
40.26	0.001050593	-8.77344E-06	-0.001486853	-0.334541832	0.353734751	0.940947883
40.265	-0.002257103	7.83593E-06	0.001830114	0.41177576	0.353736039	0.940947883
40.27	-0.006309193	2.8306E-05	0.005914587	1.330782118	0.353746099	0.940947883
40.275	-0.006744154	3.0645E-05	0.006380577	1.435629737	0.353757595	0.940947883
40.28	-0.008972156	4.18818E-05	0.008621295	1.939791429	0.35377794	0.940947883
40.285	-0.011834272	5.64417E-05	0.011522376	2.592534519	0.353813337	0.940947883
40.29	-0.009942664	4.71614E-05	0.009648334	2.170875103	0.353838322	0.940947883
40.295	-0.009503624	4.5029E-05	0.009218206	2.074096422	0.353861149	0.940947883
40.3	-0.010264918	4.90137E-05	0.010022931	2.255159461	0.35388778	0.940947883
40.305	-0.007619142	3.59188E-05	0.007379757	1.660445253	0.353902452	0.940947883
40.31	-0.005444168	2.5114E-05	0.005201122	1.170252507	0.353909943	0.940947883
40.315	-0.002123146	8.6955E-06	0.001893302	0.425992919	0.353911082	0.940947883
40.32	0.002537205	-1.44668E-05	-0.002767838	-0.622763584	0.353912709	0.940947883
40.325	0.003411099	-1.88353E-05	-0.003646275	-0.820411808	0.35391565	0.940947883
40.33	0.005790839	-3.05666E-05	-0.006004236	-1.350953047	0.353924126	0.940947883
40.335	0.010879635	-5.59411E-05	-0.011099452	-2.497376743	0.353954042	0.940947883
40.34	0.011923418	-6.12406E-05	-0.012162619	-2.736589164	0.353989973	0.940947883
40.345	0.012623546	-6.46939E-05	-0.012855468	-2.892480412	0.354030249	0.940947883
40.35	0.016072824	-8.18739E-05	-0.016299922	-3.667482375	0.354095541	0.940947883
40.355	0.018520085	-9.41211E-05	-0.018753595	-4.219558945	0.354182229	0.940947883
40.36	0.021182605	-0.000107417	-0.021415724	-4.818537958	0.354295635	0.940947883
40.365	0.024681458	-0.000124944	-0.02492228	-5.607513072	0.354449598	0.940947883
40.37	0.026267517	-0.000132994	-0.026531941	-5.969686668	0.354623985	0.940947883
40.375	0.026413696	-0.000133829	-0.026698826	-6.007235945	0.354800319	0.940947883
40.38	0.027336595	-0.000138491	-0.027630732	-6.216914743	0.354989189	0.940947883
40.385	0.029407854	-0.000148915	-0.029713486	-6.685534366	0.355207765	0.940947883
40.39	0.030224622	-0.000153148	-0.030558995	-6.875773887	0.355438651	0.940947883
40.395	0.029847081	-0.00015139	-0.030204014	-6.795903094	0.355663805	0.940947883
40.4	0.030776261	-0.000156148	-0.031158154	-7.010584603	0.355903196	0.940947883
40.405	0.030677036	-0.000155857	-0.031095889	-6.996575044	0.356141046	0.940947883
40.41	0.028868599	-0.000147028	-0.029313112	-6.595450088	0.35635168	0.940947883
40.415	0.0269903	-0.000137873	-0.027465867	-6.179819992	0.356535795	0.940947883
40.42	0.021747196	-0.000112066	-0.022264478	-5.009507606	0.356655327	0.940947883
40.425	0.015806613	-8.25862E-05	-0.016332279	-3.674762847	0.356718474	0.940947883
40.43	0.013229113	-6.98162E-05	-0.013765612	-3.097262675	0.356762706	0.940947883
40.435	0.008467223	-4.62349E-05	-0.009030469	-2.031855462	0.356780826	0.940947883
40.44	0.002247484	-1.52028E-05	-0.002807884	-0.631773852	0.356782103	0.940947883
40.445	-0.001078926	1.43789E-06	0.000524968	0.118117731	0.356782397	0.940947883
40.45	-0.005219639	2.21235E-05	0.004664211	1.049447435	0.356789283	0.940947883
40.455	-0.009208781	4.21693E-05	0.008671517	1.95109139	0.356810716	0.940947883
40.46	-0.010993025	5.11688E-05	0.010469364	2.355606914	0.356841259	0.940947883
40.465	-0.013880875	6.56757E-05	0.013361284	3.006288892	0.356889956	0.940947883
40.47	-0.01535163	7.31769E-05	0.014854547	3.34227316	0.356949521	0.940947883
40.475	-0.014446892	6.87272E-05	0.013955801	3.140055179	0.357002271	0.940947883
40.48	-0.015156062	7.23088E-05	0.014679238	3.30282846	0.357060327	0.940947883
40.485	-0.015177409	7.25183E-05	0.014718643	3.311694603	0.357118547	0.940947883
40.49	-0.013181049	6.25925E-05	0.012714557	2.860775405	0.357162458	0.940947883
40.495	-0.011561467	5.44972E-05	0.011081147	2.493258033	0.357196241	0.940947883
40.5	-0.01019116	4.76347E-05	0.009697164	2.181861867	0.357222491	0.940947883
40.505	-0.00935341	4.34378E-05	0.008851051	1.991486426	0.357244602	0.940947883
40.51	-0.007479309	3.40864E-05	0.006966569	1.567478042	0.357258741	0.940947883
40.515	-0.004327891	1.8259E-05	0.003779434	0.850372623	0.357263475	0.940947883
40.52	-0.003782361	1.54098E-05	0.003206425	0.721445564	0.357267091	0.940947883
40.525	-0.003967527	1.6293E-05	0.003384815	0.76158334	0.357271069	0.940947883
40.53	-0.003087222	1.18214E-05	0.002483934	0.558885226	0.357273478	0.940947883
40.535	-0.003954882	1.6083E-05	0.003344694	0.752556095	0.357277431	0.940947883
40.54	-0.004468801	1.86501E-05	0.003863042	0.869184446	0.357282478	0.940947883
40.545	-0.003788731	1.52196E-05	0.003170124	0.713277943	0.357286106	0.940947883
40.55	-0.003358854	1.30384E-05	0.002729649	0.614171076	0.357288958	0.940947883
40.555	-0.001670916	4.53238E-06	0.001017648	0.228970779	0.357289663	0.940947883

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
48.88305664	0.001963889	2.81553484
48.88916016	0.002024876	2.916661494
48.89526367	0.002436891	3.513529655
48.90136719	0.002643615	3.801474506
48.9074707	0.002632548	3.801083641
48.91357422	0.003408744	4.926622376
48.91967773	0.004342536	6.20067127
48.92578125	0.004197363	5.896181724
48.93188477	0.003355365	4.631026972
48.93798828	0.002796794	3.808211604
48.9440918	0.002937124	3.979011575
48.95019531	0.003312487	4.412757973
48.95629883	0.003470181	4.478926544
48.96240234	0.003311887	4.167203347
48.96850586	0.003015613	3.704943121
48.97460938	0.002478527	2.971571473
48.98071289	0.00188542	2.23478147
48.98681641	0.001644585	1.930693828
48.99291992	0.001730385	1.995284343
48.99902344	0.002017271	2.283388311
49.00512695	0.00241543	2.680457098
49.01123047	0.002605135	2.851639338
49.01733398	0.002322885	2.539958968
49.0234375	0.002087492	2.273762803
49.02954102	0.00246642	2.664141547
49.03564453	0.00272083	2.930410766
49.04174805	0.002592537	2.775261334
49.04785156	0.00254809	2.696333286
49.05395508	0.002722539	2.864853328
49.06005859	0.00269748	2.850514379
49.06616211	0.002531329	2.71000072
49.07226563	0.002388463	2.590864669
49.07836914	0.002282931	2.474266181
49.08447266	0.002384846	2.567265959
49.09057617	0.002756677	2.981163282
49.09667969	0.002887477	3.157461282
49.1027832	0.002791879	3.075989356
49.10888672	0.002965399	3.280955937
49.11499023	0.00325677	3.611364904
49.12109375	0.003045652	3.389169292
49.12719727	0.00232489	2.594206942
49.13330078	0.001881545	2.095817505
49.1394043	0.002497823	2.798204783
49.14550781	0.003831557	4.370540486
49.15161133	0.004631256	5.360275589
49.15771484	0.004360427	5.078625139
49.16381836	0.003498559	4.107499995
49.16992188	0.002611499	3.107230959
49.17602539	0.002185185	2.645031415
49.18212891	0.002542361	3.13239669
49.18823242	0.003089772	3.876256808
49.19433594	0.003164043	4.051529617
49.20043945	0.00301813	3.920736946
49.20654297	0.002909817	3.788749288
49.21264648	0.002563386	3.35949701
49.21875	0.002125826	2.844183312
49.22485352	0.002331514	3.193602329
49.23095703	0.002651385	3.688606933
49.23706055	0.002317851	3.222491897
49.24316406	0.001685572	2.325997145
49.24926758	0.001347832	1.868470451
49.25537109	0.001377719	1.90448742
49.26147461	0.00130405	1.766965105
49.26757813	0.000998801	1.348931981
49.27368164	0.000637604	0.86441969
49.27978516	0.000549764	0.726926484
49.28588867	0.001078792	1.377037947
49.29199219	0.002012325	2.509282353
49.2980957	0.002612091	3.202324539
49.30419922	0.002319897	2.810938863
49.31030273	0.001368072	1.640227143
49.31640625	0.000643227	0.761029382
49.32250977	0.000889921	1.042750275
49.32861328	0.001540205	1.782316699
49.3347168	0.001817665	2.061339444
49.34082031	0.001718626	1.926895103
49.34692383	0.001407973	1.579905181
49.35302734	0.000855107	0.957228206
49.35913086	0.000520184	0.575852497
49.36523438	0.000823061	0.896819158
49.37133789	0.001152302	1.240279024
49.37744141	0.001275584	1.368483306
49.38354492	0.001548146	1.657674737
49.38964844	0.001798309	1.922999817
49.39575195	0.002149943	2.312500638
49.40185547	0.002399647	2.589181673
49.40795898	0.002550892	2.733961746
49.4140625	0.002595399	2.770726799
49.42016602	0.002598349	2.79194538
49.42626953	0.002548568	2.7711144
49.43237305	0.002536301	2.784824661
49.43847656	0.0028451	3.131929368
49.44458008	0.003279115	3.609592652
49.45068359	0.003406424	3.768470602
49.45678711	0.003379219	3.765826095
49.46289063	0.003311665	3.722945381
49.46899414	0.002998152	3.424817447
49.47509766	0.002896865	3.370542853
49.48120117	0.003273825	3.854851996
49.48730469	0.003685337	4.373280157
49.4934082	0.003822273	4.575758659
49.49951172	0.003824172	4.647952581
49.50561523	0.003471896	4.316354594
49.51171875	0.002877973	3.647088798

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
40.56	-0.002276642	7.40593E-06	0.001599368	0.359857773	0.357290973	0.940947883
40.565	-0.00525759	2.22835E-05	0.004602068	1.035465404	0.35729796	0.940947883
40.57	-0.0042353	1.71882E-05	0.003572938	0.803911039	0.357302493	0.940947883
40.575	-0.003830124	1.50056E-05	0.003132524	0.704817791	0.357306201	0.940947883
40.58	-0.007556513	3.35599E-05	0.00687595	1.547088808	0.357320633	0.940947883
40.585	-0.008376147	3.76915E-05	0.00770825	1.734356296	0.357338365	0.940947883
40.59	-0.00794845	3.5451E-05	0.007255739	1.632541255	0.357354333	0.940947883
40.595	-0.010876885	4.99787E-05	0.010183986	2.291396923	0.357384234	0.940947883
40.6	-0.013758882	6.43663E-05	0.013080167	2.943037637	0.357432079	0.940947883
40.605	-0.015895727	7.50209E-05	0.015221564	3.424851947	0.35749594	0.940947883
40.61	-0.018594317	8.84871E-05	0.01790081	4.027682327	0.357583325	0.940947883
40.615	-0.021360133	0.000102313	0.020649935	4.646235395	0.35769864	0.940947883
40.62	-0.023782687	0.000114459	0.023063697	5.189331927	0.357841594	0.940947883
40.625	-0.024336015	0.000117242	0.023616601	5.31373531	0.357991278	0.940947883
40.63	-0.025548175	0.000123197	0.024799383	5.579861271	0.358156245	0.940947883
40.635	-0.031357473	0.000152365	0.030588501	6.882412764	0.358404763	0.940947883
40.64	-0.038824051	0.000190116	0.038070437	8.565848432	0.358785721	0.940947883
40.645	-0.043936201	0.000216165	0.043226275	9.725911887	0.35927361	0.940947883
40.65	-0.044848322	0.000221031	0.044186129	9.941878916	0.359781966	0.940947883
40.655	-0.042872702	0.000211149	0.042190534	9.492870234	0.360246522	0.940947883
40.66	-0.045231484	0.000222856	0.044549667	10.02367507	0.360763602	0.940947883
40.665	-0.050996056	0.000252209	0.050350848	11.32894087	0.36142088	0.940947883
40.67	-0.0506735	0.000250904	0.050067319	11.26514684	0.362069869	0.940947883
40.675	-0.046988065	0.000232744	0.046403036	10.44068306	0.362627891	0.940947883
40.68	-0.048586608	0.000240685	0.048006636	10.80149305	0.363224526	0.940950259
40.685	-0.051064047	0.00025317	0.050526088	11.36836969	0.363883558	0.940997224
40.69	-0.048708629	0.000241731	0.048216203	10.84864564	0.364483194	0.941016836
40.695	-0.04576083	0.000227197	0.045284556	10.18902512	0.365012448	0.941016836
40.7	-0.046313013	0.000229998	0.045850447	10.3163505	0.365554551	0.941016836
40.705	-0.045993773	0.000228612	0.045570445	10.25335008	0.366089206	0.941016836
40.71	-0.041852699	0.000208199	0.041456976	9.327819494	0.36653192	0.941016836
40.715	-0.040107517	0.000199524	0.039710592	8.934883157	0.366938483	0.941016836
40.72	-0.040755578	0.000202839	0.040380081	9.085518294	0.36735829	0.941016836
40.725	-0.03794141	0.000188988	0.037590613	8.457887968	0.367722124	0.941016836
40.73	-0.036098857	0.000179828	0.035748738	8.043466063	0.368051478	0.941016836
40.735	-0.03684076	0.000183579	0.036506379	8.213935309	0.368394508	0.941016836
40.74	-0.034651622	0.000172809	0.034337815	7.726008455	0.368697983	0.941016836
40.745	-0.033422166	0.000166683	0.03310681	7.449032352	0.368980306	0.941016836
40.75	-0.035044517	0.000174801	0.034746271	7.817911085	0.369290702	0.941016836
40.755	-0.033981447	0.000169655	0.033706878	7.584047629	0.369582552	0.941016836
40.76	-0.032458832	0.000162141	0.0321945	7.243762531	0.369848834	0.941016836
40.765	-0.032277111	0.000161325	0.032030653	7.206896837	0.370112142	0.941016836
40.77	-0.030093564	0.000150591	0.02987537	6.721958202	0.37034103	0.941016836
40.775	-0.027893878	0.000139702	0.027690211	6.230297441	0.37053768	0.941016836
40.78	-0.026594466	0.000133307	0.026407334	5.941650075	0.370716435	0.941016836
40.785	-0.02399414	0.000120453	0.023830155	5.361784805	0.370861943	0.941016836
40.79	-0.021753914	0.000109337	0.021602949	4.860663534	0.370981549	0.941016836
40.795	-0.019724215	9.92927E-05	0.01959136	4.408056072	0.371079876	0.941016836
40.8	-0.016248158	8.20343E-05	0.016137352	3.630904165	0.371146601	0.941016836
40.805	-0.014068812	7.11346E-05	0.013957408	3.14041675	0.371196626	0.941016836
40.81	-0.013809993	6.98159E-05	0.013693734	3.081090189	0.371244828	0.941016836
40.815	-0.012127797	6.14797E-05	0.01202736	2.706155996	0.371282002	0.941016836
40.82	-0.009734995	4.95458E-05	0.009642958	2.169665577	0.371305954	0.941016836
40.825	-0.009507162	4.8341E-05	0.009404017	2.115903916	0.371328798	0.941016836
40.83	-0.009554644	4.85824E-05	0.009452773	2.126873878	0.371351871	0.941016836
40.835	-0.007885544	4.03032E-05	0.007797198	1.754369622	0.371367587	0.941016836
40.84	-0.006475501	3.3266E-05	0.006392373	1.438283885	0.371378185	0.941016836
40.845	-0.005322517	2.75151E-05	0.005244685	1.180054193	0.371385345	0.941016836
40.85	-0.003966182	2.07257E-05	0.003890117	0.875276263	0.371389321	0.941016836
40.855	-0.004404605	2.28469E-05	0.004318792	0.971728266	0.371394224	0.941047705
40.86	-0.004450829	2.31044E-05	0.004370745	0.983417689	0.371399231	0.94110835
40.865	-0.002359179	1.27127E-05	0.002291992	0.515698187	0.371400638	0.94110835
40.87	-0.001803983	9.88923E-06	0.001729567	0.389152505	0.37140146	0.94110835
40.875	-0.001967359	1.06926E-05	0.001891849	0.425665939	0.371402438	0.94110835
40.88	-0.000894262	5.34162E-06	0.000822398	0.185039458	0.371402641	0.94110835
40.885	-0.00126477	7.13404E-06	0.001185265	0.266684564	0.371403045	0.94110835
40.89	-0.00159599	8.79414E-06	0.001520522	0.342117454	0.371403689	0.94110835
40.895	-0.000808278	4.86537E-06	0.000727462	0.163679008	0.371403854	0.94110835
40.9	-0.001732566	9.43006E-06	0.001649429	0.3711215	0.371404612	0.94110835
40.905	-0.001939241	1.05025E-05	0.001865884	0.419824006	0.371405563	0.94110835
40.91	-0.0009513	5.58652E-06	0.000873069	0.196440511	0.371405792	0.94110835
40.915	-0.00212844	1.14168E-05	0.002050592	0.461383217	0.371406937	0.94110835
40.92	-0.002330382	1.24892E-05	0.002266933	0.510059823	0.371408309	0.94110835
40.925	-0.00103045	6.03765E-06	0.000964119	0.216926806	0.371408578	0.94110835
40.93	-0.002083843	1.12494E-05	0.002016748	0.453768392	0.371409675	0.94110835
40.935	-0.002811125	1.49243E-05	0.002758687	0.620704533	0.371411672	0.94110835
40.94	-0.002315811	1.24933E-05	0.002267617	0.510213912	0.371413028	0.94110835
40.945	-0.00343535	1.80766E-05	0.003394897	0.763851743	0.371416011	0.94110835
40.95	-0.003954141	2.07463E-05	0.00393362	0.885064412	0.371419962	0.941662618
40.955	-0.003116833	1.66623E-05	0.003108733	0.699465001	0.371422418	0.942192466
40.96	-0.002663298	1.44774E-05	0.002667544	0.600197324	0.37142421	0.942667096
40.965	-0.001292677	7.75703E-06	0.00131097	0.294968249	0.371424633	0.943085961
40.97	0.00086395	-2.9071E-06	-0.000821591	-0.184858008	0.371424821	0.943448352
40.975	0.002620849	-1.16117E-05	-0.002555783	-0.57505121	0.371426557	0.943753416
40.98	0.004266076	-1.97772E-05	-0.004181942	-0.940936873	0.371431157	0.944000433
40.985	0.005154867	-2.41956E-05	-0.005061613	-1.13886299	0.371437873	0.944188831
40.99	0.006117428	-2.89436E-05	-0.006006732	-1.3515147	0.371447331	0.944318285
40.995	0.008367438	-4.01072E-05	-0.008228093	-1.851320885	0.371465027	0.944388499
41	0.009606449	-4.63139E-05	-0.009462669	-2.129100547	0.371488351	0.944401228
41.005	0.008958702	-4.31126E-05	-0.008816024	-1.983605442	0.371508635	0.944401228
41.01	0.009217739	-4.43349E-05	-0.009062975	-2.039169408	0.37153011	0.944401228
41.015	0.011657869	-5.64026E-05	-0.011468659	-2.58044829	0.371564459	0.944401228
41.02	0.014274203	-6.94234E-05	-0.01405634	-3.162676478	0.371615956	0.944665527
41.025	0.015421844	-7.51736E-05	-0.015198635	-3.419692968	0.371676066	0.94500263
41.03	0.016272097	-7.94179E-05	-0.016041601	-3.609360294	0.371742987	0.945297645
41.035	0.017407225	-8.50822E-05	-0.01716635	-3.862428827	0.37181957	0.945650788
41.04	0.018176794	-8.89224E-05	-0.017928743	-4.033967124	0.371903075	0.946159674
41.045	0.020035632	-9.81515E-05	-0.01976045	-4.446101205	0.372004532	0.946594978
41.05	0.022667912	-0.000111286	-0.022366006	-5.032351286	0.372134399	0.946955374
41.055	0.023451753	-0.000115279	-0.023157761	-5.210496131	0.372273403	0.947239304
41.06	0.023466592	-0.000115401	-0.02318199	-5.215947638	0.372412583	0.947446168
41.065	0.024119389	-0.000118672	-0.023830634	-5.36189276	0.372559613	0.947673924
41.07	0.024962277	-0.000122875	-0.024663779	-5.54935027	0.3727171	0.948054716
41.075	0.026985834	-0.000132942	-0.026658808	-5.998231761	0.372901155	0.948372681

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
49.51782227	0.002835172	3.632421067
49.52392578	0.003409631	4.40738962
49.5300293	0.003680467	4.788596863
49.53613281	0.003334544	4.344440872
49.54223633	0.00301289	3.932843362
49.54833984	0.00252938	3.353382915
49.55444336	0.001863333	2.53621447
49.56054688	0.001944191	2.671555985
49.56665039	0.002880902	3.908996293
49.57275391	0.003600525	4.871986075
49.57885742	0.003438887	4.729324895
49.58496094	0.002902921	4.027084038
49.59106445	0.002785703	3.857175451
49.59716797	0.002984719	4.163628694
49.60327148	0.003056713	4.273988159
49.609375	0.002775801	3.809722194
49.61547852	0.002046455	2.751042452
49.62158203	0.001205397	1.603853688
49.62768555	0.001195754	1.588278748
49.63378906	0.001635985	2.153937287
49.63989258	0.002168223	2.785802093
49.64599609	0.002242124	2.846672435
49.65209961	0.001800072	2.270145224
49.65820313	0.001342612	1.627780206
49.66430664	0.001066969	1.252145478
49.67041016	0.000978228	1.155602448
49.67651367	0.001402552	1.652261193
49.68261719	0.00200853	2.28059391
49.6887207	0.002537338	2.79784059
49.69482422	0.002879069	3.166407863
49.70092773	0.002780639	3.02825819
49.70703125	0.002451019	2.597678715
49.71313477	0.002226163	2.345649028
49.71923828	0.002061717	2.189401013
49.7253418	0.001797187	1.885799958
49.73144531	0.001634089	1.68666228
49.73754883	0.001219408	1.254992779
49.74365234	0.000448936	0.467476617
49.74975586	0.000237843	0.249311011
49.75585938	0.001073144	1.114309042
49.76196289	0.001925836	2.033367656
49.76806641	0.002255612	2.428420482
49.77416992	0.002570247	2.694972753
49.78027344	0.002955678	3.118296516
49.78637695	0.002658985	2.922168903
49.79248047	0.001976402	2.164009557
49.79858398	0.001611405	1.783218916
49.8046875	0.001572238	1.793890268
49.81079102	0.001572291	1.76956161
49.81689453	0.002168316	2.444352945
49.82299805	0.002729178	3.143149549
49.82910156	0.002225259	2.565124283
49.83520508	0.001531888	1.803764179
49.84130859	0.002031109	2.416586902
49.84741211	0.002983228	3.501676412
49.85351563	0.003531423	4.203804626
49.85961914	0.003502275	4.161499774
49.86572266	0.003096357	3.676032513
49.87182617	0.002505988	3.124476235
49.87792969	0.002297152	2.902250188
49.8840332	0.002387192	2.992061636
49.89013672	0.002346184	3.068016755
49.89624023	0.002405121	3.190689562
49.90234375	0.00262434	3.423270886
49.90844727	0.002814859	3.814303448
49.91455078	0.002812933	3.976777005
49.9206543	0.002440681	3.441931099
49.92675781	0.001942262	2.764450819
49.93286133	0.001895217	2.740947832
49.93896484	0.002048569	2.890539564
49.94506836	0.001771406	2.46797232
49.95117188	0.001223448	1.749216132
49.95727539	0.000798907	1.123082873
49.96337891	0.000944537	1.272538117
49.96948242	0.001706367	2.297536195
49.97558594	0.002260009	2.975268554
49.98168945	0.001905633	2.381539396
49.98779297	0.001182593	1.477461391
49.99389648	0.00127135	1.582276201
50	0.002144351	2.529682111
50.00610352	0.002740887	3.179492434
50.01220703	0.00249648	2.901011177
50.01831055	0.001628404	1.80442997
50.02441406	0.000482475	0.522774692
50.03051758	0.000344889	0.38147664
50.03662109	0.000456238	0.495962146
50.04272461	0.000387134	0.412335415
50.04882813	0.000336841	0.364256016
50.05493164	0.000409248	0.43710347
50.06103516	0.000925133	0.965639388
50.06713867	0.001592545	1.702787752
50.07324219	0.002282482	2.486102006
50.0793457	0.002623308	2.805558569
50.08544922	0.002523466	2.715380925
50.09155273	0.002179663	2.399926098
50.09765625	0.001755186	1.900726294
50.10375977	0.001610336	1.733042636
50.10986328	0.001982014	2.212896827
50.1159668	0.002403492	2.691380143
50.12207031	0.002399272	2.654198659
50.12817383	0.002185907	2.496526972
50.13427734	0.002064362	2.362424347
50.14038086	0.002352168	2.624487606
50.14648438	0.002639663	3.011610999

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
41.08	0.028859076	-0.000142332	-0.028518959	-6.416765822	0.37311165	0.948626566
41.085	0.028767253	-0.000141956	-0.028440787	-6.399177071	0.373320807	0.948815317
41.09	0.029277983	-0.000144509	-0.028950149	-6.513783421	0.373537457	0.94896318
41.095	0.030955913	-0.000152892	-0.03061	-6.887249969	0.373779651	0.949079404
41.1	0.031880472	-0.000157571	-0.031536237	-7.095653428	0.374036528	0.949163532
41.105	0.032327157	-0.000159881	-0.031993456	-7.198527681	0.374300654	0.949215281
41.11	0.031829928	-0.000157516	-0.031515728	-7.091038724	0.374556717	0.94923458
41.115	0.030575384	-0.000151355	-0.030271722	-6.811137436	0.374792993	0.94923458
41.12	0.030023804	-0.000148678	-0.029731294	-6.689541146	0.375020821	0.94923458
41.125	0.02839796	-0.0001407	-0.028121473	-6.327331363	0.375224643	0.94923458
41.13	0.02540527	-0.000125879	-0.025133093	-5.654946012	0.375387769	0.94923458
41.135	0.023416195	-0.000115999	-0.023142595	-5.207083975	0.375526351	0.94923458
41.14	0.021111331	-0.000104565	-0.020840286	-4.689064368	0.375638995	0.94923458
41.145	0.018355297	-9.0831E-05	-0.018076988	-4.067322194	0.375724148	0.94923458
41.15	0.017345806	-8.57435E-05	-0.017053887	-3.837124513	0.375800192	0.94923458
41.155	0.016570573	-8.18589E-05	-0.016272879	-3.661397664	0.37586959	0.94923458
41.16	0.015318559	-7.55849E-05	-0.015011828	-3.377661352	0.375928898	0.94923458
41.165	0.015230375	-7.50799E-05	-0.014910908	-3.354954248	0.375987525	0.94923458
41.17	0.01543129	-7.60537E-05	-0.015107622	-3.399214961	0.376047709	0.94923458
41.175	0.015000271	-7.39039E-05	-0.014674022	-3.301654971	0.376104578	0.94923458
41.18	0.014286076	-7.03531E-05	-0.013960583	-3.141131282	0.37615616	0.94923458
41.185	0.012886738	-6.34032E-05	-0.012564555	-2.827024847	0.376198133	0.94923458
41.19	0.010931929	-5.36705E-05	-0.010610391	-2.387337981	0.376228337	0.94923458
41.195	0.008913366	-4.35943E-05	-0.008588304	-1.932368457	0.376248417	0.94923458
41.2	0.007033643	-3.41761E-05	-0.006699197	-1.507319387	0.37626092	0.94923458
41.205	0.005826891	-2.80704E-05	-0.005474988	-1.231872403	0.376269502	0.94923458
41.21	0.005403327	-2.58404E-05	-0.005027965	-1.131292102	0.376276881	0.94923458
41.215	0.005983699	-2.85804E-05	-0.005581428	-1.255821317	0.37628593	0.94923458
41.22	0.00813842	-3.91485E-05	-0.00771494	-1.735861425	0.37630267	0.94923458
41.225	0.011152617	-5.40339E-05	-0.010717411	-2.41141748	0.376334106	0.94923458
41.23	0.014202631	-6.91263E-05	-0.013758737	-3.095715746	0.376385088	0.94923458
41.235	0.01802211	-8.80642E-05	-0.017571184	-3.953516329	0.376467177	0.94923458
41.24	0.022438196	-0.000110057	-0.021993479	-4.9485328	0.376594425	0.94923458
41.245	0.026096274	-0.000128339	-0.025665735	-5.774790306	0.376766546	0.94923458
41.25	0.029502178	-0.000145378	-0.029085277	-6.544187303	0.376986526	0.94923458
41.255	0.032951347	-0.000162683	-0.032547939	-7.323286326	0.377260951	0.94923458
41.26	0.034699818	-0.00017157	-0.034306195	-7.718893813	0.37756527	0.94923458
41.265	0.035558344	-0.000175988	-0.035180168	-7.915537847	0.377884835	0.94923458
41.27	0.037419647	-0.000185402	-0.037041743	-8.334392191	0.378238731	0.94923458
41.275	0.038460505	-0.000190786	-0.038105977	-8.573844769	0.378612588	0.94923458
41.28	0.038266858	-0.000189996	-0.037946286	-8.537914383	0.37898269	0.94923458
41.285	0.038873381	-0.000193168	-0.038576697	-8.679756876	0.379364617	0.94923458
41.29	0.039297407	-0.000195468	-0.039031361	-8.782056174	0.379754922	0.94923458
41.295	0.038551257	-0.000191936	-0.038317871	-8.621520933	0.380130546	0.94923458
41.3	0.037594682	-0.000187337	-0.037389324	-8.412597969	0.38048776	0.94923458
41.305	0.036161483	-0.000180353	-0.035979658	-8.095423055	0.380818258	0.94923458
41.31	0.034425971	-0.000171811	-0.034256624	-7.707740318	0.381117793	0.94923458
41.315	0.033188913	-0.000165711	-0.03302666	-7.430998433	0.381396189	0.94923458
41.32	0.033236544	-0.000165945	-0.033074589	-7.441782566	0.381675384	0.94923458
41.325	0.037529927	-0.000187243	-0.037373007	-8.408926525	0.382031368	0.94923458
41.33	0.044151967	-0.00022084	-0.044040454	-9.909102248	0.382524061	0.94923458
41.335	0.045635291	-0.000228788	-0.04560414	-10.26093159	0.383050414	0.94923458
41.34	0.041730211	-0.000209601	-0.04173102	-9.389479562	0.38349054	0.949560821
41.345	0.037005836	-0.000186399	-0.037054295	-8.337216308	0.383836652	0.949854548
41.35	0.032114878	-0.000162308	-0.032205129	-7.246154111	0.384097321	0.950092982
41.355	0.027585222	-0.000139961	-0.027712827	-6.235386128	0.384289643	0.950274501
41.36	0.021723168	-0.000111028	-0.021904257	-4.928457747	0.38440891	0.950397607
41.365	0.009537096	-5.04073E-05	-0.009761632	-2.196367155	0.384431899	0.950460323
41.37	-0.003706378	1.60516E-05	0.003510128	0.78977889	0.384435371	0.950467978
41.375	-0.00823654	3.90712E-05	0.008097665	1.821974683	0.384452517	0.950467978
41.38	-0.009035302	4.31371E-05	0.008907469	2.004180488	0.38447315	0.950467978
41.385	-0.013491184	6.55061E-05	0.013360003	3.006000661	0.384519152	0.950467978
41.39	-0.017412468	8.52871E-05	0.017293733	3.891089894	0.384595781	0.950467978
41.395	-0.021744472	0.000107061	0.021619897	4.864476891	0.384715283	0.950467978
41.4	-0.030293857	0.000150244	0.030187435	6.79217281	0.384947228	0.950467978
41.405	-0.034000524	0.000169262	0.03395567	7.640025644	0.385239406	0.950801299
41.41	-0.032253461	0.000160522	0.032190697	7.242906894	0.385502328	0.951403983
41.415	-0.038457141	0.000191775	0.038412523	8.642817578	0.38587612	0.951936239
41.42	-0.047201481	0.000236311	0.047216908	10.62380421	0.386439223	0.952395951
41.425	-0.045704368	0.000229101	0.045751406	10.29406641	0.386967171	0.952780576
41.43	-0.044299428	0.000222006	0.044320025	9.972005708	0.38746316	0.953090014
41.435	-0.050851845	0.000254942	0.050895288	11.45143985	0.388116726	0.953324321
41.44	-0.05314086	0.00026695	0.053263721	11.98433717	0.388830454	0.953481884
41.445	-0.048576131	0.000244576	0.048747842	10.96826446	0.389426832	0.953562152
41.45	-0.047596504	0.000239772	0.047779682	10.75042849	0.389999399	0.953573686
41.455	-0.049848158	0.000251146	0.05007609	11.26712032	0.39062742	0.953573686
41.46	-0.046501968	0.000234901	0.046797066	10.52933978	0.391173956	0.953573686
41.465	-0.039253572	0.000199025	0.039573682	8.904078411	0.39156339	0.953573686
41.47	-0.036693206	0.000186322	0.037019524	8.329392794	0.391903679	0.953573686
41.475	-0.033908811	0.000172682	0.034278824	7.712735426	0.392194282	0.953874838
41.48	-0.024362112	0.000125206	0.024754645	5.569795231	0.392344287	0.954152835
41.485	-0.018037776	9.34591E-05	0.018398413	4.139642922	0.39242652	0.954384266
41.49	-0.016355163	8.50306E-05	0.01671255	3.760323846	0.392494126	0.954570977
41.495	-0.009161784	4.90448E-05	0.009522162	2.142486508	0.39251534	0.95471384
41.5	-0.00310032	1.83943E-05	0.003407307	0.766644148	0.39251777	0.954831756
41.505	-0.00399986	2.27037E-05	0.004277724	0.962487854	0.392521813	0.955107823
41.51	-0.002370188	1.4479E-05	0.002626815	0.591033278	0.392523233	0.955317195
41.515	0.000310256	8.25904E-07	-9.37924E-05	-0.021103281	0.392523257	0.955479323
41.52	-0.00190811	1.17581E-05	0.002113681	0.47557822	0.392524178	0.955615652
41.525	-0.003175283	1.80495E-05	0.003383261	0.761233837	0.392526726	0.955725672
41.53	-0.003456686	1.93148E-05	0.003638532	0.818669673	0.392529746	0.955808961
41.535	-0.006864519	3.62798E-05	0.007059084	1.588293965	0.392541655	0.955865278
41.54	-0.009496423	4.94546E-05	0.009712991	2.185422938	0.392564448	0.955893738
41.545	-0.01119175	5.7877E-05	0.011408518	2.566916543	0.392596105	0.955897262
41.55	-0.015288497	7.82588E-05	0.0155083	3.48936748	0.39265518	0.955897262
41.555	-0.018947031	9.64973E-05	0.019173137	4.313955727	0.392745912	0.955897262
41.56	-0.020967186	0.000106557	0.021193113	4.768450408	0.392857023	0.955897262
41.565	-0.024409342	0.000123666	0.024625941	5.540836776	0.39300761	0.955897262
41.57	-0.028523829	0.00014425	0.028752084	6.469218908	0.393213242	0.955897262
41.575	-0.031169677	0.000157535	0.031412961	7.067916148	0.393458793	0.955897262
41.58	-0.033863127	0.000171021	0.034112425	7.675295564	0.393748614	0.955897262
41.585	-0.03742707	0.000188893	0.037686912	8.479555236	0.39410265	0.955897262
41.59	-0.03982346	0.000200987	0.040104067	9.023415129	0.394503474	0.955897262
41.595	-0.041785574	0.00021087	0.0420784	9.467640099	0.394944769	0.955897262

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
50.15258789	0.002530523	2.931196871
50.15869141	0.003045774	3.524422103
50.16479492	0.003120904	3.683604601
50.17089844	0.002295283	2.702013879
50.17700195	0.001564085	1.846843789
50.18310547	0.00138035	1.671450995
50.18920898	0.001520326	1.840558481
50.1953125	0.001591867	1.965682041
50.20141602	0.001313469	1.666969824
50.20751953	0.0009023	1.137042804
50.21362305	0.000719929	0.936844082
50.21972656	0.000661447	0.891201914
50.22583008	0.000554998	0.735608323
50.23193359	0.000300563	0.40770341
50.23803711	0.000603209	0.853441648
50.24414063	0.001078817	1.521535091
50.25024414	0.001288804	1.81653173
50.25634766	0.001574535	2.232565625
50.26245117	0.001840142	2.605230188
50.26855469	0.001581696	2.223867517
50.2746582	0.001046377	1.455073901
50.28076172	0.000963921	1.35770849
50.28686523	0.000913583	1.282370466
50.29296875	0.001469285	1.966318726
50.29907227	0.002013128	2.658505607
50.30517578	0.002043313	2.723881319
50.3112793	0.002036225	2.625096048
50.31738281	0.002101474	2.621346114
50.32348633	0.00222231	2.775806016
50.32958984	0.002338089	2.918637772
50.33569336	0.002116617	2.570313562
50.34179688	0.001448977	1.704466257
50.34790039	0.000715407	0.837449341
50.35400391	0.000331673	0.390403197
50.36010742	0.000292516	0.339937481
50.36621094	0.000394474	0.454355056
50.37231445	0.000429597	0.498211687
50.37841797	0.000403224	0.463805636
50.38452148	0.00029075	0.32631348
50.390625	0.000905306	1.010125529
50.39672852	0.001551087	1.74996155
50.40283203	0.001990537	2.237044435
50.40893555	0.002091495	2.315930114
50.41503906	0.001716419	1.894174735
50.42114258	0.001332791	1.47519257
50.42724609	0.001346774	1.486990988
50.43334961	0.001520519	1.669517765
50.43945313	0.001517402	1.669593543
50.44555664	0.001225314	1.367164573
50.45166016	0.001009669	1.139347453
50.45776367	0.001230356	1.389753531
50.46386719	0.001580645	1.791943286
50.4699707	0.001856644	2.133031589
50.47607422	0.002053648	2.405191417
50.48217773	0.002047014	2.439078221
50.48828125	0.002281592	2.750418828
50.49438477	0.002832926	3.461457977
50.50048828	0.003006694	3.719400777
50.5065918	0.002568372	3.202236237
50.51269531	0.001899588	2.412453921
50.51879883	0.001432697	1.872068356
50.52490234	0.001246022	1.66535408
50.53100586	0.001035112	1.405752646
50.53710938	0.000536621	0.734851052
50.54321289	0.000690059	0.949296338
50.54931641	0.001481196	2.075909797
50.55541992	0.002011295	2.883104559
50.56152344	0.001947236	2.806147943
50.56762695	0.001456363	2.105822064
50.57373047	0.001106195	1.611938429
50.57983398	0.001382597	2.001756459
50.5859375	0.002160785	3.087363945
50.59204102	0.002820253	4.00662021
50.59814453	0.002966944	4.212314424
50.60424805	0.00298758	4.262986903
50.61035156	0.003249104	4.63760907
50.61645508	0.003405941	4.791613605
50.62255859	0.003189546	4.422265846
50.62866211	0.002843082	3.89635337
50.63476563	0.002830949	3.83286782
50.64086914	0.00328766	4.444484421
50.64697266	0.003549461	4.797930309
50.65307617	0.002806538	3.740971301
50.65917969	0.001330241	1.740666611
50.6652832	0.000443074	0.570279348
50.67138672	0.000639494	0.812014461
50.67749023	0.001231696	1.547138258
50.68359375	0.001883452	2.319964156
50.68969727	0.002592027	3.131082324
50.69580078	0.002583352	3.111754364
50.7019043	0.001961448	2.349552054
50.70800781	0.001487634	1.745252428
50.71411133	0.001445759	1.668473742
50.72021484	0.001275944	1.46549745
50.72631836	0.000937485	1.075775155
50.73242188	0.001007328	1.146684933
50.73852539	0.000937566	1.046841371
50.74462891	0.00060275	0.666474096
50.75073242	0.001127065	1.256935889
50.75683594	0.001445044	1.622657158
50.76293945	0.00091465	1.028124814
50.76904297	0.000331425	0.37422368
50.77514648	0.0001857	0.211706069
50.78125	0.000587041	0.679219287

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
41.6	-0.045159699	0.000227819	0.045462106	10.22897377	0.395460209	0.955897262
41.605	-0.04764635	0.000240418	0.047975581	10.79450569	0.396033975	0.955897262
41.61	-0.048990156	0.000247286	0.049345324	11.10269798	0.396640563	0.955897262
41.615	-0.051691171	0.000260931	0.052065016	11.71462857	0.397315881	0.955897262
41.62	-0.053309483	0.000269266	0.053721289	12.08728996	0.398034147	0.955897262
41.625	-0.052726145	0.000266593	0.053181532	11.96584462	0.398736779	0.955897262
41.63	-0.053007301	0.00026822	0.053510154	12.03978468	0.399446924	0.955897262
41.635	-0.051558216	0.000261298	0.052112206	11.72524645	0.400118773	0.955917653
41.64	-0.045815744	0.000233042	0.046413338	10.44300094	0.400649298	0.955929458
41.645	-0.040838959	0.000208357	0.041442784	9.32462631	0.401070824	0.955929458
41.65	-0.039531112	0.000201818	0.04012712	9.02860198	0.401465785	0.955929458
41.655	-0.042440732	0.000216213	0.043033547	9.682548144	0.401921026	0.955929458
41.66	-0.049601586	0.000251931	0.050232782	11.30237592	0.40254285	0.955929458
41.665	-0.05206798	0.000264718	0.052806261	11.88140862	0.40322805	0.955929458
41.67	-0.042659027	0.000218563	0.043497703	9.786983201	0.403687986	0.955929458
41.675	-0.029553648	0.000153465	0.030413601	6.843060227	0.403908735	0.955929458
41.68	-0.022911085	0.000120194	0.02374407	5.34241577	0.404041403	0.955929458
41.685	-0.022486593	0.000118056	0.023317325	5.246398125	0.404169201	0.955929458
41.69	-0.019937113	0.000105558	0.020813406	4.683016442	0.404269663	0.955929458
41.695	-0.009162082	5.18215E-05	0.010071413	2.266067901	0.404290879	0.955929458
41.7	0.000799301	1.66086E-06	6.83768E-05	0.015384779	0.40429104	0.955929458
41.705	0.001896111	-4.02146E-06	-0.001061486	-0.238834373	0.404291949	0.955929458
41.71	0.006054761	-2.48228E-05	-0.005203879	-1.170872845	0.404301214	0.955929458
41.715	0.015817224	-7.41204E-05	-0.01500143	-3.375321787	0.404364446	0.955929458
41.72	0.016179019	-7.62948E-05	-0.015409976	-3.467244521	0.404430604	0.955929458
41.725	0.013974515	-6.53133E-05	-0.013193674	-2.968576676	0.404479961	0.955929458
41.73	0.022841951	-0.000109672	-0.022054088	-4.962169857	0.40461183	0.955929458
41.735	0.028300553	-0.000137604	-0.027587657	-6.207222713	0.404814256	0.955929458
41.74	0.024489571	-0.000118746	-0.023780842	-5.350689455	0.404965835	0.955929458
41.745	0.027296524	-0.000132583	-0.026574615	-5.979288475	0.405154152	0.95625137
41.75	0.033365119	-0.000163375	-0.032687415	-7.354668358	0.405435511	0.95692132
41.755	0.032322228	-0.000158354	-0.031670459	-7.125853373	0.405699557	0.957510779
41.76	0.033055058	-0.000162107	-0.03242844	-7.296398925	0.405975711	0.958019261
41.765	0.036794917	-0.000181181	-0.036207797	-8.146754391	0.406317888	0.95844613
41.77	0.033662829	-0.000165889	-0.033120451	-7.452101425	0.406604291	0.958790336
41.775	0.030578022	-0.000150586	-0.030034252	-6.757706662	0.406840608	0.959052458
41.78	0.034368933	-0.000169455	-0.033843085	-7.61469413	0.407139152	0.959233163
41.785	0.03372819	-0.000166598	-0.033265096	-7.484646658	0.407426668	0.959331746
41.79	0.027751674	-0.000137071	-0.027311018	-6.144979131	0.407621318	0.959350281
41.795	0.027239616	-0.000134533	-0.026801565	-6.030352195	0.407808851	0.959350281
41.8	0.026460376	-0.000130901	-0.026068522	-5.865417402	0.407985808	0.959350281
41.805	0.019125894	-9.45805E-05	-0.018763081	-4.22169325	0.408078261	0.959350281
41.81	0.014522328	-7.16053E-05	-0.014149253	-3.183581835	0.408131563	0.959350281
41.815	0.011801696	-5.81388E-05	-0.011447506	-2.575688889	0.408166765	0.959350281
41.82	0.00412392	-1.98527E-05	-0.003776163	-0.849636634	0.408171063	0.959350281
41.825	-0.001685406	9.36435E-06	0.002068433	0.465397475	0.408171781	0.959412999
41.83	-0.004471828	2.34071E-05	0.004874669	1.096800549	0.408176835	0.959440822
41.835	-0.009751984	4.99887E-05	0.010181563	2.290851723	0.408200871	0.959440822
41.84	-0.012538725	6.42325E-05	0.013022599	2.930084697	0.408240607	0.959440822
41.845	-0.012785333	6.56406E-05	0.013303354	2.99325455	0.408281921	0.959440822
41.85	-0.015494292	7.94159E-05	0.016049024	3.611030336	0.408342598	0.959440822
41.855	-0.014750551	7.6007E-05	0.015353808	3.454606866	0.408397589	0.959440822
41.86	-0.010983532	5.74778E-05	0.011614961	2.613366228	0.408428079	0.959440822
41.865	-0.012215587	6.36741E-05	0.012866386	2.894936765	0.408465793	0.959440822
41.87	-0.011949134	6.26621E-05	0.012661625	2.848865537	0.40850188	0.959440822
41.875	-0.005834622	3.25282E-05	0.00658759	1.482207784	0.408510484	0.959440822
41.88	-0.002947555	1.82128E-05	0.003706328	0.833923824	0.40851268	0.959440822
41.885	-0.001928569	1.33203E-05	0.002722154	0.612484632	0.40851362	0.959440822
41.89	0.003620565	-1.41168E-05	-0.002792299	-0.628267334	0.408516933	0.959440822
41.895	0.00831334	-3.74723E-05	-0.007480164	-1.683036877	0.4085344	0.959440822
41.9	0.011064838	-5.11092E-05	-0.010214737	-2.298315815	0.408565344	0.959440822
41.905	0.016314909	-7.72501E-05	-0.015451554	-3.476599658	0.408632617	0.959440822
41.91	0.020692917	-9.9155E-05	-0.019834629	-4.462791593	0.40874084	0.959440822
41.915	0.024105099	-0.000116191	-0.023240234	-5.229052743	0.408887697	0.959440822
41.92	0.029887863	-0.000145174	-0.029028141	-6.531331638	0.409113467	0.959440822
41.925	0.034110553	-0.000166477	-0.03327721	-7.487372253	0.409407539	0.959440822
41.93	0.036669125	-0.000179398	-0.035852498	-8.066812089	0.409747381	0.959440822
41.935	0.040519509	-0.000198824	-0.039693274	-8.930986713	0.410162339	0.959440822
41.94	0.042298481	-0.000207932	-0.041491712	-9.335635098	0.410614533	0.959440822
41.945	0.042894452	-0.000211036	-0.04210447	-9.473505798	0.41107956	0.959440822
41.95	0.044971076	-0.000221575	-0.044184221	-9.941449724	0.411590703	0.959440822
41.955	0.0452793	-0.000223279	-0.044517106	-10.0163489	0.412108877	0.959440822
41.96	0.045858528	-0.000226264	-0.045109303	-10.14959315	0.412640393	0.959440822
41.965	0.048383677	-0.000239096	-0.047638695	-10.71870644	0.413232055	0.959440822
41.97	0.046471148	-0.000229768	-0.045755045	-10.29488511	0.413777866	0.959440822
41.975	0.041330633	-0.000204345	-0.040627451	-9.141176407	0.414209604	0.959440822
41.98	0.03949484	-0.000195171	-0.038779127	-8.725303478	0.41460384	0.959440822
41.985	0.039978921	-0.00019752	-0.039253612	-8.832062731	0.4150078	0.959440822
41.99	0.042647622	-0.000210689	-0.041912049	-9.43021109	0.415467491	0.959440822
41.995	0.048663477	-0.000240602	-0.047935428	-10.78547141	0.416066016	0.959440822
42	0.05316762	-0.000263718	-0.052487236	-11.80962813	0.416780463	0.959440822
42.005	0.053131489	-0.000263825	-0.052494891	-11.81135049	0.41749394	0.959440822
42.01	0.050140953	-0.000248842	-0.049470649	-11.13089613	0.41812936	0.959440822
42.015	0.046993095	-0.000232924	-0.046260858	-10.40869312	0.418687501	0.959440822
42.02	0.047768449	-0.00023686	-0.047056498	-10.58771211	0.419264212	0.959440822
42.025	0.051589995	-0.000256438	-0.051006904	-11.47655347	0.41993689	0.959440822
42.03	0.051132997	-0.000254481	-0.050610364	-11.38733193	0.420597703	0.959440822
42.035	0.044742593	-0.00022303	-0.044267458	-9.96017805	0.421103665	0.959440822
42.04	0.040742634	-0.0002032	-0.04027552	-9.061992095	0.421523206	0.959502587
42.045	0.040847802	-0.00020388	-0.040412859	-9.092893272	0.421944915	0.959693525
42.05	0.035936688	-0.00017976	-0.035562439	-8.0015488	0.422271317	0.959830658
42.055	0.026975095	-0.00013518	-0.026614986	-5.988371833	0.422455225	0.959910818
42.06	0.023923217	-0.000119891	-0.023551098	-5.298997004	0.422599874	0.95993094
42.065	0.022253357	-0.000111712	-0.021912966	-4.930417389	0.422725034	0.95993094
42.07	0.014250633	-7.18329E-05	-0.013935084	-3.135393944	0.422776361	0.95993094
42.075	0.007756612	-3.91824E-05	-0.007414422	-1.668244841	0.422791567	0.95993094
42.08	0.006474368	-3.26696E-05	-0.006114938	-1.375861098	0.422802162	0.95993094
42.085	0.003371057	-1.71192E-05	-0.00301374	-0.678091601	0.422805034	0.95993094
42.09	0.00039412	-2.07749E-06	-1.60668E-05	-0.00361504	0.422805073	0.95993094
42.095	0.001062762	-5.34496E-06	-0.000676062	-0.152114052	0.422805358	0.95993094
42.1	-0.000921431	4.5913E-06	0.001312308	0.295269216	0.422805573	0.95993094
42.105	-0.003630366	1.83635E-05	0.004054376	0.912234628	0.422808904	0.95993094
42.11	0.001478457	-6.82869E-06	-0.001029927	-0.231733501	0.422809457	0.960343462
42.115	0.006940587	-3.40353E-05	-0.006511477	-1.465082414	0.422821631	0.960676712

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
50.78735352	0.000467342	0.547863699
50.79345703	0.001012559	1.198459097
50.79956055	0.001659972	1.998188055
50.80566406	0.001478306	1.815263129
50.81176758	0.001532316	1.900576255
50.81787109	0.001728329	2.157005806
50.82397461	0.001465292	1.847541168
50.83007813	0.00114584	1.459368958
50.83618164	0.001090553	1.402134871
50.84228516	0.000971662	1.267787063
50.84838867	0.000540977	0.719205122
50.85449219	0.000200362	0.270770326
50.8605957	0.000706784	0.963756969
50.86669922	0.000943811	1.293159499
50.87280273	0.001355347	1.885996073
50.87890625	0.00168968	2.40505238
50.88500977	0.001619188	2.323627209
50.89111328	0.001572538	2.256491874
50.8972168	0.001854873	2.692919216
50.90332031	0.002319988	3.431146797
50.90942383	0.002455933	3.666331138
50.91552734	0.001946585	2.897081216
50.92163086	0.001276545	1.901209244
50.92773438	0.001109467	1.681730699
50.93383789	0.00146755	2.264429618
50.93994141	0.002164554	3.340400139
50.94604492	0.002652471	4.072983389
50.95214844	0.002449769	3.76594139
50.95825195	0.002001062	3.075250868
50.96435547	0.002024217	3.084655335
50.97045898	0.002403521	3.595473956
50.9765625	0.002543323	3.717109794
50.98266602	0.002316683	3.317798605
50.98876953	0.002072518	2.892692333
50.99487305	0.002063686	2.786492839
51.00097656	0.002114782	2.783110304
51.00708008	0.001909436	2.463019425
51.01318359	0.001510411	1.903809071
51.01928711	0.001341634	1.656321515
51.02539063	0.001464815	1.775389435
51.03149414	0.001802091	2.142168032
51.03759766	0.002027811	2.371301339
51.04370117	0.001727849	1.995370509
51.04980469	0.001077312	1.23626043
51.0559082	0.000651307	0.748955161
51.06201172	0.000670499	0.771738213
51.06811523	0.00133085	1.522704505
51.07421875	0.00179614	2.049558239
51.08032227	0.001952742	2.244165058
51.08642578	0.001552379	1.806446651
51.0925293	0.000929635	1.097333935
51.09863281	0.001294201	1.548411245
51.10473633	0.002207844	2.669785205
51.11083984	0.002851987	3.48402298
51.11694336	0.002888305	3.554439197
51.12304688	0.002593497	3.198800051
51.12915039	0.002285894	2.836715486
51.13525391	0.002229968	2.80453368
51.14135742	0.002274009	2.892721353
51.14746094	0.002133199	2.720863731
51.15356445	0.001890004	2.402106874
51.15966797	0.001813118	2.305118773
51.16577148	0.001912819	2.451273814
51.171875	0.001763111	2.278579858
51.17797852	0.001089194	1.418642883
51.18408203	0.000442311	0.582239759
51.19018555	0.000434238	0.578733782
51.19628906	0.001281929	1.728683764
51.20239258	0.00220137	2.995048011
51.20849609	0.002585686	3.555951329
51.21459961	0.002472305	3.464143175
51.22070313	0.00225481	3.218115295
51.22680664	0.002265848	3.269438582
51.23291016	0.002376541	3.471970256
51.23901367	0.002388844	3.563349361
51.24511719	0.002454408	3.747265678
51.2512207	0.002582706	4.020397357
51.25732422	0.002746913	4.3489924
51.26342773	0.003140281	5.04690846
51.26953125	0.003631673	5.893420266
51.27563477	0.003933371	6.388925803
51.28173828	0.004198707	6.770546446
51.2878418	0.004483398	7.18591764
51.29394531	0.004414551	7.06744625
51.30004883	0.003941037	6.249088852
51.30615234	0.003394667	5.251884714
51.31225586	0.00294396	4.407889728
51.31835938	0.002672472	3.86081556
51.32446289	0.002666523	3.738837178
51.33056641	0.00287099	3.939726855
51.33666992	0.003101397	4.149347337
51.34277344	0.003200083	4.169458198
51.34887695	0.003219314	4.119750623
51.35498047	0.003144327	3.94394128
51.36108398	0.002763692	3.3868241
51.3671875	0.002442133	2.948480514
51.37329102	0.002420345	2.891141156
51.37939453	0.001899129	2.255212221
51.38549805	0.001248395	1.488269672
51.39160156	0.001177355	1.40318081
51.39770508	0.001797033	2.12236716
51.40380859	0.002170663	2.549664476
51.40991211	0.002086508	2.449867188
51.41601563	0.002157435	2.538722463

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
42.12	0.005237633	-2.5645E-05	-0.004817093	-1.08384594	0.422828565	0.960927098
42.125	0.007177356	-3.50961E-05	-0.006725011	-1.513127577	0.422841585	0.961094446
42.13	0.013906741	-6.85991E-05	-0.013463047	-3.029185535	0.422890464	0.961179478
42.135	0.015901492	-7.86708E-05	-0.015486262	-3.484408997	0.422954372	0.961191758
42.14	0.01844499	-9.13599E-05	-0.018033748	-4.057593189	0.423040359	0.961191758
42.145	0.022613454	-0.000112318	-0.022237692	-5.003480621	0.423169602	0.961191758
42.15	0.02228058	-0.000110836	-0.021937054	-4.935837185	0.423295069	0.961191758
42.155	0.025186308	-0.000125402	-0.024859948	-5.593488261	0.423455396	0.961191758
42.16	0.0289189	-0.000144369	-0.028658342	-6.448127061	0.423666764	0.961191758
42.165	0.024488211	-0.000122637	-0.024271832	-5.461162252	0.423818326	0.961191758
42.17	0.024472845	-0.000122611	-0.024268558	-5.460425583	0.423969697	0.961191758
42.175	0.027771355	-0.000139348	-0.027645915	-6.220330763	0.424164624	0.961191758
42.18	0.018972586	-9.61798E-05	-0.018940015	-4.261503334	0.4242556	0.961191758
42.185	0.009507954	-4.91893E-05	-0.009490131	-2.135279575	0.424278448	0.961624151
42.19	0.004389123	-2.3842E-05	-0.004402543	-0.990572095	0.424283317	0.962225874
42.195	-0.007583917	3.59297E-05	0.007549402	1.698615493	0.424297854	0.96275422
42.2	-0.015548489	7.62849E-05	0.015568386	3.502886744	0.424358955	0.963205437
42.205	-0.015026117	7.37693E-05	0.015060251	3.388556541	0.42441602	0.963576891
42.21	-0.019168163	9.45863E-05	0.019200442	4.320099552	0.424508882	0.963868054
42.215	-0.023487989	0.000116505	0.023546684	5.298003973	0.424648316	0.964077729
42.22	-0.023534849	0.000116795	0.02360381	5.310857159	0.424788306	0.964204748
42.225	-0.026707416	0.000132747	0.026764632	6.022042289	0.424968583	0.964248944
42.23	-0.031628998	0.00015762	0.0316882	7.1298449	0.425221423	0.964248944
42.235	-0.03816555	0.000190722	0.038232952	8.602414236	0.425589568	0.964248944
42.24	-0.045559772	0.000228434	0.045678218	10.27759902	0.426114181	0.964248944
42.245	-0.04559121	0.000228929	0.045752533	10.29431987	0.426639519	0.964248944
42.25	-0.044298134	0.00022243	0.044440647	9.999145549	0.427135479	0.964307335
42.255	-0.049437424	0.000248312	0.049598026	11.15955591	0.427753193	0.964361588
42.26	-0.051911538	0.000261176	0.052133053	11.72993683	0.428434282	0.96438607
42.265	-0.050434688	0.000253879	0.050659457	11.39837779	0.429077169	0.964416799
42.27	-0.051427151	0.000259051	0.05170393	11.63338421	0.429745606	0.964461703
42.275	-0.051782936	0.000261084	0.052109965	11.72474221	0.430423325	0.96448129
42.28	-0.049969054	0.000252058	0.050287253	11.31463199	0.431054396	0.964498029
42.285	-0.049110927	0.000247829	0.049433876	11.12262211	0.431663978	0.964510382
42.29	-0.047941383	0.000242042	0.048266216	10.85989858	0.432244872	0.964510382
42.295	-0.045994796	0.000232252	0.046292102	10.41572285	0.432779551	0.964510382
42.3	-0.046286824	0.000233785	0.046602364	10.48553188	0.433321041	0.964510382
42.305	-0.047190047	0.000238529	0.04756022	10.70104957	0.433883871	0.964510382
42.31	-0.044516982	0.000225116	0.044853956	10.09214006	0.434384743	0.964510382
42.315	-0.043332016	0.000219088	0.043639807	9.818956625	0.434859306	0.964510382
42.32	-0.046465807	0.000235092	0.04687064	10.54589408	0.435404992	0.964510382
42.325	-0.044807859	0.000226913	0.045218881	10.17424833	0.435912432	0.964510382
42.33	-0.041903586	0.000212488	0.042310304	9.519818307	0.436356223	0.964510382
42.335	-0.04720776	0.000238804	0.047621337	10.7148009	0.436919475	0.964510382
42.34	-0.04903673	0.000248209	0.049516116	11.14112618	0.437527216	0.964510382
42.345	-0.045150015	0.000229093	0.045657777	10.27299982	0.438042435	0.964510382
42.35	-0.048037525	0.000243452	0.048556829	10.92528646	0.438625661	0.964637598
42.355	-0.049966125	0.000253363	0.050555366	11.37495735	0.439256658	0.964740989
42.36	-0.04504949	0.00022925	0.045688833	10.2799875	0.439769585	0.964818805
42.365	-0.043580523	0.000222067	0.044240658	9.954148148	0.440249607	0.964869608
42.37	-0.042991257	0.000219398	0.043702571	9.833078425	0.440716735	0.964892721
42.375	-0.03841778	0.000196889	0.039170928	8.813458813	0.441089763	0.964893837
42.38	-0.035568372	0.000182845	0.036346835	8.178037773	0.441409508	0.964893837
42.385	-0.033053972	0.000170551	0.033876332	7.622174724	0.441685644	0.964893837
42.39	-0.027943952	0.000145269	0.028800855	6.480192282	0.441883	0.964893837
42.395	-0.02292919	0.000120367	0.023808085	5.356819089	0.442015878	0.964893837
42.4	-0.017049137	9.10963E-05	0.017947158	4.038110586	0.442089343	0.964893837
42.405	-0.010610234	5.88742E-05	0.011504857	2.588592728	0.442117796	0.964893837
42.41	-0.006775371	3.95905E-05	0.007654051	1.722161564	0.442129399	0.964893837
42.415	-0.004296963	2.71284E-05	0.005167297	1.162641803	0.442134065	0.964893837
42.42	-0.002205278	1.65981E-05	0.003067129	0.690103954	0.442135294	0.964893837
42.425	-0.001033523	1.0699E-05	0.001891048	0.42548581	0.442135564	0.964893837
42.43	0.001211062	-5.5656E-07	-0.000352049	-0.079210914	0.442135935	0.964893837
42.435	0.003223372	-1.07412E-05	-0.002380753	-0.535669451	0.442138561	0.964893837
42.44	0.001420672	-1.81772E-06	-0.000578733	-0.130214985	0.442139071	0.964893837
42.445	-0.000962644	1.01651E-05	0.001839204	0.413820844	0.442139305	0.964893837
42.45	-0.000388686	7.36565E-06	0.00127373	0.286589299	0.442139343	0.964893837
42.455	-0.000201968	6.44833E-06	0.001088533	0.244920019	0.442139354	0.964893837
42.46	-0.000955432	1.02941E-05	0.001865217	0.419673743	0.442139585	0.964893837
42.465	-0.000160795	6.40083E-06	0.001078846	0.242740266	0.442139591	0.964893837
42.47	-0.000213898	6.73969E-06	0.001147366	0.258157339	0.442139603	0.964893837
42.475	0.000445515	3.61564E-06	0.000516444	0.116199877	0.442139653	0.964893837
42.48	0.005076607	-1.93316E-05	-0.004091172	-0.920513782	0.442146166	0.964893837
42.485	0.007686592	-3.23947E-05	-0.006690885	-1.505449199	0.442161099	0.964893837
42.49	0.008768607	-3.76948E-05	-0.00774525	-1.742681154	0.442180532	0.964893837
42.495	0.014382678	-6.58419E-05	-0.013340477	-3.001607301	0.442232815	0.964893837
42.5	0.018816797	-8.8263E-05	-0.017792544	-4.003322313	0.442322303	0.964893837
42.505	0.019763105	-9.30581E-05	-0.018744129	-4.217429043	0.442421019	0.964893837
42.51	0.022771743	-0.000108193	-0.021746323	-4.892922582	0.442552078	0.965424992
42.515	0.024944293	-0.000119199	-0.023928313	-5.383870404	0.442709338	0.965908215
42.52	0.025872903	-0.000123846	-0.024849348	-5.591103386	0.442878525	0.966296108
42.525	0.03041317	-0.00014671	-0.029378093	-6.610070949	0.443112301	0.966587992
42.53	0.034592579	-0.000167934	-0.033578006	-7.555051284	0.443414742	0.966782537
42.535	0.036455035	-0.000177417	-0.035453462	-7.977028973	0.443750628	0.966878592
42.54	0.040143317	-0.000196118	-0.039149612	-8.808662629	0.444157916	0.96688953
42.545	0.043807837	-0.00021482	-0.042843049	-9.639685966	0.444642959	0.96688953
42.55	0.045561052	-0.000223849	-0.044625204	-10.04067086	0.445167601	0.96688953
42.555	0.047576831	-0.000234193	-0.046666174	-10.49988926	0.445739695	0.96688953
42.56	0.049111259	-0.00024216	-0.048237434	-10.85342274	0.446349285	0.96688953
42.565	0.04821082	-0.000237809	-0.04735857	-10.65567825	0.446936727	0.96688953
42.57	0.045514395	-0.000224272	-0.044626257	-10.04090785	0.447460295	0.96688953
42.575	0.044316346	-0.000218207	-0.043403064	-9.765689436	0.447956663	0.966941511
42.58	0.046091243	-0.000227221	-0.045223292	-10.17524073	0.448493587	0.967066604
42.585	0.047523056	-0.00023457	-0.046706393	-10.50893849	0.449064388	0.967162854
42.59	0.048833075	-0.000241291	-0.048062278	-10.81401258	0.449667092	0.967230338
42.595	0.050392004	-0.000249345	-0.049654169	-11.17218798	0.450308891	0.967269285
42.6	0.048696438	-0.000240925	-0.047953705	-10.78958364	0.450908227	0.967280022
42.605	0.047377161	-0.000234268	-0.046610213	-10.48729784	0.451475529	0.967527574
42.61	0.049018218	-0.000242646	-0.048302102	-10.86797285	0.452082812	0.967812832
42.615	0.048449306	-0.0002399	-0.047747244	-10.74312994	0.45267608	0.96806484
42.62	0.047657235	-0.000235912	-0.04694213	-10.56197936	0.453250108	0.968282319
42.625	0.049766452	-0.00024665	-0.049110209	-11.04979695	0.453876072	0.968464165
42.63	0.050467603	-0.000250344	-0.049851096	-11.21649665	0.454519799	0.968610109
42.635	0.050333036	-0.000249752	-0.049731528	-11.18959382	0.455160097	0.96871984

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
51.42211914	0.00218528	2.579695093
51.42822266	0.00211765	2.498785946
51.43432617	0.002176147	2.564066327
51.44042969	0.0023906	2.823770557
51.4465332	0.002453421	2.911518185
51.45263672	0.002248337	2.674710599
51.45874023	0.002133435	2.539133876
51.46484375	0.002221941	2.657324808
51.47094727	0.00225894	2.733673847
51.47705078	0.002332895	2.857769034
51.4831543	0.00263653	3.251944693
51.48925781	0.003024338	3.748676761
51.49536133	0.003123345	3.915034205
51.50146484	0.002918111	3.724277131
51.50756836	0.00253312	3.284851695
51.51367188	0.002062495	2.695939038
51.51977539	0.001956188	2.570698586
51.52587891	0.002443334	3.260724383
51.53198242	0.002845455	3.89499768
51.53808594	0.002602378	3.635068851
51.54418945	0.002130399	3.017061824
51.55029297	0.001876225	2.699553519
51.55639648	0.001522155	2.221793426
51.5625	0.001254716	1.850008744
51.56860352	0.001615804	2.402007327
51.57470703	0.002471675	3.69958269
51.58081055	0.003119666	4.721744458
51.58691406	0.003086459	4.748335119
51.59301758	0.002486803	3.859663479
51.59912109	0.001861144	2.867851949
51.60522461	0.001639219	2.488762021
51.61132813	0.00158384	2.386061221
51.61743164	0.00174981	2.639103058
51.62353516	0.002450032	3.694629503
51.62963867	0.002398988	3.604762293
51.63574219	0.001339479	1.99422183
51.6418457	0.000239739	0.348549709
51.64794922	0.000988726	1.403069883
51.65405273	0.001258693	1.765995775
51.66015625	0.000609267	0.842525188
51.66625977	0.001043402	1.417193534
51.67236328	0.001409174	1.900501556
51.6784668	0.000820868	1.096063982
51.68457031	0.000253198	0.331298555
51.69067383	0.000177165	0.228516979
51.69677734	0.000185579	0.237286893
51.70288086	0.00109572	1.392486844
51.70898438	0.002042518	2.604686822
51.71508789	0.002115391	2.692583545
51.72119141	0.001325547	1.653395826
51.72729492	0.000888492	1.08877058
51.73339844	0.001289849	1.575290608
51.73950195	0.001575271	1.924172181
51.74560547	0.001862042	2.275471952
51.75170898	0.002248115	2.746560373
51.7578125	0.002349903	2.857778427
51.76391602	0.002018514	2.449839532
51.77001953	0.001663299	2.026033279
51.77612305	0.001502522	1.843460606
51.78222656	0.001351351	1.684061436
51.78833008	0.001391548	1.767627418
51.79443359	0.002098956	2.696603613
51.80053711	0.002269544	2.931009358
51.80664063	0.001877683	2.432857611
51.81274414	0.001636328	2.134968779
51.81884766	0.00181473	2.411781039
51.82495117	0.001849579	2.515480167
51.83105469	0.00130607	1.805105326
51.8371582	0.001095558	1.528793208
51.84326172	0.00102847	1.441973705
51.84936523	0.001232945	1.729626165
51.85546875	0.001770028	2.489959432
51.86157227	0.001964669	2.786897275
51.86767578	0.001791874	2.566023127
51.8737793	0.001174544	1.689239364
51.87988281	0.000627438	0.899812552
51.88598633	0.000693454	0.989743744
51.89208984	0.001456544	2.075968036
51.89819336	0.002067341	2.950678523
51.90429688	0.002041343	2.926091632
51.91040039	0.001902133	2.744711103
51.91650391	0.002082097	3.02071822
51.92260742	0.00230586	3.357203847
51.92871094	0.002189318	3.192434939
51.93481445	0.001960951	2.866605503
51.94091797	0.002121201	3.129654857
51.94702148	0.002025341	3.011907585
51.953125	0.001356528	2.015932562
51.95922852	0.000784949	1.16447823
51.96533203	0.000835224	1.229847841
51.97143555	0.000961357	1.39354935
51.97753906	0.000708151	1.021082639
51.98364258	0.000784699	1.134849047
51.98974609	0.000970774	1.393389352
51.99584961	0.000799029	1.13205949
52.00195313	0.000616288	0.859429672
52.00805664	0.000572482	0.777666431
52.01416016	0.00234929	0.311296532
52.02026367	0.0007139	0.929486511
52.02636719	0.001293253	1.650166612
52.0324707	0.001395039	1.746916087
52.03857422	0.001405804	1.731213426
52.04467773	0.001623521	1.951434074
52.05078125	0.001918472	2.246393919

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
42.64	0.051401629	-0.000255266	-0.050821291	-11.43479048	0.455827871	0.968793043
42.645	0.051801287	-0.000257418	-0.051245353	-11.53020449	0.45650607	0.968829835
42.65	0.052701617	-0.000262096	-0.052167262	-11.73763385	0.457208048	0.968834644
42.655	0.053235987	-0.000264989	-0.052737203	-11.86587074	0.457924334	0.968834644
42.66	0.051790451	-0.00025782	-0.051289394	-11.54011363	0.45860225	0.968834644
42.665	0.052165644	-0.000259816	-0.051692528	-11.63081883	0.459290022	0.968834644
42.67	0.053165934	-0.000265092	-0.052757442	-11.87042446	0.460004425	0.968834644
42.675	0.050760738	-0.000253141	-0.050344287	-11.32746465	0.460655651	0.968834644
42.68	0.048161944	-0.000240101	-0.047713634	-10.73556759	0.461241902	0.968834644
42.685	0.047403705	-0.000236395	-0.046966587	-10.56748203	0.46180984	0.968834644
42.69	0.045541705	-0.000227156	-0.04510449	-10.14851036	0.462334037	0.968834644
42.695	0.042244063	-0.000210599	-0.041769934	-9.398235054	0.462785069	0.968834644
42.7	0.040097995	-0.000199814	-0.039599732	-8.909939682	0.463191438	0.968834644
42.705	0.039319953	-0.000195989	-0.038830344	-8.736827388	0.463582191	0.968834644
42.71	0.037988735	-0.000189416	-0.037508651	-8.439446561	0.463946933	0.968834644
42.715	0.035487236	-0.000176928	-0.03499854	-7.874671502	0.464265221	0.968834644
42.72	0.031777618	-0.000158294	-0.031256449	-7.032700961	0.464520443	0.968834644
42.725	0.028157731	-0.000140331	-0.027652436	-6.221798196	0.464720831	0.968834644
42.73	0.026317199	-0.000131249	-0.0258316	-5.812109923	0.464895878	0.968834644
42.735	0.022689519	-0.000113301	-0.022235445	-5.002975139	0.465025993	0.968834644
42.74	0.017312632	-8.64588E-05	-0.016863205	-3.794221157	0.465101746	0.968834644
42.745	0.015796898	-7.88436E-05	-0.01534033	-3.451574234	0.465164816	0.968834644
42.75	0.014596228	-7.29331E-05	-0.014158727	-3.185713597	0.465218662	0.968834644
42.755	0.010491735	-5.24147E-05	-0.010059381	-2.263360784	0.465246483	0.968834644
42.76	0.009696473	-4.83628E-05	-0.009253111	-2.081949883	0.465270246	0.968834644
42.765	0.010694935	-5.34251E-05	-0.010275442	-2.311974481	0.465299155	0.968834644
42.77	0.009074509	-4.54002E-05	-0.008658847	-1.948240585	0.465319967	0.968834644
42.775	0.008342833	-4.17782E-05	-0.007935863	-1.785569087	0.465337559	0.968834644
42.78	0.007697416	-3.86623E-05	-0.007313977	-1.645644931	0.465352534	0.968834644
42.785	0.00498531	-2.51871E-05	-0.004625605	-1.040761162	0.465358815	0.968834644
42.79	0.002571329	-1.31598E-05	-0.002227508	-0.501189333	0.465360486	0.968834644
42.795	2.74095E-05	-4.83731E-07	0.000298544	0.067172384	0.465360487	0.968834644
42.8	-0.002198807	1.06281E-05	0.002511699	0.565132304	0.465361709	0.968834644
42.805	-0.004096644	2.00607E-05	0.00438953	0.987644176	0.46536595	0.968834644
42.81	-0.007684979	3.79851E-05	0.007955725	1.790038095	0.465380877	0.968834644
42.815	-0.009305486	4.6124E-05	0.009574097	2.154171739	0.465402762	0.968834644
42.82	-0.009790105	4.84566E-05	0.010037821	2.258509681	0.465426986	0.968834644
42.825	-0.014088448	6.9949E-05	0.014308239	3.219353782	0.465477152	0.968834644
42.83	-0.01734569	8.63795E-05	0.0175702	3.953295027	0.465553195	0.968834644
42.835	-0.019131862	9.53122E-05	0.019342644	4.352094955	0.465645705	0.968834644
42.84	-0.024380767	0.000121738	0.024582163	5.530986706	0.46579594	0.968834644
42.845	-0.028063917	0.000140414	0.028281436	6.363323044	0.465994994	0.968834644
42.85	-0.030006833	0.000150215	0.030221707	6.799884096	0.466222565	0.968834644
42.855	-0.03504267	0.000175683	0.035259817	7.933458917	0.466532928	0.968834644
42.86	-0.038259943	0.000192092	0.038502926	8.66315835	0.466902897	0.968834644
42.865	-0.039809282	0.000199977	0.040060602	9.013635403	0.467303435	0.968834644
42.87	-0.043758493	0.000220037	0.044021088	9.904744874	0.467787386	0.968834644
42.875	-0.045579502	0.000229407	0.045869917	10.32073137	0.468312453	0.968834644
42.88	-0.046757527	0.000235414	0.047054775	10.5873243	0.468865013	0.968834644
42.885	-0.051028454	0.000257165	0.051342742	11.55211697	0.469523126	0.968834644
42.89	-0.05293707	0.000267047	0.053289567	11.99015266	0.470231391	0.968834644
42.895	-0.053158566	0.000268278	0.053532017	12.04470371	0.470945595	0.968834644
42.9	-0.055612319	0.000280849	0.056007304	12.60164336	0.471727255	0.968834644
42.905	-0.056150095	0.000283784	0.056579893	12.73047583	0.472524106	0.968834644
42.91	-0.054646965	0.000276282	0.05506505	12.38963619	0.473278864	0.968834644
42.915	-0.05455905	0.000275918	0.054991649	12.37312092	0.474031196	0.968834644
42.92	-0.054494171	0.000275694	0.054946405	12.36294112	0.47478174	0.968834644
42.925	-0.054283484	0.000274707	0.054747118	12.31810164	0.475526491	0.968834644
42.93	-0.054518018	0.000275995	0.055007163	12.37661167	0.476277692	0.968834644
42.935	-0.05385263	0.000272722	0.054346342	12.22792704	0.477010668	0.968934053
42.94	-0.053160759	0.000269262	0.053648185	12.07084173	0.477724931	0.969067263
42.945	-0.053896317	0.000273036	0.054410465	12.24235453	0.478459097	0.96916958
42.95	-0.055131263	0.000279398	0.055694859	12.53134329	0.479227293	0.969240907
42.955	-0.055128047	0.000279505	0.055716461	12.5362038	0.479995399	0.969281433
42.96	-0.05448943	0.000276342	0.055077515	12.39244095	0.480745812	0.969291189
42.965	-0.055089477	0.000279451	0.055705596	12.53375908	0.481512843	0.969291189
42.97	-0.055436854	0.000281326	0.05608411	12.61892466	0.482289579	0.969291189
42.975	-0.054901554	0.000278688	0.055551286	12.49903932	0.483051386	0.969291189
42.98	-0.055755107	0.000283079	0.056437754	12.69849472	0.483837065	0.969291189
42.985	-0.056546926	0.00028721	0.057259176	12.88331467	0.484645219	0.969291189
42.99	-0.056565019	0.00028739	0.057294328	12.89122372	0.48545389	0.969291189
42.995	-0.058061661	0.000295071	0.05879607	13.22911573	0.48630592	0.969291189
43	-0.059170787	0.000300855	0.059926754	13.48351972	0.487190812	0.969291189
43.005	-0.059085678	0.000300564	0.05986803	13.47030682	0.488073161	0.969291189
43.01	-0.059559391	0.000303104	0.060366231	13.58240199	0.488969715	0.969291189
43.015	-0.059275938	0.000301819	0.060106062	13.52386403	0.489857756	0.969291189
43.02	-0.05928497	0.000301983	0.060139053	13.53128702	0.490746067	0.969291189
43.025	-0.06032818	0.000307447	0.061215061	13.77338882	0.491665916	0.969291189
43.03	-0.059119425	0.000301517	0.060017406	13.50391632	0.492549273	0.969291189
43.035	-0.057895662	0.000295428	0.058788145	13.22733266	0.493396438	0.969291189
43.04	-0.058406507	0.000298191	0.059346364	13.35293189	0.494258619	0.969291189
43.045	-0.056512974	0.000288804	0.057451591	12.92660804	0.495065802	0.969512107
43.05	-0.054131151	0.000276854	0.055041812	12.38440772	0.495806379	0.970154447
43.055	-0.052892694	0.000270743	0.053810315	12.1073209	0.496513457	0.970732531
43.06	-0.048892301	0.000250881	0.049810286	11.20731443	0.497117624	0.971244754
43.065	-0.045118215	0.000232164	0.046045053	10.36013702	0.497632118	0.971689078
43.07	-0.044401826	0.000228658	0.0453402	10.20154511	0.498130402	0.972535813
43.075	-0.043343095	0.000223519	0.044307365	9.969157192	0.498605208	0.973888926
43.08	-0.041711894	0.00021555	0.042706254	9.608907113	0.499044948	0.975113744
43.085	-0.038391331	0.000199204	0.039423993	8.870398521	0.499417461	0.976207132
43.09	-0.033998471	0.00017736	0.035042124	7.88447798	0.499709604	0.977165308
43.095	-0.033055434	0.000172689	0.034105769	7.673798083	0.499985764	0.977987141
43.1	-0.031081177	0.00016302	0.032168079	7.237817694	0.500229922	0.978726359
43.105	-0.0254217	0.000134824	0.026523147	5.967708157	0.500393259	0.979396927
43.11	-0.023128737	0.000123332	0.024224444	5.450499963	0.50052846	0.979996246
43.115	-0.021846432	0.000117024	0.022963318	5.166746648	0.500649085	0.980522571
43.12	-0.017051112	9.30857E-05	0.018180656	4.090647674	0.500722567	0.980974555
43.125	-0.014540512	8.04619E-05	0.015660699	3.523657271	0.500776003	0.981350308
43.13	-0.014122855	7.84252E-05	0.015254272	3.432211272	0.500826414	0.981648592
43.135	-0.01075963	6.1668E-05	0.011911783	2.680151259	0.500855674	0.981868815
43.14	-0.007010913	4.2863E-05	0.008163859	1.8368682	0.500868097	0.982009919
43.145	-0.004948128	3.25176E-05	0.006103312	1.373245182	0.500874285	0.982070866
43.15	-0.002319804	1.93757E-05	0.00348716	0.784610966	0.500875645	0.982071118
43.155	0.001335185	1.04839E-06	-0.000158701	-0.035707807	0.500876095	0.982071118

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
52.05688477	0.002032323	2.335225541
52.06298828	0.001978438	2.249678151
52.0690918	0.001893058	2.150912211
52.07519531	0.001875628	2.138433222
52.08129883	0.001960292	2.234950427
52.08740234	0.002213362	2.519768945
52.09350586	0.002592686	2.952670721
52.09960938	0.002699266	3.08875589
52.10571289	0.002470151	2.863185344
52.11181641	0.00246553	2.912065119
52.11791992	0.002405153	2.900834064
52.12402344	0.001955759	2.41143407
52.13012695	0.001669225	2.097283009
52.13623047	0.0016848	2.145569532
52.14233398	0.002006408	2.590976034
52.1484375	0.001942512	2.552021816
52.15454102	0.001542633	2.066275759
52.16064453	0.001207987	1.651596692
52.16674805	0.001637821	2.262181159
52.17285156	0.002509708	3.44536498
52.17895508	0.003078629	4.208878872
52.18505859	0.003111825	4.286779542
52.19116211	0.002728941	3.794744412
52.19726563	0.00264101	3.694711772
52.20336914	0.003259347	4.567345734
52.20947266	0.004109545	5.73716922
52.21557617	0.004382097	6.10730487
52.22167969	0.003824632	5.362864747
52.2277832	0.002777021	3.928649512
52.23388672	0.001821144	2.593403075
52.23999023	0.001480777	2.122283163
52.24609375	0.001431633	2.06300643
52.25219727	0.001512067	2.172357027
52.25830078	0.002114427	3.008929288
52.2644043	0.00289627	4.102957869
52.27050781	0.003037164	4.335040758
52.27661133	0.002473707	3.596499869
52.28271484	0.001836507	2.705520956
52.28881836	0.001462217	2.132480017
52.29492188	0.001421235	2.0319604
52.30102539	0.001477033	2.101521219
52.30712891	0.001081519	1.552223565
52.31323242	0.000206158	0.298432884
52.31933594	0.000929843	1.348923827
52.32543945	0.001787085	2.569861768
52.33154297	0.002318636	3.264968887
52.33764648	0.002565577	3.530519351
52.34375	0.002750835	3.727128966
52.34985352	0.002723719	3.650498186
52.35595703	0.002362911	3.137967162
52.36206055	0.002091258	2.762599279
52.36816406	0.002106309	2.753446738
52.37426758	0.002095719	2.673246792
52.38037109	0.002287222	2.846769039
52.38647461	0.002639414	3.254992285
52.39257813	0.002453356	3.040718593
52.39868164	0.001910957	2.387113873
52.40478516	0.001849696	2.3006792
52.41088867	0.002318926	2.83889735
52.41699219	0.002621845	3.173302721
52.4230957	0.002488882	3.011114598
52.42919922	0.002366924	2.890331521
52.43530273	0.002657265	3.284935988
52.44140625	0.002901224	3.592242958
52.44750977	0.00311097	3.827165715
52.45361328	0.0035524	4.360317612
52.4597168	0.004008146	4.912134841
52.46582031	0.00427407	5.234327836
52.47192383	0.004274724	5.288187806
52.47802734	0.003978346	4.990440219
52.48413086	0.003689339	4.642530034
52.49023438	0.003673349	4.587413826
52.49633789	0.003655393	4.518917021
52.50244141	0.003585441	4.436349135
52.50854492	0.003921198	4.949690909
52.51464844	0.004195012	5.421940866
52.52075195	0.003765885	4.922685956
52.52685547	0.003068599	4.028226773
52.53295898	0.002790211	3.668217043
52.5390625	0.002860065	3.776344047
52.54516602	0.003093033	4.152202272
52.55126953	0.003451748	4.734244444
52.55737305	0.003814936	5.326886808
52.56347656	0.003780978	5.357072689
52.56958008	0.003298254	4.691955561
52.57568359	0.002952178	4.181419959
52.58178711	0.002960832	4.193952087
52.58789063	0.002842523	4.044703783
52.59399414	0.002351886	3.36925481
52.60009766	0.001905587	2.746711087
52.60620117	0.00197985	2.839654825
52.61230469	0.002132552	3.016646371
52.6184082	0.001994114	2.788148568
52.62451172	0.001922749	2.667526233
52.63061523	0.002184286	3.021723451
52.63671875	0.002419541	3.342997819
52.64282227	0.002525623	3.453000023
52.64892578	0.002573455	3.4588011
52.6550293	0.002602656	3.439238275
52.66113281	0.002496203	3.245664469
52.66723633	0.002065042	2.667401418
52.67333984	0.001656483	2.141217311
52.67944336	0.001758025	2.253067571
52.68554688	0.002010222	2.537048165

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
43.16	0.004204693	-1.33906E-05	-0.00302899	-0.681522832	0.500880564	0.982071118
43.165	0.005761945	-2.12262E-05	-0.004585851	-1.031816404	0.500888955	0.982071118
43.17	0.007911382	-3.20007E-05	-0.006725766	-1.513297382	0.500904774	0.982071118
43.175	0.010351685	-4.42706E-05	-0.00916148	-2.061332987	0.500931857	0.982071118
43.18	0.011831296	-5.17078E-05	-0.010637219	-2.393374325	0.500967235	0.982071118
43.185	0.01448812	-6.50258E-05	-0.013278677	-2.987702295	0.501020287	0.982071118
43.19	0.017390036	-7.96457E-05	-0.016176637	-3.639743363	0.50109672	0.982071118
43.195	0.018484591	-8.51852E-05	-0.017274217	-3.886698779	0.501183076	0.982071118
43.2	0.020971576	-9.76644E-05	-0.019745828	-4.442811407	0.501294234	0.982071118
43.205	0.024001321	-0.000112957	-0.022772822	-5.123884987	0.501439828	0.982071118
43.21	0.024686102	-0.000116483	-0.023470569	-5.280877991	0.50159385	0.982071118
43.215	0.026460214	-0.000125417	-0.025237817	-5.678508847	0.501770805	0.982071118
43.22	0.028653618	-0.000136539	-0.027437079	-6.173342871	0.501978313	0.982304511
43.225	0.028121263	-0.000133976	-0.02691937	-6.056858299	0.502178182	0.982803825
43.23	0.02861511	-0.000136472	-0.027423402	-6.170265462	0.502385132	0.983600824
43.235	0.030542645	-0.000146219	-0.02935018	-6.603790418	0.502620903	0.984629714
43.24	0.030726903	-0.000147247	-0.029551336	-6.649050593	0.502859526	0.986235535
43.245	0.030908352	-0.000148219	-0.029745417	-6.692718937	0.503100977	0.988350673
43.25	0.031231609	-0.000149923	-0.030082129	-6.768479131	0.503347504	0.990625384
43.255	0.030537586	-0.0001465	-0.029390771	-6.612923516	0.503583196	0.992761291
43.26	0.030783561	-0.00014776	-0.02964517	-6.670163265	0.5038227	0.994758504
43.265	0.031328364	-0.000150555	-0.030207049	-6.796585959	0.504070757	0.996616052
43.27	0.030871267	-0.000148313	-0.029754037	-6.694658243	0.504311629	0.998332627
43.275	0.030979311	-0.00014887	-0.02986666	-6.719998496	0.504554189	0.999908221
43.28	0.031705978	-0.000152545	-0.030600229	-6.885051454	0.504808262	1.001342212
43.285	0.032292654	-0.000155526	-0.031189016	-7.017528711	0.505071824	1.002633052
43.29	0.032982256	-0.000159018	-0.031878763	-7.17272176	0.505346763	1.003779306
43.295	0.033941706	-0.00016386	-0.032834973	-7.387868825	0.505637931	1.004791784
43.3	0.035331151	-0.000170871	-0.034219218	-7.699324138	0.505953425	1.005691268
43.305	0.036490103	-0.000176747	-0.035378892	-7.960250749	0.506289957	1.00647555
43.31	0.037545587	-0.000182087	-0.036432745	-8.197367673	0.506646239	1.007142701
43.315	0.039390488	-0.000191398	-0.038269657	-8.610672714	0.507038395	1.007690852
43.32	0.040822235	-0.000198673	-0.039704252	-8.933456616	0.507459576	1.008117365
43.325	0.041923966	-0.000204273	-0.040808364	-9.181881957	0.507903799	1.008430728
43.33	0.043931246	-0.000214432	-0.042810642	-9.632394484	0.508391578	1.008658683
43.335	0.045235472	-0.000221109	-0.044126324	-9.928422856	0.508908749	1.008813151
43.34	0.045854294	-0.000224327	-0.044760111	-10.07102504	0.509440166	1.008908519
43.345	0.047129394	-0.000230845	-0.046043846	-10.35986533	0.51000155	1.008955011
43.35	0.04770078	-0.000233863	-0.046638203	-10.49359567	0.510576628	1.009093335
43.355	0.047971461	-0.000235351	-0.04693113	-10.55950435	0.511158251	1.009315409
43.36	0.04868145	-0.000239065	-0.047662412	-10.7240427	0.511757218	1.00951428
43.365	0.048214755	-0.000236894	-0.04722385	-10.62536628	0.512344756	1.00968978
43.37	0.047662821	-0.000234257	-0.046691154	-10.50550967	0.512918919	1.009842007
43.375	0.047626294	-0.000234229	-0.04668558	-10.50425542	0.513492203	1.009971113
43.38	0.046258535	-0.000227533	-0.045333835	-10.20011277	0.514033032	1.010077186
43.385	0.044887117	-0.00022077	-0.04396915	-9.893058776	0.514542268	1.010160616
43.39	0.044187611	-0.000217391	-0.043287486	-9.739684294	0.515035756	1.010221822
43.395	0.042702265	-0.000210077	-0.041812614	-9.407838203	0.515496626	1.010261103
43.4	0.041418153	-0.000203745	-0.040536462	-9.120703839	0.515930194	1.010726665
43.405	0.040291575	-0.000198219	-0.039423	-8.870175049	0.516340497	1.011190651
43.41	0.038769107	-0.000190697	-0.037908044	-8.529309832	0.516720377	1.011577244
43.415	0.037862687	-0.000186268	-0.037016392	-8.328688255	0.517082703	1.011886453
43.42	0.036214385	-0.000178151	-0.035382722	-7.96111239	0.517414168	1.01211758
43.425	0.033665879	-0.000165488	-0.03283544	-7.387973946	0.517700623	1.012269934
43.43	0.031726228	-0.000155872	-0.03090235	-6.953028759	0.51795502	1.012342796
43.435	0.028830484	-0.000141482	-0.028011531	-6.302594405	0.518165098	1.012349273
43.44	0.024915134	-0.000121933	-0.024087619	-5.419714242	0.518321991	1.012349273
43.445	0.021252566	-0.00010362	-0.020415307	-4.593444101	0.518436146	1.012633574
43.45	0.017247219	-8.35985E-05	-0.016404329	-3.690973949	0.518511329	1.013394348
43.455	0.014536175	-7.00304E-05	-0.013688364	-3.079881803	0.518564733	1.014072992
43.46	0.013458327	-6.46611E-05	-0.012614086	-2.838169388	0.518610511	1.014667624
43.465	0.011165948	-5.32694E-05	-0.010335735	-2.325540472	0.518642022	1.015176932
43.47	0.008257559	-3.87575E-05	-0.007435144	-1.67290736	0.518659256	1.015599545
43.475	0.006065836	-2.78071E-05	-0.005247716	-1.180736133	0.518668556	1.015934107
43.48	0.004180722	-1.83891E-05	-0.003367281	-0.757638335	0.518672973	1.016179611
43.485	0.00281283	-1.15743E-05	-0.00200713	-0.451604323	0.518674973	1.016335372
43.49	0.000347398	6.85344E-07	0.000438683	0.098703711	0.518675003	1.016400985
43.495	-0.003441619	1.96108E-05	0.004211638	0.94761849	0.518677997	1.016400985
43.5	-0.005755376	3.12143E-05	0.006523311	1.467745084	0.518686369	1.016418012
43.505	-0.007695024	4.09012E-05	0.008452225	1.90175057	0.518701334	1.016923968
43.51	-0.011133925	5.80875E-05	0.011872416	2.671293581	0.518732665	1.017351605
43.515	-0.01421112	7.35247E-05	0.014942307	3.362019053	0.518783708	1.017699459
43.52	-0.01638689	8.44661E-05	0.017116898	3.851302049	0.518851576	1.017966279
43.525	-0.018362767	9.44071E-05	0.019091755	4.295644859	0.518936799	1.01815121
43.53	-0.020170162	0.000103502	0.020897693	4.701981	0.519039623	1.018253643
43.535	-0.022255226	0.000113989	0.022979373	5.170358977	0.519164804	1.018273787
43.54	-0.024041	0.000123008	0.024768777	5.572974933	0.519310881	1.018273787
43.545	-0.025293301	0.000129356	0.026027931	5.856284484	0.519472572	1.018273787
43.55	-0.026699597	0.000136479	0.027440272	6.174061296	0.519652743	1.018273787
43.555	-0.027414307	0.000140168	0.0281716	6.33860991	0.519842689	1.018273787
43.56	-0.027556647	0.000140973	0.028331223	6.374525258	0.520034613	1.018273787
43.565	-0.028147504	0.000144016	0.028934329	6.510224119	0.520234855	1.018273787
43.57	-0.028112963	0.000143956	0.028919424	6.506870334	0.520434607	1.018273787
43.575	-0.027469029	0.000140821	0.028286139	6.364381202	0.520625312	1.018273787
43.58	-0.02757302	0.000141407	0.028404546	6.391022879	0.520817464	1.018273787
43.585	-0.027617969	0.00014173	0.028469723	6.405687599	0.521010242	1.018273787
43.59	-0.026755593	0.000137515	0.027618698	6.214207151	0.52119117	1.018273787
43.595	-0.025929163	0.00013345	0.026798094	6.029571165	0.521361093	1.018273787
43.6	-0.025634842	0.000132048	0.026515184	5.965916441	0.521527181	1.018273787
43.605	-0.024825639	0.000128092	0.025716884	5.786298985	0.521682949	1.018273787
43.61	-0.023410697	0.000121075	0.024301476	5.46783214	0.521821466	1.018273787
43.615	-0.023142545	0.000119761	0.024036587	5.408232033	0.521956828	1.018273787
43.62	-0.023029791	0.000119266	0.023936548	5.38572323	0.522090875	1.018273787
43.625	-0.021660856	0.000112473	0.022567239	5.077628704	0.522209459	1.018273787
43.63	-0.021570677	0.000112021	0.022476518	5.057216636	0.522327058	1.018273787
43.635	-0.022160956	0.00011502	0.023082409	5.193541927	0.522451182	1.018273787
43.64	-0.021238779	0.000110459	0.022161285	4.986289161	0.522565189	1.018273787
43.645	-0.02138361	0.000111179	0.022307197	5.019119286	0.522680758	1.018343465
43.65	-0.022106696	0.000114838	0.023046036	5.185358023	0.522804274	1.018534236
43.655	-0.021524464	0.000111962	0.022465144	5.054657305	0.522921369	1.018691728
43.66	-0.022319168	0.000115928	0.02326618	5.234890415	0.523047271	1.018815977
43.665	-0.023378267	0.000121279	0.024346457	5.477952846	0.523185405	1.018906766
43.67	-0.023010948	0.000119491	0.023985147	5.396658148	0.523319232	1.018963848
43.675	-0.023837801	0.00012364	0.024822923	5.585157711	0.52346285	1.018987284

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
52.69165039	0.001997792	2.490662605
52.69775391	0.002037947	2.510466525
52.70385742	0.002634137	3.206968758
52.70996094	0.003111021	3.761289482
52.71606445	0.003083541	3.728818261
52.72216797	0.003003053	3.641695318
52.72827148	0.002845052	3.431424927
52.734375	0.002132917	2.540276535
52.74047852	0.001508435	1.77830737
52.74658203	0.001428044	1.6716362
52.75268555	0.001825213	2.131103549
52.75878906	0.001975869	2.316752041
52.76489258	0.001216023	1.429093917
52.77099609	0.000740885	0.866013225
52.77709961	0.000748325	0.867744528
52.78320313	0.000161146	0.185819097
52.78930664	0.000672148	0.776403283
52.79541016	0.001041044	1.214464382
52.80151367	0.001250263	1.472002647
52.80761719	0.00126376	1.497754454
52.8137207	0.001229946	1.472306307
52.81982422	0.001469263	1.77106108
52.82592773	0.001989423	2.398283513
52.83203125	0.002507383	3.044787615
52.83813477	0.002986188	3.697810471
52.84423828	0.003538821	4.470964988
52.8503418	0.003743013	4.796229747
52.85644531	0.00338419	4.365089346
52.86254883	0.003059239	3.942784727
52.86865234	0.003394007	4.399787083
52.87475586	0.004087947	5.4160039
52.88085938	0.00462951	6.275131454
52.88696289	0.00476011	6.533160307
52.89306641	0.00417436	5.763688506
52.89916992	0.003230996	4.460541227
52.90527344	0.002864468	3.953515794
52.91137695	0.003223251	4.471706046
52.91748047	0.003485319	4.849739218
52.92358398	0.003138665	4.368054746
52.9296875	0.002393363	3.326860179
52.93579102	0.001565879	2.161146918
52.94189453	0.000990121	1.34895959
52.94799805	0.000989346	1.325323152
52.95410156	0.001454502	1.932665116
52.96020508	0.001810717	2.434605684
52.96630859	0.001795663	2.448369212
52.97241211	0.001845317	2.51348328
52.97851563	0.00201883	2.710992194
52.98461914	0.001432214	1.884690559
52.99072266	0.000394329	0.514952987
52.99682617	0.000277828	0.365743831
53.00292969	0.00044685	0.588661213
53.0090332	0.001547084	2.016675696
53.01513672	0.002718458	3.497046514
53.02124023	0.003456915	4.35695685
53.02734375	0.003552947	4.382777657
53.03344727	0.003329564	4.05498318
53.03955078	0.003205761	3.872496451
53.0456543	0.003250523	3.91154267
53.05175781	0.003343342	4.020467743
53.05786133	0.003398826	4.044135925
53.06396484	0.003236619	3.768293748
53.07006836	0.002660941	3.04104161
53.07617188	0.00197723	2.247751146
53.08227539	0.00154654	1.772856419
53.08837891	0.001425357	1.644568924
53.09448242	0.001598504	1.827724792
53.10058594	0.001877743	2.119154571
53.10668945	0.001734268	1.946607407
53.11279297	0.00125091	1.409875865
53.11889648	0.001192622	1.367905479
53.125	0.000884084	1.03257943
53.13110352	0.000719261	0.843921313
53.13720703	0.00117445	1.385037475
53.14331055	0.001308105	1.559157908
53.14941406	0.001170799	1.404633328
53.15551758	0.0012088	1.467760276
53.16162109	0.001841514	2.284007133
53.16772461	0.002566293	3.237595197
53.17382813	0.00273963	3.496848296
53.17993164	0.002633231	3.3764123
53.18603516	0.002813581	3.591167558
53.19213867	0.003152065	4.043713895
53.19824219	0.003274916	4.304648858
53.2043457	0.003016851	4.076570434
53.21044922	0.002382175	3.261140452
53.21655273	0.001900424	2.585605968
53.22265625	0.002207747	2.974320853
53.22875977	0.002857171	3.87091706
53.23486328	0.003118191	4.289048124
53.2409668	0.003097848	4.305556883
53.24707031	0.003020439	4.220867859
53.25317383	0.002830545	3.963702619
53.25927734	0.002738402	3.831875482
53.26538086	0.00280874	3.921858123
53.27148438	0.002771312	3.851808018
53.27758789	0.002458393	3.422528461
53.28369141	0.002116726	2.997939551
53.28979492	0.001829511	2.632421816
53.29589844	0.001606316	2.300401994
53.30200195	0.001226071	1.732878579
53.30810547	0.0073264	1.022341801
53.31420898	0.000738991	1.015538152
53.3203125	0.00099593	1.358433481

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
43.68	-0.024395752	0.000126501	0.025400119	5.715026843	0.52361327	1.018987284
43.685	-0.02396707	0.000124398	0.024975423	5.619470224	0.523758449	1.018987284
43.69	-0.025064624	0.000129913	0.026088392	5.869888217	0.52391723	1.018987284
43.695	-0.025278197	0.000131074	0.026322251	5.922506387	0.524078729	1.018987284
43.7	-0.02446428	0.00012705	0.025509601	5.739660316	0.524229995	1.018987284
43.705	-0.025430542	0.00013191	0.026491152	5.960509188	0.524393445	1.018987284
43.71	-0.025693223	0.000133321	0.02677552	6.024491898	0.52456029	1.018987284
43.715	-0.025014108	0.000129996	0.026103944	5.873387366	0.524718432	1.018987284
43.72	-0.025300505	0.000131496	0.02640706	5.941588482	0.524880215	1.018987284
43.725	-0.024664391	0.000128427	0.025787244	5.802129964	0.525033966	1.018987284
43.73	-0.023558603	0.00012299	0.024689539	5.555146292	0.525174239	1.018987284
43.735	-0.022477923	0.0001177	0.023621929	5.314934088	0.525301939	1.018987284
43.74	-0.019848925	0.000104672	0.02099528	4.72393797	0.525401513	1.018987284
43.745	-0.017302197	9.20156E-05	0.018446363	4.150431662	0.525477176	1.018987284
43.75	-0.014342908	7.73148E-05	0.015488145	3.484832651	0.525529169	1.018987284
43.755	-0.009996533	5.57102E-05	0.011144988	2.507622324	0.525554426	1.018987284
43.76	-0.007023719	4.08766E-05	0.008165898	1.837327152	0.525566894	1.018987284
43.765	-0.004279737	2.72052E-05	0.005422241	1.220004265	0.525571523	1.018987284
43.77	-0.000986068	1.07407E-05	0.002120576	0.477129671	0.525571769	1.018987284
43.775	0.000127373	5.09552E-06	0.00098916	0.222560923	0.525571773	1.018987284
43.78	0.000827834	1.56142E-06	0.000281011	0.063227545	0.525571946	1.018987284
43.785	0.002065757	-4.67029E-06	-0.000967372	-0.217658798	0.525573025	1.018987284
43.79	0.001898247	-3.9115E-06	-0.000813435	-0.183022957	0.525573936	1.018987284
43.795	0.001783226	-3.37115E-06	-0.0007043	-0.158467481	0.525574739	1.018987284
43.8	0.001743019	-3.21568E-06	-0.000672889	-0.151400086	0.525575507	1.018987284
43.805	0.000927483	8.25689E-07	0.000143265	0.032234683	0.525575725	1.018987284
43.81	0.001009311	4.28755E-07	6.30288E-05	0.014181476	0.525575982	1.018987284
43.815	0.00102613	3.30637E-07	4.32226E-05	0.00972509	0.525576248	1.018987284
43.82	0.000476336	3.08353E-06	0.000599119	0.134801707	0.525576306	1.018987284
43.825	0.000999482	5.14358E-07	8.01564E-05	0.018035198	0.525576558	1.018987284
43.83	0.001622064	-2.57018E-06	-0.000542749	-0.122118556	0.525577223	1.018987284
43.835	0.002419469	-6.5108E-06	-0.001336004	-0.300600809	0.525578703	1.018987284
43.84	0.004052342	-1.46389E-05	-0.002963569	-0.66680302	0.525582853	1.018987284
43.845	0.004808584	-1.84369E-05	-0.003723861	-0.837868767	0.525588697	1.018987284
43.85	0.005219664	-2.04946E-05	-0.004135703	-0.930533229	0.525595583	1.018987284
43.855	0.006036294	-2.45846E-05	-0.004954219	-1.114699269	0.525604792	1.018987284
43.86	0.006220859	-2.55367E-05	-0.005144722	-1.157562536	0.525614573	1.018987284
43.865	0.006630554	-2.75924E-05	-0.005556046	-1.250110247	0.525625684	1.018987284
43.87	0.007234595	-3.06405E-05	-0.006165836	-1.387313095	0.525638913	1.018987284
43.875	0.007157755	-3.03015E-05	-0.006097287	-1.371889478	0.525651861	1.018987284
43.88	0.007274757	-3.09202E-05	-0.006221785	-1.399901714	0.525665237	1.018987284
43.885	0.006966602	-2.9442E-05	-0.005923192	-1.332718112	0.525677503	1.018987284
43.89	0.005935703	-2.43391E-05	-0.004892672	-1.100851123	0.525686408	1.018987284
43.895	0.005527319	-2.2314E-05	-0.004483823	-1.008860127	0.52569413	1.018987284
43.9	0.005023959	-1.98286E-05	-0.003982146	-0.895982943	0.525700509	1.018987284
43.905	0.004259294	-1.60152E-05	-0.003212564	-0.722826877	0.525705094	1.018987284
43.91	0.004390241	-1.66473E-05	-0.003340304	-0.751568334	0.525709965	1.018987284
43.915	0.004814324	-1.87588E-05	-0.00376679	-0.84752769	0.525715823	1.018987284
43.92	0.005156831	-2.04708E-05	-0.004112527	-0.925318626	0.525722545	1.018987284
43.925	0.005323185	-2.13199E-05	-0.004283994	-0.963898663	0.525729706	1.018987284
43.93	0.004828683	-1.88666E-05	-0.003788419	-0.85239423	0.525735599	1.018987284
43.935	0.004837602	-1.88797E-05	-0.00379112	-0.853001985	0.525741514	1.018987284
43.94	0.005985707	-2.45751E-05	-0.004941193	-1.111768433	0.525750569	1.018987284
43.945	0.007123884	-3.0253E-05	-0.006087155	-1.369609917	0.525763396	1.018987284
43.95	0.007958877	-3.44231E-05	-0.006922475	-1.557556798	0.525779406	1.018987284
43.955	0.009027872	-3.97554E-05	-0.007988837	-1.797488282	0.525800005	1.018987284
43.96	0.010380074	-4.6508E-05	-0.009338867	-2.101245078	0.525827236	1.018987284
43.965	0.011700487	-5.31147E-05	-0.010659292	-2.398340718	0.525861837	1.018987284
43.97	0.013084005	-6.00357E-05	-0.012042108	-2.70947421	0.525905104	1.018987284
43.975	0.014948058	-6.93587E-05	-0.013904134	-3.128430122	0.525961578	1.018987284
43.98	0.016797303	-7.86434E-05	-0.015757714	-3.545485716	0.526032888	1.018987284
43.985	0.017921009	-8.43347E-05	-0.016893501	-3.801037667	0.526114059	1.018987284
43.99	0.018613646	-8.78702E-05	-0.017598937	-3.959760926	0.526201626	1.018987284
43.995	0.019462595	-9.21806E-05	-0.018458821	-4.153234738	0.526297363	1.018987284
44	0.020390273	-9.69094E-05	-0.019401963	-4.365441644	0.526402443	1.018987284
44.005	0.020163154	-9.59159E-05	-0.019199744	-4.31994249	0.526505196	1.018987284
44.01	0.01875763	-8.90219E-05	-0.017807628	-4.006716201	0.526594122	1.018987284
44.015	0.018037937	-8.55159E-05	-0.017099947	-3.847488035	0.526676356	1.018987284
44.02	0.016924589	-8.00932E-05	-0.016005718	-3.601286593	0.526748751	1.018987284
44.025	0.013794548	-6.46033E-05	-0.012882229	-2.898501493	0.526796845	1.018987284
44.03	0.011271023	-5.20578E-05	-0.010354659	-2.329798237	0.526828953	1.018987284
44.035	0.009661422	-4.40826E-05	-0.00874885	-1.968491308	0.526852544	1.018987284
44.04	0.006884546	-3.02981E-05	-0.005975023	-1.344380136	0.526864523	1.018987284
44.045	0.004220032	-1.70246E-05	-0.003306033	-0.743857503	0.526869024	1.018987284
44.05	0.002061868	-6.26603E-06	-0.001144148	-0.257433228	0.526870099	1.018987284
44.055	-1.12899E-05	4.09128E-06	0.000935956	0.210590054	0.526870099	1.018987284
44.06	-0.001002175	9.06271E-06	0.001933992	0.435148096	0.526870353	1.018987284
44.065	-0.002140935	1.47344E-05	0.003072297	0.691266821	0.526871511	1.018987284
44.07	-0.003619185	2.21092E-05	0.004551926	1.02418335	0.526874822	1.018987284
44.075	-0.004792059	2.79413E-05	0.005721625	1.287365661	0.526880626	1.018987284
44.08	-0.007735892	4.25828E-05	0.008656691	1.947755551	0.526895751	1.018987284
44.085	-0.010474046	5.62987E-05	0.01140429	2.565965351	0.526923478	1.018987284
44.09	-0.010694766	5.7462E-05	0.011637146	2.618357789	0.526952386	1.018987284
44.095	-0.012632291	6.70939E-05	0.013565509	3.052239413	0.526992717	1.018987284
44.1	-0.016119584	8.45363E-05	0.017055118	3.837401594	0.52705839	1.018987284
44.105	-0.017022992	8.91725E-05	0.017982178	4.045989951	0.527131629	1.018987284
44.11	-0.017288978	9.05747E-05	0.018262523	4.109067772	0.527207176	1.018987284
44.115	-0.018393397	9.6163E-05	0.019379609	4.360412105	0.527292683	1.018987284
44.12	-0.018657902	9.75975E-05	0.019666318	4.424921497	0.527380666	1.018987284
44.125	-0.018446832	9.66567E-05	0.019476259	4.38215819	0.52746667	1.018987284
44.13	-0.01776944	9.34048E-05	0.018819474	4.234381574	0.527546474	1.018987284
44.135	-0.016199086	8.57007E-05	0.017264138	3.884431072	0.527612796	1.018987284
44.14	-0.014153122	7.56121E-05	0.015228702	3.426458026	0.527663423	1.018987284
44.145	-0.011675693	6.33563E-05	0.012757835	2.870512779	0.527697877	1.018987284
44.15	-0.009056818	5.03804E-05	0.01014379	2.282352753	0.527718608	1.018987284
44.155	-0.005750859	3.39725E-05	0.006841156	1.539260069	0.527726967	1.018987284
44.16	-0.002153869	1.60553E-05	0.003238186	0.728591919	0.52772814	1.018987284
44.165	0.000134713	4.62693E-06	0.000941865	0.211919523	0.527728144	1.018987284
44.17	0.002828233	-8.79231E-06	-0.001752721	-0.39436222	0.527730166	1.018987284
44.175	0.006125624	-2.52846E-05	-0.005061826	-1.138910757	0.527739649	1.018987284
44.18	0.007298514	-3.12361E-05	-0.006255288	-1.407439883	0.527753113	1.018987284
44.185	0.008312602	-3.63418E-05	-0.007278863	-1.637744107	0.527770577	1.018987284
44.19	0.010176803	-4.57246E-05	-0.00915921	-2.060822153	0.527796752	1.018987284
44.195	0.009877789	-4.43729E-05	-0.008884698	-1.999057082	0.527821413	1.018987284

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
53.32641602	0.001196817	1.628826035
53.33251953	0.001282645	1.719035188
53.33862305	0.001434141	1.876317514
53.34472656	0.001537932	1.969106959
53.35083008	0.001486034	1.867061069
53.35693359	0.001454843	1.802678721
53.36303711	0.001668188	2.046176233
53.36914063	0.001683671	2.039537202
53.37524414	0.001375875	1.639177114
53.38134766	0.001091089	1.278283054
53.38745117	0.00117532	1.362150224
53.39355469	0.001936109	2.225353114
53.3996582	0.002286935	2.605253682
53.40576172	0.001670367	1.900438307
53.41186523	0.000801055	0.913774611
53.41796875	0.000581432	0.660470477
53.42407227	0.001116403	1.264539638
53.43017578	0.001583547	1.798957381
53.4362793	0.001429058	1.630542497
53.44238281	0.00099746	1.154126906
53.44848633	0.000958795	1.131389873
53.45458984	0.001314813	1.562851263
53.46069336	0.001524652	1.815846179
53.46679688	0.001504016	1.799654182
53.47290039	0.001574352	1.886309916
53.47900391	0.001805252	2.185554931
53.48510742	0.00209479	2.590791024
53.49121094	0.00240181	3.001395955
53.49731445	0.002646721	3.315446979
53.50341797	0.002831712	3.565690708
53.50952148	0.003084739	3.888738382
53.515625	0.003326898	4.203679919
53.52172852	0.003371925	4.302682091
53.52783203	0.003384328	4.370962391
53.53393555	0.003631602	4.75786845
53.54003906	0.003948936	5.220392612
53.54614258	0.003914941	5.136861499
53.55224609	0.003509101	4.557544473
53.55834961	0.003093714	4.033497499
53.56445313	0.002745844	3.635506293
53.57055664	0.002473932	3.338170179
53.57666016	0.002609914	3.555469513
53.58276367	0.002606529	3.528307316
53.58886719	0.002130927	2.875746921
53.5949707	0.002004959	2.730929321
53.60107422	0.002292729	3.145146566
53.60717773	0.002278021	3.140792828
53.61328125	0.001672319	2.319811465
53.61938477	0.000926409	1.286481314
53.62548828	0.000520324	0.722986261
53.6315918	0.001096466	1.519266901
53.63769531	0.002297307	3.154588278
53.64379883	0.00285673	3.923975127
53.64990234	0.002303923	3.192142332
53.65600586	0.001513767	2.098285216
53.66210938	0.000602127	0.824607416
53.66821289	0.000142876	0.191066856
53.67431641	0.000212386	0.276770533
53.68041992	0.001099684	1.413517969
53.68652344	0.001507179	1.927792878
53.69262695	0.001419194	1.798319915
53.69873047	0.001056931	1.314094584
53.70483398	0.000292166	0.354643411
53.7109375	0.000605166	0.720654827
53.71704102	0.000848141	1.00011999
53.72314453	0.00093007	1.090290582
53.72924805	0.00141771	1.655874981
53.73535156	0.001834392	2.145070002
53.74145508	0.001523297	1.778537414
53.74755859	0.000907376	1.050851993
53.75366211	0.000997551	1.147389862
53.75976563	0.001074327	1.230138876
53.76586914	0.001320948	1.51537257
53.77197266	0.001753345	2.038343049
53.77807617	0.002199467	2.578060733
53.78417969	0.002409038	2.806042226
53.7902832	0.002268527	2.628081629
53.79638672	0.001912671	2.22521415
53.80249023	0.001625713	1.920072718
53.80859375	0.001687954	2.035258063
53.81469727	0.001612	1.96578636
53.82080078	0.001188635	1.454761945
53.8269043	0.000928353	1.144786303
53.83300781	0.000975287	1.213119159
53.83911133	0.000906068	1.138072205
53.84521484	0.001264811	1.611296904
53.85131836	0.001513373	1.954621085
53.85742188	0.001085319	1.420330791
53.86352539	0.000645541	0.853872639
53.86962891	0.000991809	1.31355653
53.87573242	0.00164622	2.180167469
53.88183594	0.002019863	2.694194016
53.88793945	0.001936796	2.611576738
53.89404297	0.001683922	2.298494505
53.90014648	0.001651518	2.262008455
53.90625	0.001708978	2.311437361
53.91235352	0.001419868	1.903358326
53.91845703	0.000939212	1.264216227
53.92456055	0.000801819	1.083274856
53.93066406	0.001088913	1.477108329
53.93676758	0.001404875	1.919630571
53.94287109	0.001401215	1.913924336
53.94897461	0.00138972	1.890558438
53.95507813	0.001657268	2.259314863

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
44.2	0.008991939	-4.00284E-05	-0.008007361	-1.801656191	0.527841848	1.018987284
44.205	0.009109052	-4.06838E-05	-0.008139761	-1.831446309	0.527862819	1.018987284
44.21	0.007950314	-3.50066E-05	-0.006993636	-1.573568056	0.527878794	1.018987284
44.215	0.006564389	-2.81404E-05	-0.005608153	-1.261834319	0.527889685	1.018987284
44.22	0.006206359	-2.63969E-05	-0.005256459	-1.182703193	0.527899421	1.018987284
44.225	0.004951035	-2.02121E-05	-0.004009159	-0.902060825	0.527905616	1.018987284
44.23	0.003093007	-1.09869E-05	-0.002149622	-0.483664904	0.527908034	1.018987284
44.235	0.001871352	-4.9125E-06	-0.000925758	-0.208295607	0.527908919	1.018987284
44.24	0.000585933	1.46738E-06	0.000359176	0.080814639	0.527909006	1.018987284
44.245	-0.001044269	9.57486E-06	0.001991373	0.448058958	0.527909281	1.018987284
44.25	-0.002505721	1.68553E-05	0.003456425	0.777695737	0.527910868	1.018987284
44.255	-0.003873031	2.36616E-05	0.004825537	1.085745825	0.527914659	1.018987284
44.26	-0.005615513	3.23339E-05	0.006569261	1.478083736	0.527922629	1.018987284
44.265	-0.007620588	4.23308E-05	0.008578305	1.930118615	0.527937307	1.018987284
44.27	-0.009499994	5.17162E-05	0.010463481	2.354283313	0.527960117	1.018987284
44.275	-0.011322744	6.083E-05	0.012293231	2.765976991	0.527992519	1.018987284
44.28	-0.012890485	6.86893E-05	0.013870423	3.12084528	0.528034516	1.018987284
44.285	-0.014167455	7.51023E-05	0.015156912	3.410305232	0.528085245	1.018987284
44.29	-0.015436095	8.14818E-05	0.016436265	3.698159718	0.528145467	1.018987284
44.295	-0.016185991	8.52922E-05	0.017200206	3.870046349	0.528211681	1.018987284
44.3	-0.016625788	8.75453E-05	0.017651863	3.971669101	0.528281543	1.018987284
44.305	-0.01740452	9.14887E-05	0.018442241	4.149504176	0.528358103	1.018987284
44.31	-0.017845759	9.37711E-05	0.018899631	4.252416935	0.528438594	1.018987284
44.315	-0.018073815	9.4989E-05	0.019143668	4.307325225	0.528521155	1.018987284
44.32	-0.018391412	9.66722E-05	0.01948093	4.383209143	0.528606643	1.018987284
44.325	-0.017766293	9.3685E-05	0.018877541	4.247446687	0.528686418	1.018987284
44.33	-0.016425387	8.71209E-05	0.01755217	3.949238361	0.528754606	1.018987284
44.335	-0.014713	7.87021E-05	0.015853261	3.566983753	0.528809318	1.018987284
44.34	-0.012323495	6.6893E-05	0.013471813	3.031158005	0.528847701	1.018987284
44.345	-0.010169849	5.62329E-05	0.011323566	2.547802454	0.528873841	1.018987284
44.35	-0.007966253	4.53301E-05	0.009127815	2.0537584	0.52888988	1.018987284
44.355	-0.005313871	3.21774E-05	0.006480791	1.45817791	0.528897017	1.018987284
44.36	-0.002827379	1.98555E-05	0.004002718	0.900611635	0.528899038	1.018987284
44.365	0.001341713	-8.33289E-07	-0.000154345	-0.034727568	0.528899493	1.018987284
44.37	0.006953825	-2.8843E-05	-0.005775277	-1.299437381	0.528911714	1.018987284
44.375	0.010474102	-4.65321E-05	-0.009320984	-2.097221425	0.528939441	1.018987284
44.38	0.012497124	-5.67297E-05	-0.011363567	-2.55680247	0.528978914	1.018987284
44.385	0.014562044	-6.71394E-05	-0.013447568	-3.025702803	0.529032509	1.018987284
44.39	0.015926038	-7.40626E-05	-0.014832983	-3.337421179	0.529096614	1.018987284
44.395	0.017147808	-8.02763E-05	-0.016076043	-3.617109722	0.529170931	1.018987284
44.4	0.017561559	-8.24836E-05	-0.016517532	-3.716444705	0.529248879	1.018987284
44.405	0.016961757	-7.95959E-05	-0.015934242	-3.585204356	0.529321593	1.018987284
44.41	0.017542237	-8.25855E-05	-0.016537908	-3.721029328	0.529399369	1.018987284
44.415	0.017287091	-8.1476E-05	-0.016311348	-3.670053287	0.529474899	1.018987284
44.42	0.014752124	-6.89459E-05	-0.013781835	-3.100912882	0.529529902	1.018987284
44.425	0.013483013	-6.26693E-05	-0.012515584	-2.816006318	0.529575848	1.018987284
44.43	0.012389648	-5.73312E-05	-0.011439091	-2.573795475	0.529614645	1.018987284
44.435	0.008977903	-4.03995E-05	-0.008026937	-1.806060908	0.529635016	1.018987284
44.44	0.006451641	-2.77961E-05	-0.005489269	-1.235085486	0.529645536	1.018987284
44.445	0.005273002	-2.19439E-05	-0.00431156	-0.970101032	0.529652564	1.018987284
44.45	0.002924845	-1.02641E-05	-0.001962234	-0.441502724	0.529654726	1.018987284
44.455	0.000910212	-1.88233E-07	6.32691E-05	0.014235547	0.529654935	1.018987284
44.46	0.000270894	3.02158E-06	0.000708291	0.159365465	0.529654954	1.018987284
44.465	-0.000476052	6.74604E-06	0.001456594	0.327733606	0.529655011	1.018987284
44.47	-0.001113072	9.93531E-06	0.002097253	0.471881883	0.529655324	1.018987284
44.475	-0.001139819	1.00669E-05	0.002123577	0.4778048	0.529655652	1.018987284
44.48	-0.001562138	1.21456E-05	0.002541186	0.571766818	0.529656269	1.018987284
44.485	-0.002628107	1.74488E-05	0.00360614	0.811381401	0.529658015	1.018987284
44.49	-0.003406874	2.13396E-05	0.004387274	0.987136683	0.529660948	1.018987284
44.495	-0.003963864	2.411E-05	0.004943365	1.112257036	0.529664919	1.018987284
44.5	-0.005207061	3.03012E-05	0.006185824	1.391810295	0.529671772	1.018987284
44.505	-0.006756297	3.80515E-05	0.007740631	1.741641933	0.529683309	1.018987284
44.51	-0.007935714	4.39763E-05	0.008928793	2.008978333	0.529699226	1.018987284
44.515	-0.00893321	4.90042E-05	0.009936827	2.235786163	0.529719395	1.018987284
44.52	-0.009558555	5.21875E-05	0.0105749	2.37935255	0.529742487	1.018987284
44.525	-0.010071143	5.48034E-05	0.011099181	2.49731576	0.529768122	1.018987284
44.53	-0.010752732	5.82836E-05	0.011796554	2.654224618	0.529797344	1.018987284
44.535	-0.010442252	5.68345E-05	0.011503629	2.588316431	0.529824903	1.018987284
44.54	-0.009614278	5.2768E-05	0.010682377	2.403534843	0.529848265	1.018987284
44.545	-0.009544785	5.24843E-05	0.010625119	2.39065169	0.529871291	1.018987284
44.55	-0.008762173	4.86715E-05	0.009855338	2.217450942	0.529890695	1.018987284
44.555	-0.007189663	4.08756E-05	0.00828212	1.863477039	0.52990376	1.018987284
44.56	-0.006692325	3.84189E-05	0.007786544	1.751972364	0.529915079	1.018987284
44.565	-0.006242199	3.62258E-05	0.007344188	1.652442257	0.529924927	1.018987284
44.57	-0.005295813	3.15315E-05	0.006397573	1.439453958	0.529932015	1.018987284
44.575	-0.005517852	3.265E-05	0.006623623	1.490315087	0.529939711	1.018987284
44.58	-0.006037905	3.52958E-05	0.007157989	1.610547489	0.529948925	1.018987284
44.585	-0.00589246	3.46197E-05	0.007021404	1.579815852	0.5299577	1.018987284
44.59	-0.006344432	3.69142E-05	0.007484794	1.68407875	0.529967873	1.018987284
44.595	-0.00685827	3.95491E-05	0.008016776	1.803774648	0.529979761	1.018987284
44.6	-0.006691825	3.8787E-05	0.007862827	1.769136153	0.529991079	1.018987284
44.605	-0.006987462	4.03196E-05	0.008172328	1.838773839	0.530003419	1.018987284
44.61	-0.007389328	4.24114E-05	0.008594545	1.933772527	0.530017219	1.018987284
44.615	-0.007130734	4.12162E-05	0.008353104	1.879448458	0.530030071	1.018987284
44.62	-0.006798302	3.96497E-05	0.008036715	1.808260933	0.530041751	1.018987284
44.625	-0.00611583	3.63468E-05	0.00736973	1.658189148	0.530051205	1.018987284
44.63	-0.005053507	3.11389E-05	0.006318407	1.421641484	0.530057659	1.018987284
44.635	-0.004080639	2.6378E-05	0.005358668	1.205700234	0.530061868	1.018987284
44.64	-0.00249147	1.85452E-05	0.003780259	0.850558371	0.530063437	1.018987284
44.645	-0.00084155	1.03819E-05	0.002136037	0.480608375	0.530063616	1.018987284
44.65	0.000294051	4.79536E-06	0.001011279	0.227537804	0.530063638	1.018987284
44.655	0.002501345	-6.12264E-06	-0.001185868	-0.266820191	0.530065219	1.018987284
44.66	0.005211114	-1.9598E-05	-0.003895816	-0.876558653	0.530072082	1.018987284
44.665	0.007041116	-2.87043E-05	-0.005726023	-1.288355177	0.530084613	1.018987284
44.67	0.00904895	-3.86916E-05	-0.007732278	-1.739762558	0.530105308	1.018987284
44.675	0.010917414	-4.80088E-05	-0.009602969	-2.160668039	0.530135432	1.018987284
44.68	0.012269676	-5.47437E-05	-0.010954622	-2.464789887	0.530173481	1.018987284
44.685	0.0142678	-6.47044E-05	-0.012952842	-2.914389518	0.530224931	1.018987284
44.69	0.015723805	-7.19943E-05	-0.014414625	-3.243290684	0.530287419	1.018987284
44.695	0.016481744	-7.57722E-05	-0.015171962	-3.413691387	0.530356075	1.018987284
44.7	0.018424091	-8.54509E-05	-0.017110963	-3.849666618	0.530441868	1.018987284
44.705	0.020199584	-9.43436E-05	-0.018888877	-4.249997325	0.530544992	1.018987284
44.71	0.021129622	-9.90051E-05	-0.019819899	-4.459477297	0.530657831	1.018987284
44.715	0.022724531	-0.000106977	-0.021409223	-4.817075075	0.530788347	1.018987284

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
53.96118164	0.001796035	2.453453716
53.96728516	0.001481509	2.022307076
53.97338867	0.001507549	2.06181367
53.97949219	0.001991832	2.729958419
53.9855957	0.002207885	3.010859529
53.99169922	0.00255303	3.429785653
53.99780273	0.003093989	4.086090059
54.00390625	0.003312801	4.327098038
54.01000977	0.003089946	4.001241194
54.01611328	0.003033874	3.900828264
54.0222168	0.003118059	3.9866384
54.02832031	0.00279765	3.532200326
54.03442383	0.002218969	2.768170618
54.04052734	0.001742833	2.169322556
54.04663086	0.001540283	1.902404793
54.05273438	0.001333996	1.625077963
54.05883789	0.001491948	1.80915041
54.06494141	0.001960963	2.365202237
54.07104492	0.001799416	2.140547889
54.07714844	0.001277659	1.506659687
54.08325195	0.001174409	1.380480936
54.08935547	0.001436054	1.680802705
54.09545898	0.00142333	1.667151051
54.1015625	0.000637404	0.750529161
54.10766602	0.000591791	0.698546513
54.11376953	0.001672096	1.982179911
54.11987305	0.00268427	3.207118947
54.12597656	0.002931414	3.528129885
54.13208008	0.002171942	2.645212557
54.13818359	0.001364182	1.687873917
54.14428711	0.001713884	2.147856265
54.15039063	0.002708671	3.431270952
54.15649414	0.003539569	4.511696528
54.16259766	0.003807517	4.876243336
54.16870117	0.003526505	4.583935369
54.17480469	0.002858942	3.786541205
54.1809082	0.002221112	2.97799665
54.18701172	0.002502725	3.38323849
54.19311523	0.003185804	4.326930325
54.19921875	0.002916796	3.966008787
54.20532227	0.001785273	2.425240697
54.21142578	0.000962114	1.304905071
54.2175293	0.001004684	1.36606891
54.22363281	0.001395728	1.907974756
54.22973633	0.001727541	2.361848266
54.23583984	0.001817612	2.464185247
54.24194336	0.00163158	2.182923078
54.24804688	0.001276177	1.692427797
54.25415039	0.000897485	1.193515194
54.26025391	0.000640597	0.858428354
54.26635742	0.000292185	0.391366141
54.27246094	0.00041481	0.552913585
54.27856445	0.000729319	0.969825253
54.28466797	0.001065514	1.409975421
54.29077148	0.001438211	1.901507189
54.296875	0.00145157	1.934438203
54.30297852	0.000948357	1.267959717
54.30908203	0.000201675	0.269953026
54.31518555	0.000464823	0.623781688
54.32128906	0.000714082	0.949256563
54.32739258	0.001286053	1.689684797
54.33349609	0.001716696	2.253514922
54.33959961	0.001456592	1.914798838
54.34570313	0.001170863	1.538727118
54.35180664	0.001909884	2.489666243
54.35791016	0.001942021	2.481250521
54.36401367	0.001485118	1.864320086
54.37011719	0.001506664	1.871727237
54.3762207	0.001767384	2.179386103
54.38232422	0.001699661	2.089070518
54.38842773	0.001407358	1.716916109
54.39453125	0.001631628	1.960800781
54.40063477	0.002080947	2.480041413
54.40673828	0.002085064	2.485794314
54.4128418	0.001657654	1.974100999
54.41894531	0.001221464	1.453721742
54.42504883	0.001385803	1.652645545
54.43115234	0.001781402	2.123714329
54.43725586	0.002229862	2.657324733
54.44335938	0.002842629	3.387686163
54.44946289	0.003021627	3.594384993
54.45556641	0.002585576	3.099052924
54.46166992	0.002377627	2.905172772
54.46777344	0.002886587	3.570799925
54.47387695	0.00371801	4.620588824
54.47998047	0.004645303	5.83868477
54.48608398	0.005442828	6.94961638
54.4921875	0.005546524	7.204176971
54.49829102	0.004884486	6.474439607
54.50439453	0.00425232	5.721834334
54.51049805	0.00419947	5.699072012
54.51660156	0.004349421	5.961078637
54.52270508	0.004295755	5.932421465
54.52880859	0.003988653	5.524562183
54.53491211	0.003483347	4.854885692
54.54101563	0.00309462	4.364627284
54.54711914	0.003095927	4.411030103
54.55322266	0.003300198	4.705669254
54.55932617	0.003383959	4.802780715
54.56542969	0.00325196	4.608720975
54.5715332	0.002963212	4.194852237
54.57763672	0.002571918	3.637116313
54.58374023	0.002101295	2.980228465
54.58984375	0.001621326	2.295090606

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
44.72	0.024040181	-0.000113584	-0.022726123	-5.113377563	0.530934414	1.018987284
44.725	0.024808267	-0.000117449	-0.023496284	-5.286663816	0.531089964	1.018987284
44.73	0.025679087	-0.000121829	-0.024368873	-5.482996319	0.531256625	1.018987284
44.735	0.02579666	-0.000122441	-0.024490473	-5.510356529	0.531424816	1.018987284
44.74	0.026517716	-0.00012602	-0.025203671	-5.670825932	0.531602541	1.018987284
44.745	0.028455754	-0.000135705	-0.027132052	-6.104711597	0.531807193	1.018987284
44.75	0.029439378	-0.000140659	-0.028118201	-6.326595136	0.532026238	1.018987284
44.755	0.03047785	-0.000145862	-0.029153603	-6.559560637	0.532261009	1.018987284
44.76	0.03194942	-0.000153272	-0.03062792	-6.891281995	0.532518999	1.018987284
44.765	0.031297196	-0.0001501	-0.029987253	-6.74713184	0.532766562	1.018987284
44.77	0.030398559	-0.000145611	-0.029080872	-6.543196127	0.533000113	1.018987284
44.775	0.03141969	-0.000150696	-0.030107868	-6.774270304	0.533249618	1.018987284
44.78	0.032238673	-0.000154811	-0.030934141	-6.960181717	0.5335123	1.018987284
44.785	0.032937892	-0.000158308	-0.031629546	-7.116647809	0.533786501	1.018987284
44.79	0.034562467	-0.000166431	-0.033244887	-7.480099485	0.534088416	1.018987284
44.795	0.036155293	-0.000174415	-0.034831917	-7.837181275	0.534418801	1.018987284
44.8	0.038457345	-0.000185936	-0.037120943	-8.352212166	0.534792596	1.018987284
44.805	0.041648698	-0.000201956	-0.040302011	-9.067952473	0.535231005	1.018987284
44.81	0.043713171	-0.000212423	-0.042379237	-9.53532827	0.535713953	1.018987284
44.815	0.044339114	-0.000215724	-0.04303411	-9.682674771	0.536210831	1.018987284
44.82	0.043977444	-0.000214094	-0.042704883	-9.608598614	0.536699636	1.018987284
44.825	0.042692674	-0.000207835	-0.041441013	-9.324227957	0.537160299	1.018987284
44.83	0.041373911	-0.000201376	-0.040137423	-9.030920243	0.537592941	1.018987284
44.835	0.040056216	-0.000194916	-0.038834037	-8.737658251	0.537998464	1.018987284
44.84	0.038692936	-0.000188209	-0.037481576	-8.433354687	0.538376854	1.018987284
44.845	0.03789111	-0.00018431	-0.036695451	-8.256476395	0.538739724	1.018987284
44.85	0.036320299	-0.000176611	-0.035143906	-7.907378861	0.539073131	1.018987284
44.855	0.032907567	-0.000159686	-0.031735798	-7.140554509	0.539346826	1.018987284
44.86	0.029834853	-0.000144363	-0.028652971	-6.44691857	0.539571796	1.018987284
44.865	0.029031559	-0.000140341	-0.027844192	-6.26494309	0.539784814	1.018987284
44.87	0.028866071	-0.000139556	-0.027686333	-6.229424931	0.53999541	1.018987284
44.875	0.027713801	-0.000133847	-0.026538755	-5.971219803	0.540189529	1.018987284
44.88	0.027398719	-0.000132264	-0.026221165	-5.899762187	0.540379259	1.018987284
44.885	0.029030855	-0.000140426	-0.027869404	-6.27061591	0.540592267	1.018987284
44.89	0.030337639	-0.000147039	-0.029204064	-6.570914328	0.540824883	1.018987284
44.895	0.030461017	-0.000147744	-0.029346224	-6.602900339	0.541059395	1.018987284
44.9	0.031285962	-0.00015192	-0.030188756	-6.792470182	0.541306781	1.018987284
44.905	0.033186764	-0.000161507	-0.032122	-7.227449899	0.54158514	1.018987284
44.91	0.034298079	-0.00016722	-0.033273518	-7.486541646	0.541882454	1.018987284
44.915	0.033970815	-0.000165753	-0.032977093	-7.419845957	0.542174122	1.018987284
44.92	0.033936423	-0.000165722	-0.032970906	-7.418453828	0.542465199	1.018987284
44.925	0.034341181	-0.000167933	-0.03341711	-7.518849731	0.542763261	1.018987284
44.93	0.032950991	-0.000161239	-0.032065215	-7.214673358	0.543037679	1.018987284
44.935	0.029771965	-0.000145593	-0.02890806	-6.50431343	0.543261701	1.018987284
44.94	0.025905358	-0.000126527	-0.025067767	-5.640247603	0.543431312	1.018987284
44.945	0.020922863	-0.000101862	-0.020115508	-4.525989343	0.543541954	1.018987284
44.95	0.015600391	-7.54034E-05	-0.014810066	-3.332264914	0.543603464	1.018987284
44.955	0.010713422	-5.10497E-05	-0.009932829	-2.234886486	0.543632473	1.018987284
44.96	0.005595369	-2.54693E-05	-0.004816084	-1.083618953	0.543640386	1.018987284
44.965	0.001532848	-5.07793E-06	-0.000741734	-0.166890091	0.54364098	1.018987284
44.97	-0.000511132	5.20965E-06	0.001312335	0.295275367	0.543641046	1.018987284
44.975	-0.002330017	1.43336E-05	0.003133244	0.704979963	0.543642418	1.018987284
44.98	-0.004239349	2.39186E-05	0.005045363	1.135206585	0.54364696	1.018987284
44.985	-0.005586839	3.06857E-05	0.006394819	1.438834331	0.543654849	1.018987284
44.99	-0.007215337	3.88414E-05	0.008020639	1.804643872	0.543668007	1.018987284
44.995	-0.0090801	4.81921E-05	0.00988394	2.223886409	0.543688845	1.018987284
45	-0.010677654	5.62083E-05	0.011480679	2.583152701	0.543717661	1.018987284
45.005	-0.012424101	6.49649E-05	0.013224261	2.97545868	0.543756673	1.018987284
45.01	-0.014269637	7.42221E-05	0.015066765	3.390022147	0.543808137	1.018987284
45.015	-0.016245835	8.41317E-05	0.01703829	3.833615288	0.543874842	1.019031434
45.02	-0.018564774	9.57677E-05	0.019352193	4.354243428	0.54396195	1.019442235
45.025	-0.02077772	0.000106888	0.021562424	4.851545456	0.544071062	1.019831321
45.03	-0.023040062	0.000118255	0.023820573	5.35962893	0.544205228	1.020366486
45.035	-0.025640566	0.000131331	0.026416846	5.943790387	0.54437139	1.020860564
45.04	-0.02793276	0.000142887	0.028710173	6.459788858	0.544568588	1.021303414
45.045	-0.02986838	0.00015266	0.030647192	6.895618238	0.544794064	1.021693449
45.05	-0.031868261	0.000162763	0.032648251	7.345856535	0.545050744	1.022029311
45.055	-0.033546732	0.000171274	0.034333467	7.72503002	0.545335175	1.022309704
45.06	-0.034704533	0.00017718	0.03550253	7.988069334	0.545639577	1.022533555
45.065	-0.035682755	0.000182185	0.036493072	8.210941203	0.545961382	1.022718985
45.07	-0.036330656	0.000185541	0.037156998	8.360324617	0.546294979	1.022876298
45.075	-0.036620818	0.000187093	0.037463972	8.429393593	0.546633926	1.023279943
45.08	-0.037248772	0.000190323	0.038103016	8.573178709	0.546984597	1.023634961
45.085	-0.038071626	0.000194547	0.038938517	8.761166368	0.547350933	1.023935953
45.09	-0.038367461	0.000196139	0.039253306	8.831993869	0.547722983	1.024182422
45.095	-0.038855191	0.000198675	0.039754801	8.944830242	0.548104553	1.024374123
45.1	-0.039848354	0.000203764	0.040760965	9.171217232	0.548505879	1.024525726
45.105	-0.040111541	0.000205224	0.041049534	9.236145115	0.548912523	1.024651006
45.11	-0.040055217	0.000205064	0.041017225	9.228875689	0.549318026	1.024749857
45.115	-0.040495427	0.000207399	0.041479573	9.332904018	0.549732491	1.024822272
45.12	-0.040221629	0.000206185	0.041233663	9.277574105	0.55014137	1.024868184
45.125	-0.039463514	0.00020252	0.040493554	9.111049553	0.550534981	1.024887706
45.13	-0.039222115	0.000201444	0.040276316	9.062171131	0.550923792	1.024887706
45.135	-0.038262577	0.000196797	0.039338193	8.851093444	0.551293811	1.024887706
45.14	-0.036668191	0.000188945	0.037753632	8.494567173	0.551633636	1.024887706
45.145	-0.035447581	0.000182962	0.036546889	8.223050114	0.551951213	1.024887706
45.15	-0.033313744	0.000172426	0.034423054	7.745187067	0.552231706	1.024887706
45.155	-0.030209716	0.000156996	0.031315067	7.045889993	0.552462365	1.024887706
45.16	-0.02723616	0.000142188	0.028334789	6.375327419	0.55264985	1.024887706
45.165	-0.023963356	0.000125861	0.02505184	5.636664024	0.552794985	1.024887706
45.17	-0.020880601	0.000110438	0.021953095	4.939446448	0.55290518	1.024887706
45.175	-0.018805313	0.000100041	0.019865836	4.469813068	0.552994559	1.024887706
45.18	-0.016744769	8.97248E-05	0.017795657	4.004022763	0.553065425	1.024887706
45.185	-0.014798037	7.99444E-05	0.015834071	3.562665897	0.55312077	1.024887706
45.19	-0.014099801	7.6399E-05	0.015123214	3.402723186	0.553171016	1.024887706
45.195	-0.013977859	7.5765E-05	0.014996115	3.374125933	0.553220397	1.024887706
45.2	-0.013772209	7.47189E-05	0.014786406	3.32694141	0.553268335	1.024887706
45.205	-0.014019022	7.59363E-05	0.015032343	3.382777244	0.553318007	1.024887706
45.21	-0.014639481	7.90405E-05	0.01565928	3.523337995	0.553372174	1.024887706
45.215	-0.015492544	8.33211E-05	0.016523571	3.717803555	0.553432836	1.024887706
45.22	-0.01686875	9.02462E-05	0.017921208	4.032271908	0.553504755	1.024887706
45.225	-0.018031745	9.61547E-05	0.019113172	4.300463619	0.553586932	1.024887706
45.23	-0.018157239	9.68973E-05	0.019262858	4.334143052	0.553670257	1.024887706
45.235	-0.017674552	9.46008E-05	0.018798979	4.229770248	0.553749211	1.024887706

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
54.59594727	0.001242283	1.743504797
54.60205078	0.000908239	1.268536709
54.6081543	0.000544377	0.756440117
54.61425781	0.00057628	0.794964531
54.62036133	0.000781125	1.081068373
54.62646484	0.001031656	1.441554174
54.63256836	0.000907296	1.269396182
54.63867188	0.000769326	1.071758182
54.64477539	0.001166762	1.617273537
54.65087891	0.001204383	1.65651484
54.65698242	0.001063975	1.451766527
54.66308594	0.000922681	1.251564922
54.66918945	0.001232639	1.665894309
54.67529297	0.001905459	2.561803631
54.68139648	0.002200962	2.923564836
54.6875	0.001966483	2.581446142
54.69360352	0.001490291	1.942628116
54.69970703	0.001316042	1.703524222
54.70581055	0.001563766	2.022829461
54.71191406	0.001738207	2.26185482
54.71801758	0.001582435	2.059803438
54.72412109	0.000947489	1.230867089
54.73022461	0.000272008	0.352287748
54.73632813	0.000914321	1.170320043
54.74243164	0.001926634	2.446252377
54.74853516	0.002537743	3.230056894
54.75463867	0.002679833	3.409721612
54.76074219	0.002570076	3.265829634
54.7668457	0.002655353	3.38633341
54.77294922	0.003300184	4.207547716
54.77905273	0.004113192	5.251758352
54.78515625	0.004254124	5.495301374
54.79125977	0.003737562	4.871898182
54.79736328	0.003319238	4.352603502
54.8034668	0.003141138	4.16767278
54.80957031	0.00314713	4.188860794
54.81567383	0.003495259	4.624673311
54.82177734	0.003864668	5.138537781
54.82788086	0.003816335	5.126958752
54.83398438	0.003362602	4.538742972
54.84008789	0.002915362	3.95399129
54.84619141	0.002727188	3.7059516
54.85229492	0.002612705	3.542214414
54.85839844	0.002477688	3.369932103
54.86450195	0.002438582	3.348454964
54.87060547	0.002529012	3.517990208
54.87670898	0.002738564	3.85740106
54.8828125	0.002936423	4.144035205
54.88891602	0.002938897	4.123527109
54.89501953	0.002582867	3.610784586
54.90112305	0.001935111	2.700039828
54.90722656	0.001703795	2.381040447
54.91333008	0.001612214	2.266553338
54.91943359	0.001047016	1.474412734
54.92553711	0.000564227	0.788855993
54.93164063	0.000631689	0.871130986
54.93774414	0.000959505	1.307113234
54.94384766	0.001440111	1.960283159
54.94995117	0.0018112	2.484724779
54.95605469	0.001744573	2.413729392
54.9621582	0.001248241	1.732907741
54.96826172	0.000551759	0.759574391
54.97436523	0.000166138	0.225751782
54.98046875	0.00055844	0.75343285
54.98657227	0.000683445	0.918830358
54.99267578	0.000742787	0.999952211
54.9987793	0.000856983	1.156884575
55.00488281	0.001206127	1.615543771
55.01098633	0.001706786	2.25686197
55.01708984	0.001774076	2.320521503
55.02319336	0.00144813	1.874470496
55.02929688	0.001329699	1.720153464
55.03540039	0.001659122	2.163040438
55.04150391	0.002211638	2.877008594
55.04760742	0.002618522	3.374189257
55.05371094	0.002421807	3.102169705
55.05981445	0.00167329	2.132311344
55.06591797	0.00099828	1.272915011
55.07202148	0.000547665	0.705057805
55.078125	0.000672022	0.870819722
55.08422852	0.001347016	1.746977088
55.09033203	0.001665032	2.156741836
55.09643555	0.001493824	1.921784862
55.10253906	0.001219037	1.560503158
55.10864258	0.001150374	1.480739794
55.11474609	0.001306718	1.696745909
55.12084961	0.001630138	2.128173208
55.12695313	0.002144335	2.803023531
55.13305664	0.002529665	3.297885023
55.13916016	0.002365781	3.088120611
55.14526367	0.001926457	2.545071667
55.15136719	0.001689491	2.272249856
55.1574707	0.001578294	2.163161429
55.16357422	0.001304309	1.823230303
55.16967773	0.001215712	1.723529399
55.17578125	0.001466081	2.09577596
55.18188477	0.001411705	2.043809077
55.18798828	0.001065167	1.566641016
55.1940918	0.000826229	1.236928335
55.20019531	0.000750943	1.150911426
55.20629883	0.000530909	0.825371391
55.21240234	0.00020203	0.313675288
55.21850586	0.000986689	1.52279571
55.22460938	0.001560078	2.388328123

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
45.24	-0.016483894	8.87817E-05	0.017623967	3.965392639	0.553817885	1.024887706
45.245	-0.013761342	7.52978E-05	0.01490317	3.353213164	0.553865748	1.024887706
45.25	-0.009958561	5.63654E-05	0.011108906	2.499503762	0.553890813	1.024887706
45.255	-0.005916596	3.62089E-05	0.00707395	1.591638672	0.553899661	1.024887706
45.26	-0.00160582	1.4673E-05	0.002767185	0.622616686	0.553900312	1.024887706
45.265	0.002846653	-7.64318E-06	-0.001691027	-0.380481009	0.55390236	1.024887706
45.27	0.006737195	-2.72244E-05	-0.005599054	-1.259787243	0.553913832	1.024887706
45.275	0.008828456	-3.78338E-05	-0.007715012	-1.735877791	0.553933531	1.024887706
45.28	0.009080104	-3.91975E-05	-0.007986923	-1.797057686	0.553954369	1.024887706
45.285	0.009273081	-4.02206E-05	-0.008190892	-1.842950668	0.553976103	1.024887706
45.29	0.009713263	-4.24806E-05	-0.008641463	-1.94432924	0.553999948	1.024887706
45.295	0.009890721	-4.34163E-05	-0.00882799	-1.986297828	0.554024673	1.024887706
45.3	0.010356661	-4.57985E-05	-0.009302833	-2.093137362	0.554051782	1.024887706
45.305	0.010086579	-4.45179E-05	-0.009043146	-2.034707894	0.554077496	1.024887706
45.31	0.008649996	-3.73505E-05	-0.007595849	-1.709065995	0.554096406	1.024887706
45.315	0.00812348	-3.46958E-05	-0.007059998	-1.58849954	0.554113085	1.024887706
45.32	0.008126529	-3.47179E-05	-0.007064468	-1.589505379	0.554129776	1.024887706
45.325	0.00751273	-3.16377E-05	-0.006442848	-1.449640828	0.554144041	1.024887706
45.33	0.007555334	-3.18207E-05	-0.006479944	-1.45798742	0.554158468	1.024887706
45.335	0.007866705	-3.33689E-05	-0.006792669	-1.528350551	0.554174109	1.024887706
45.34	0.007980731	-3.39077E-05	-0.006901484	-1.552833938	0.554190207	1.024887706
45.345	0.009312988	-4.05392E-05	-0.008240473	-1.854106519	0.554212128	1.024887706
45.35	0.011011154	-4.90481E-05	-0.009950504	-2.238863474	0.554242771	1.024887706
45.355	0.012202011	-5.50225E-05	-0.011140988	-2.506722223	0.554280402	1.024887706
45.36	0.013741164	-6.27423E-05	-0.01267881	-2.852732184	0.554328124	1.024887706
45.365	0.015053425	-6.93462E-05	-0.013993915	-3.14863092	0.554385397	1.024887706
45.37	0.016176372	-7.49879E-05	-0.015117092	-3.401345615	0.554451533	1.024887706
45.375	0.018012353	-8.42116E-05	-0.01695279	-3.814377692	0.554533533	1.024887706
45.38	0.019335248	-9.08989E-05	-0.018283224	-4.1137254	0.554628021	1.024887706
45.385	0.0199264	-9.39003E-05	-0.018880223	-4.248050151	0.554728375	1.024887706
45.39	0.021090933	-9.97584E-05	-0.020045212	-4.510172642	0.554840801	1.024887706
45.395	0.022421595	-0.000106465	-0.021378512	-4.810165279	0.554967861	1.024887706
45.4	0.023694206	-0.000112882	-0.022654061	-5.097163792	0.555109754	1.024887706
45.405	0.025117318	-0.00012007	-0.024082216	-5.418498611	0.555269203	1.024887706
45.41	0.025901286	-0.000124066	-0.024876033	-5.597107476	0.555438761	1.024887706
45.415	0.026517757	-0.000127202	-0.025498811	-5.737232403	0.555616487	1.024887706
45.42	0.027589817	-0.00013263	-0.026576694	-5.979756052	0.555808873	1.024887706
45.425	0.02805917	-0.000135056	-0.027058461	-6.08815369	0.55600786	1.024887706
45.43	0.028151483	-0.000135571	-0.027160666	-6.111149829	0.556208159	1.024887706
45.435	0.028755419	-0.000138652	-0.0277724	-6.248789898	0.556417144	1.024887706
45.44	0.028798909	-0.000138953	-0.02782996	-6.261741036	0.556626762	1.024887706
45.445	0.027985393	-0.000134938	-0.027019047	-6.079285676	0.556824704	1.024887706
45.45	0.027678663	-0.000133438	-0.026716186	-6.011141761	0.557018331	1.024887706
45.455	0.027643166	-0.000133321	-0.02669259	-6.005832716	0.557211462	1.024887706
45.46	0.026924775	-0.000129792	-0.02597995	-5.845488669	0.557394685	1.024887706
45.465	0.026143406	-0.000125932	-0.025200929	-5.670209031	0.557567428	1.024887706
45.47	0.025385393	-0.000122201	-0.024448101	-5.500822737	0.557730299	1.024887706
45.475	0.024044608	-0.000115545	-0.023105719	-5.198786706	0.557876419	1.024887706
45.48	0.023044682	-0.000110582	-0.022104988	-4.973622234	0.558010639	1.024887706
45.485	0.022003242	-0.000105444	-0.021069214	-4.740573143	0.558133002	1.024887706
45.49	0.019496256	-9.29494E-05	-0.018552156	-4.174235184	0.55822907	1.024887706
45.495	0.017494335	-8.29268E-05	-0.016534341	-3.720226814	0.558306422	1.024887706
45.5	0.016307527	-7.70196E-05	-0.0153456	-3.452760102	0.558373635	1.024887706
45.505	0.013391059	-6.24469E-05	-0.012414739	-2.793316188	0.558418956	1.024887706
45.51	0.010682244	-4.88192E-05	-0.009676021	-2.177104657	0.558447797	1.024887706
45.515	0.010071306	-4.56988E-05	-0.0090492	-2.03607008	0.558473433	1.024887706
45.52	0.009171358	-4.11634E-05	-0.008138337	-1.831125842	0.558494692	1.024887706
45.525	0.008251367	-3.64821E-05	-0.007198384	-1.619636502	0.5585119	1.024887706
45.53	0.008901027	-3.96604E-05	-0.007840356	-1.764080065	0.558531924	1.024887706
45.535	0.009850471	-4.43774E-05	-0.00879283	-1.978386718	0.558556448	1.024887706
45.54	0.010655605	-4.83716E-05	-0.009599078	-2.159792599	0.558585144	1.024887706
45.545	0.011869937	-5.44186E-05	-0.01081926	-2.434333471	0.558620755	1.024887706
45.55	0.01332102	-6.16636E-05	-0.012280526	-2.763118342	0.558665603	1.024887706
45.555	0.0149747	-6.99359E-05	-0.013948164	-3.138336821	0.558722278	1.024887706
45.56	0.016648504	-7.8325E-05	-0.015638496	-3.518661491	0.558792331	1.024887706
45.565	0.018441968	-8.73233E-05	-0.017450643	-3.926394614	0.55887829	1.024887706
45.57	0.020373207	-9.70349E-05	-0.019405385	-4.366211723	0.558983195	1.024887706
45.575	0.022029456	-0.000105389	-0.021085958	-4.744340448	0.559105849	1.024887706
45.58	0.023802101	-0.00011434	-0.022885989	-5.149347473	0.559249037	1.024887706
45.585	0.025412692	-0.000122522	-0.024530456	-5.519352677	0.559412259	1.024887706
45.59	0.026002027	-0.000125614	-0.025151579	-5.659105205	0.559583138	1.024887706
45.595	0.026000355	-0.000125753	-0.025179333	-5.665349988	0.559753996	1.024887706
45.6	0.025012339	-0.00012098	-0.024215295	-5.448441353	0.559912115	1.024887706
45.605	0.022105471	-0.000106586	-0.021310383	-4.794836076	0.560035618	1.024887706
45.61	0.018041201	-8.64442E-05	-0.017249881	-3.8812232	0.560117881	1.024887706
45.615	0.01343696	-6.36481E-05	-0.012660224	-2.848550422	0.560163514	1.024887706
45.62	0.008397712	-3.86E-05	-0.007623903	-1.71537827	0.560181338	1.024887706
45.625	0.003883541	-1.60507E-05	-0.003098631	-0.697191917	0.560185149	1.024887706
45.63	0.000659043	1.1864E-07	0.000142905	0.032153541	0.560185259	1.024887706
45.635	-0.001289643	9.93512E-06	0.002109582	0.474655955	0.56018568	1.024887706
45.64	-0.002494988	1.60353E-05	0.003331242	0.74952954	0.560187253	1.024887706
45.645	-0.003362288	2.04439E-05	0.004213915	0.948130976	0.56019011	1.024887706
45.65	-0.003833415	2.28657E-05	0.004698716	1.057211204	0.560193824	1.024887706
45.655	-0.00465754	2.70315E-05	0.005532491	1.244810562	0.560199307	1.024887706
45.66	-0.006043848	3.40311E-05	0.006933077	1.559942373	0.560208539	1.024887706
45.665	-0.006297404	3.5426E-05	0.007211158	1.622510576	0.560218562	1.024887706
45.67	-0.004907083	2.86027E-05	0.005833198	1.312469452	0.560224648	1.024887706
45.675	-0.003311042	2.06971E-05	0.00423757	0.95345328	0.560227419	1.024887706
45.68	-0.002585665	1.7106E-05	0.003513055	0.790437462	0.560229108	1.024887706
45.685	-0.002345517	1.59609E-05	0.003282069	0.738465625	0.560230499	1.024887706
45.69	-0.000961271	9.12952E-06	0.001904383	0.428486153	0.560230732	1.024887706
45.695	0.001237213	-1.81957E-06	-0.000302482	-0.068058546	0.560231119	1.024887706
45.7	0.002222256	-6.76073E-06	-0.001297927	-0.292033638	0.560232367	1.024887706
45.705	0.002524937	-8.27686E-06	-0.001603309	-0.360744424	0.560233979	1.024887706
45.71	0.003238106	-1.18415E-05	-0.002321187	-0.522267149	0.560236629	1.024887706
45.715	0.003711555	-1.42346E-05	-0.002803069	-0.630690485	0.56024011	1.024887706
45.72	0.003604449	-1.37457E-05	-0.002704187	-0.608442107	0.560243394	1.024887706
45.725	0.002537416	-8.47422E-06	-0.001639562	-0.36890148	0.560245021	1.024887706
45.73	0.000689986	7.23018E-07	0.000216863	0.048794105	0.560245142	1.024887706
45.735	-0.000770368	8.01863E-06	0.001688609	0.379937084	0.560245292	1.024887706
45.74	-0.002279315	1.55524E-05	0.003207671	0.721726038	0.560246605	1.024887706
45.745	-0.004214572	2.52387E-05	0.005159707	1.160934018	0.560251094	1.024887706
45.75	-0.005536534	3.18959E-05	0.006500643	1.462644731	0.560258841	1.024887706
45.755	-0.00645101	3.65206E-05	0.007431118	1.672001484	0.560269359	1.024887706

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
55.23071289	0.00158479	2.431058318
55.23681641	0.001534433	2.387125715
55.24291992	0.001480435	2.305040545
55.24902344	0.001480206	2.271354984
55.25512695	0.001593786	2.407222201
55.26123047	0.001893751	2.816520551
55.26733398	0.002150185	3.167295813
55.2734375	0.002442318	3.583203877
55.27954102	0.00298495	4.35412912
55.28564453	0.003134332	4.540034415
55.29174805	0.002864025	4.111879306
55.29785156	0.002816089	3.986846261
55.30395508	0.002891484	4.024147031
55.31005859	0.002650522	3.651685716
55.31616211	0.002492356	3.46012538
55.32226563	0.002843392	4.005975111
55.32836914	0.00301755	4.241208157
55.33447266	0.002702557	3.727645393
55.34057617	0.002406005	3.269736298
55.34667969	0.002266889	3.0801675
55.3527832	0.001982006	2.721503765
55.35888672	0.00162306	2.249817765
55.36499023	0.001727857	2.398706637
55.37109375	0.002214234	3.066958953
55.37719727	0.002585714	3.572144331
55.38330078	0.002607763	3.587247611
55.3894043	0.002420954	3.327476055
55.39550781	0.002506902	3.47147213
55.40161133	0.002829082	3.956389266
55.40771484	0.003034736	4.260308779
55.41381836	0.003238549	4.499709118
55.41992188	0.003717816	5.040891492
55.42602539	0.003813651	5.079576564
55.43212891	0.003140632	4.184997695
55.43823242	0.002402523	3.217516112
55.44433594	0.00230268	3.089511074
55.45043945	0.002788978	3.736778336
55.45654297	0.003649111	4.844097563
55.46264648	0.004386383	5.791828499
55.46875	0.004467156	5.959532149
55.47485352	0.00399127	5.413302844
55.48095703	0.003574804	4.940151258
55.48706055	0.003712501	5.224026808
55.49316406	0.004121552	5.819332579
55.49926758	0.004116428	5.791099463
55.50537109	0.003817566	5.39497797
55.51147461	0.003689302	5.265279987
55.51757813	0.003160804	4.583898019
55.52368164	0.002243546	3.315499512
55.52978516	0.0017722	2.63713747
55.53588867	0.001777552	2.642532977
55.54199219	0.001576	2.348738196
55.5480957	0.001163621	1.741695073
55.55419922	0.001456952	2.203708942
55.56030273	0.001216119	1.875528421
55.56640625	0.000810147	1.261401977
55.57250977	0.000991018	1.523105431
55.57861328	0.001125177	1.69589661
55.5847168	0.001268156	1.890008393
55.59082031	0.001166403	1.733428329
55.59692383	0.001144925	1.705972832
55.60302734	0.001193982	1.785457298
55.60913086	0.001352941	2.021531883
55.61523438	0.001604853	2.380875322
55.62133789	0.001660336	2.44262459
55.62744141	0.001327913	1.94922836
55.63354492	0.001051187	1.551680306
55.63964844	0.001239374	1.854511131
55.64575195	0.001326127	2.01584462
55.65185547	0.001705219	2.594692242
55.65795898	0.002075673	3.10832019
55.6640625	0.00227762	3.355404813
55.67016602	0.002226093	3.255771413
55.67626953	0.002109524	3.09113358
55.68237305	0.002176625	3.212400664
55.68847656	0.002519661	3.734523072
55.69458008	0.002919094	4.292201876
55.70068359	0.002957526	4.273753845
55.70678711	0.002733265	3.906110995
55.71289063	0.002578557	3.677071561
55.71899414	0.002781227	3.963687146
55.72509766	0.003404554	4.861145854
55.73120117	0.004098072	5.831576549
55.73730469	0.004354943	6.099842488
55.7434082	0.004151592	5.720229314
55.74951172	0.003991968	5.428216029
55.75561523	0.003911687	5.255196675
55.76171875	0.003700052	4.977295411
55.76782227	0.003614037	4.93666123
55.77392578	0.003745737	5.156715272
55.7800293	0.003884286	5.307580863
55.78613281	0.003981221	5.407200368
55.79223633	0.003683822	5.026569813
55.79833984	0.002974217	4.118042214
55.80444336	0.002569285	3.640032083
55.81054688	0.002635372	3.791456299
55.81665039	0.00268313	3.851590654
55.82275391	0.002777584	3.984265702
55.82885742	0.003011021	4.359208723
55.83496094	0.002877355	4.202082198
55.84106445	0.002520604	3.721590739
55.84716797	0.002375673	3.564711702
55.85327148	0.00233648	3.536577571
55.859375	0.002265145	3.418999733

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
45.76	-0.007296647	4.08165E-05	0.008290367	1.865332591	0.560282816	1.024887706
45.765	-0.007384034	4.13463E-05	0.008395659	1.889023169	0.560296596	1.024887706
45.77	-0.006747555	3.82577E-05	0.007771807	1.74865662	0.560308103	1.024887706
45.775	-0.005838605	3.37958E-05	0.006870872	1.545946129	0.560316719	1.024887706
45.78	-0.004789573	2.86327E-05	0.005828707	1.311459141	0.560322517	1.024887706
45.785	-0.003054821	2.0056E-05	0.004098358	0.922130603	0.560324875	1.024887706
45.79	-0.000475292	7.23635E-06	0.001513791	0.340603019	0.560324932	1.024887706
45.795	0.001881217	-4.5027E-06	-0.000851148	-0.191508194	0.560325827	1.024887706
45.8	0.004724046	-1.86655E-05	-0.003702216	-0.832998601	0.560331467	1.024887706
45.805	0.008397815	-3.70367E-05	-0.007397107	-1.664348987	0.560349291	1.024887706
45.81	0.010274314	-4.65099E-05	-0.009300954	-2.092714715	0.560375971	1.024887706
45.815	0.011071689	-5.05569E-05	-0.010114012	-2.275652612	0.560406953	1.024887706
45.82	0.013122521	-6.0861E-05	-0.01218331	-2.741244678	0.560450475	1.024887706
45.825	0.014220376	-6.6479E-05	-0.013311069	-2.994990556	0.560501584	1.024887706
45.83	0.013767596	-6.43377E-05	-0.01287854	-2.897671553	0.56054949	1.024887706
45.835	0.013852774	-6.48567E-05	-0.012983386	-2.921261852	0.560597991	1.024887706
45.84	0.013487762	-6.31593E-05	-0.012640538	-2.844121051	0.56064397	1.024887706
45.845	0.012124299	-5.64602E-05	-0.011287968	-2.539792728	0.560681122	1.024887706
45.85	0.011048963	-5.11705E-05	-0.010220415	-2.299593284	0.560711977	1.024887706
45.855	0.009929207	-4.56615E-05	-0.009109046	-2.049535358	0.560736894	1.024887706
45.86	0.008520962	-3.86989E-05	-0.007704968	-1.733617745	0.560755245	1.024887706
45.865	0.007329517	-3.28006E-05	-0.006516024	-1.46610544	0.560768823	1.024887706
45.87	0.006390641	-2.81572E-05	-0.005580329	-1.255574035	0.560779145	1.024887706
45.875	0.005570727	-2.41114E-05	-0.00476526	-1.072183525	0.560786988	1.024887706
45.88	0.00458383	-1.92328E-05	-0.003782697	-0.851106764	0.560792299	1.024887706
45.885	0.003764312	-1.51807E-05	-0.002966781	-0.667525833	0.56079588	1.024887706
45.89	0.003025514	-1.15478E-05	-0.002235455	-0.502977379	0.560798193	1.024887706
45.895	0.001574388	-4.36251E-06	-0.000789437	-0.177623354	0.56079882	1.024887706
45.9	0.000247459	2.22892E-06	0.000536557	0.120725427	0.560798835	1.024887706
45.905	-0.000913292	7.97607E-06	0.001692316	0.380771023	0.560799046	1.024887706
45.91	-0.003007698	1.83885E-05	0.003785354	0.851704719	0.560801333	1.024887706
45.915	-0.004821202	2.74439E-05	0.005604662	1.261048939	0.560807207	1.024887706
45.92	-0.006094724	3.38039E-05	0.006881923	1.548432719	0.560816596	1.024887706
45.925	-0.0077058	4.1866E-05	0.008500268	1.912560247	0.560831603	1.024887706
45.93	-0.008236085	4.45705E-05	0.0090411	2.034247523	0.560848747	1.024887706
45.935	-0.007896505	4.29043E-05	0.00870452	1.958517073	0.560864507	1.024887706
45.94	-0.00796925	4.32831E-05	0.008781039	1.975733694	0.560880558	1.024887706
45.945	-0.007518982	4.10548E-05	0.00833096	1.874465967	0.560894847	1.024887706
45.95	-0.007166808	3.92747E-05	0.007971499	1.793587325	0.560907829	1.024887706
45.955	-0.007716775	4.19913E-05	0.008520236	1.917053052	0.560922879	1.024887706
45.96	-0.008343162	4.50861E-05	0.009144198	2.057444651	0.560940472	1.024887706
45.965	-0.010298786	5.4791E-05	0.011084297	2.493966928	0.560967279	1.024887706
45.97	-0.01356567	7.11026E-05	0.014343166	3.227212292	0.56101379	1.024887706
45.975	-0.015653013	8.15985E-05	0.016438825	3.698735614	0.561075716	1.024887706
45.98	-0.016790926	8.73536E-05	0.017587471	3.957180889	0.561146973	1.024887706
45.985	-0.017799921	9.24722E-05	0.018608826	4.186985816	0.56122705	1.024887706
45.99	-0.018149028	9.43037E-05	0.018974239	4.269203814	0.5613103	1.024887706
45.995	-0.018292334	9.50911E-05	0.019131314	4.304545691	0.56139487	1.024887706
46	-0.018419133	9.57871E-05	0.019270152	4.335784309	0.561480616	1.024887706
46.005	-0.018762496	9.75428E-05	0.019620371	4.414583511	0.561569589	1.024887706
46.01	-0.020117373	0.000104347	0.020977455	4.719927264	0.561671875	1.024887706
46.015	-0.021681065	0.000112239	0.022550759	5.073920681	0.561790681	1.024887706
46.02	-0.022522383	0.000116558	0.023411587	5.267606991	0.561918886	1.024887706
46.025	-0.022419588	0.000116187	0.02333514	5.250406447	0.562045923	1.024887706
46.03	-0.020825653	0.00010837	0.021756514	4.895215713	0.562155539	1.024887706
46.035	-0.018597305	9.73201E-05	0.019526813	4.393532977	0.562242952	1.024887706
46.04	-0.01772869	9.29955E-05	0.018654605	4.197286047	0.56232239	1.024887706
46.045	-0.01862972	9.7522E-05	0.019568852	4.402991708	0.562410108	1.024887706
46.05	-0.019176862	0.00010036	0.020141935	4.53193528	0.562503054	1.024887706
46.055	-0.017444147	9.18338E-05	0.018420345	4.144577729	0.562579963	1.024887706
46.06	-0.015494492	8.21406E-05	0.016466345	3.704927545	0.56264064	1.024887706
46.065	-0.015492623	8.21546E-05	0.016469605	3.705661086	0.562701304	1.024887706
46.07	-0.014965545	7.9616E-05	0.015957621	3.590464804	0.56275791	1.024887706
46.075	-0.012830774	6.90299E-05	0.013825277	3.110687291	0.562799518	1.024887706
46.08	-0.011659997	6.32016E-05	0.012651862	2.846669043	0.56283388	1.024887706
46.085	-0.011086887	6.03967E-05	0.012087286	2.719639411	0.562864946	1.024887706
46.09	-0.008984226	4.99784E-05	0.009991039	2.247983767	0.562885347	1.024887706
46.095	-0.006495707	3.75749E-05	0.007496913	1.68680546	0.562896011	1.024887706
46.1	-0.005258261	3.13946E-05	0.006254804	1.407330825	0.562902999	1.024887706
46.105	-0.003809109	2.42023E-05	0.004809798	1.08220452	0.562906666	1.024887706
46.11	-0.000771589	9.06424E-06	0.001770206	0.398296284	0.562906816	1.024887706
46.115	0.001466322	-2.16715E-06	-0.000483428	-0.108771401	0.56290736	1.024887706
46.12	0.001712916	-3.4401E-06	-0.00073877	-0.166223337	0.562908101	1.024887706
46.125	0.003346548	-1.15662E-05	-0.002368414	-0.532893148	0.562910932	1.024887706
46.13	0.006502075	-2.73538E-05	-0.005532608	-1.244836907	0.562921617	1.024887706
46.135	0.007769586	-3.37835E-05	-0.006820574	-1.534629142	0.562936874	1.024887706
46.14	0.008382402	-3.69022E-05	-0.007445153	-1.675159352	0.562954633	1.024887706
46.145	0.00990843	-4.45918E-05	-0.008984719	-2.021561883	0.562979446	1.024887706
46.15	0.010274361	-4.65283E-05	-0.009372155	-2.108734785	0.563006126	1.024887706
46.155	0.010190216	-4.61782E-05	-0.009301438	-2.092823477	0.563032371	1.024887706
46.16	0.010977455	-5.01829E-05	-0.010103765	-2.273347205	0.563062828	1.024887706
46.165	0.010836757	-4.95851E-05	-0.009981833	-2.24591241	0.563092508	1.024887706
46.17	0.010363446	-4.72835E-05	-0.009516948	-2.141313399	0.563119653	1.024887706
46.175	0.011045327	-5.07464E-05	-0.010216418	-2.298694132	0.563150487	1.024887706
46.18	0.011128033	-5.12612E-05	-0.010318289	-2.321615084	0.563181785	1.024887706
46.185	0.010480111	-4.81034E-05	-0.009680498	-2.178111964	0.563209544	1.024887706
46.19	0.010637186	-4.89519E-05	-0.009851901	-2.216677761	0.563238142	1.024887706
46.195	0.010402573	-4.78834E-05	-0.009636063	-2.168114109	0.563265492	1.024887706
46.2	0.009174711	-4.18435E-05	-0.00841662	-1.893739474	0.563286766	1.024887706
46.205	0.008269416	-3.73921E-05	-0.007518237	-1.691603329	0.56330405	1.024887706
46.21	0.006874386	-3.05152E-05	-0.006130881	-1.379448188	0.563315993	1.024887706
46.215	0.004572884	-1.90751E-05	-0.003824309	-0.860469505	0.563321279	1.024887706
46.22	0.003404271	-1.32442E-05	-0.002649311	-0.596094911	0.563324208	1.024887706
46.225	0.002424644	-8.39387E-06	-0.001672214	-0.376248244	0.563325693	1.024887706
46.23	0.000116452	3.11024E-06	0.000644173	0.144938896	0.563325697	1.024887706
46.235	-0.000910216	8.28684E-06	0.001686001	0.379350138	0.563325906	1.024887706
46.24	-0.000761536	7.55031E-06	0.001537212	0.345872605	0.563326053	1.024887706
46.245	-0.002224362	1.48313E-05	0.003002684	0.675603789	0.563327303	1.024887706
46.25	-0.003439778	2.09412E-05	0.00423152	0.952091915	0.563330294	1.024887706
46.255	-0.003453136	2.10262E-05	0.004248614	0.955938152	0.563333308	1.024887706
46.26	-0.004913699	2.82974E-05	0.005710447	1.284850581	0.56333941	1.024887706
46.265	-0.006796877	3.77354E-05	0.007607081	1.711593201	0.563351086	1.024887706
46.27	-0.007635187	4.19654E-05	0.008456815	1.902783418	0.56336582	1.024887706
46.275	-0.0091121	4.93635E-05	0.009942519	2.237066684	0.563386805	1.024887706

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
55.86547852	0.00226565	3.399245705
55.87158203	0.002265363	3.372380848
55.87768555	0.002172665	3.216168705
55.88378906	0.002207667	3.29647124
55.88989258	0.002373995	3.601414809
55.89599609	0.00207589	3.142199339
55.90209961	0.001568646	2.324923738
55.90820313	0.001538225	2.242835475
55.91430664	0.001942459	2.832174777
55.92041016	0.002584376	3.820693545
55.92651367	0.003116756	4.714493087
55.93261719	0.003304964	5.07150125
55.9387207	0.002903487	4.417220699
55.94482422	0.00225583	3.388522323
55.95092773	0.002112282	3.171061117
55.95703125	0.002475147	3.726184314
55.96313477	0.002678198	4.049497767
55.96923828	0.002477473	3.77441509
55.9753418	0.002258981	3.453313774
55.98144531	0.002281815	3.473157539
55.98754883	0.002448732	3.666971159
55.99365234	0.002508436	3.683645847
55.99975586	0.002217873	3.258145409
56.00585938	0.002229542	3.340065082
56.01196289	0.002669177	4.067891921
56.01806641	0.002838778	4.332859358
56.02416992	0.002454671	3.685424326
56.03027344	0.001704807	2.507908363
56.03637695	0.001329925	1.953939509
56.04248047	0.001883987	2.811534883
56.04858398	0.002953041	4.446681247
56.0546875	0.003564791	5.343600341
56.06079102	0.00335497	4.966802806
56.06689453	0.003064165	4.457498128
56.07299805	0.003237043	4.651852859
56.07910156	0.003512537	5.039939195
56.08520508	0.003550912	5.11378282
56.09130859	0.003391779	4.917790235
56.09741211	0.003092449	4.493186941
56.10351563	0.002852855	4.10103512
56.10961914	0.003148731	4.474829037
56.11572266	0.003463561	4.92239182
56.12182617	0.003194896	4.591656069
56.12792969	0.002676603	3.924998498
56.1340332	0.002516186	3.754925261
56.14013672	0.003030027	4.512019499
56.14624023	0.003472872	5.091055291
56.15234375	0.003140547	4.580032375
56.15844727	0.002314153	3.418664395
56.16455078	0.00153561	2.316387348
56.1706543	0.000890678	1.366871768
56.17675781	0.000741024	1.138935618
56.18286133	0.001381164	2.097277282
56.18896484	0.001801464	2.721850798
56.19506836	0.001892746	2.87815223
56.20117188	0.001958364	3.009168003
56.20727539	0.00210727	3.301964239
56.21337891	0.002269893	3.643227962
56.21948242	0.00234672	3.81378186
56.22558594	0.002284049	3.713424051
56.23168945	0.002205169	3.576504092
56.23779297	0.002222507	3.611268117
56.24389648	0.002252963	3.703911595
56.25	0.002186902	3.661403841
56.25610352	0.002081203	3.524595829
56.26220703	0.001832322	3.07869846
56.26831055	0.001620381	2.656157499
56.27441406	0.001782362	2.856110736
56.28051758	0.002228457	3.546067879
56.28662109	0.002672559	4.266948559
56.29272461	0.002901589	4.623286586
56.29882813	0.002925527	4.581594752
56.30493164	0.002660422	4.074862879
56.31103516	0.002084224	3.152692812
56.31713867	0.001298135	1.949379701
56.32324219	0.001045451	1.560732276
56.3293457	0.001408741	2.109366492
56.33544922	0.001211085	1.822153714
56.34155273	0.000728452	1.091655466
56.34765625	0.00070639	1.045963355
56.35375977	0.001232802	1.794005506
56.35986328	0.001817756	2.624187608
56.3659668	0.002104235	3.079026336
56.37207031	0.002027061	3.021629728
56.37817383	0.001763264	2.641374625
56.38427734	0.001700037	2.518004485
56.39038086	0.002058091	2.980668705
56.39648438	0.00251742	3.600250331
56.40258789	0.002800445	4.041777249
56.40869141	0.002878689	4.202853096
56.41479492	0.002611729	3.819162557
56.42089844	0.0022801	3.325718092
56.42700195	0.002214025	3.194618545
56.43310547	0.002427392	3.450616395
56.43920898	0.002495673	3.54034398
56.4453125	0.002228749	3.187770991
56.45141602	0.001966513	2.843139869
56.45751953	0.001865494	2.737920875
56.46362305	0.001728082	2.556260869
56.46972656	0.001350001	1.981013354
56.47583008	0.000833472	1.21374978
56.48193359	0.000543437	0.797490105
56.48803711	0.00063923	0.95886895
56.49414063	0.000990218	1.525617927

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
46.28	-0.010617421	5.69442E-05	0.011464295	2.579466486	0.563415296	1.024887706
46.285	-0.011215106	5.99951E-05	0.01207657	2.717228308	0.563447086	1.024887706
46.29	-0.012206828	6.49956E-05	0.013079921	2.942982164	0.563484746	1.024887706
46.295	-0.013064185	6.93476E-05	0.013952939	3.139411381	0.563527882	1.024887706
46.3	-0.013566758	7.19115E-05	0.01446715	3.255108779	0.563574401	1.024887706
46.305	-0.015094208	7.95861E-05	0.01600602	3.601354476	0.563631984	1.024887706
46.31	-0.016409215	8.62552E-05	0.01734277	3.902123219	0.563700038	1.024887706
46.315	-0.016593587	8.72864E-05	0.017549427	3.948621044	0.563769629	1.024887706
46.32	-0.017101892	8.99251E-05	0.018078188	4.067592379	0.56384355	1.024887706
46.325	-0.017135374	9.02369E-05	0.018139323	4.081347779	0.56391776	1.024887706
46.33	-0.015694182	8.31869E-05	0.016715643	3.761019746	0.563980012	1.024887706
46.335	-0.014285956	7.62701E-05	0.015319589	3.446907477	0.564031593	1.024887706
46.34	-0.012691838	6.84366E-05	0.01373933	3.09134936	0.564072305	1.024887706
46.345	-0.010320979	5.67057E-05	0.011374323	2.559222745	0.564099228	1.024887706
46.35	-0.008750745	4.89417E-05	0.009810011	2.207252562	0.564118582	1.024887706
46.355	-0.007278946	4.17073E-05	0.008353041	1.879434281	0.564131973	1.024887706
46.36	-0.004358653	2.72468E-05	0.005442575	1.224579459	0.564136774	1.024887706
46.365	-0.001394483	1.25261E-05	0.002482154	0.558484597	0.564137266	1.024887706
46.37	0.001587895	-2.28334E-06	-0.00049373	-0.111089281	0.564137903	1.024887706
46.375	0.005475336	-2.16383E-05	-0.004379542	-0.985396947	0.56414548	1.024887706
46.38	0.00872726	-3.78756E-05	-0.007636459	-1.718203186	0.56416473	1.024887706
46.385	0.011518364	-5.1814E-05	-0.010430142	-2.346781985	0.564198262	1.024887706
46.39	0.01461508	-6.73099E-05	-0.01352986	-3.044218545	0.564252248	1.024887706
46.395	0.016488352	-7.67387E-05	-0.0154148	-3.468330043	0.564320959	1.024887706
46.4	0.017914718	-8.39128E-05	-0.016848456	-3.790902488	0.564402073	1.024887706
46.405	0.019827444	-9.35335E-05	-0.018770247	-4.223305629	0.564501433	1.024887706
46.41	0.020773105	-9.83532E-05	-0.019732692	-4.439855772	0.564610496	1.024887706
46.415	0.021806477	-0.00010359	-0.020778243	-4.675104673	0.56473068	1.024887706
46.42	0.022955785	-0.000109455	-0.021948807	-4.938481663	0.564863867	1.024887706
46.425	0.021922735	-0.000104446	-0.020937137	-4.710855851	0.564985336	1.024887706
46.43	0.020858262	-9.92051E-05	-0.019879038	-4.472783449	0.565095295	1.024887706
46.435	0.020907094	-9.95375E-05	-0.01994619	-4.487892671	0.56520577	1.024887706
46.44	0.019354719	-9.19065E-05	-0.018406189	-4.141392595	0.565300448	1.024887706
46.445	0.017522676	-8.28169E-05	-0.016572944	-3.728912489	0.565378051	1.024887706
46.45	0.01637384	-7.71386E-05	-0.015428245	-3.471355095	0.565445811	1.024887706
46.455	0.013941114	-6.50432E-05	-0.012991246	-2.923030344	0.565494933	1.024887706
46.46	0.012159933	-5.61221E-05	-0.011194904	-2.518853349	0.565532304	1.024887706
46.465	0.011614466	-5.33774E-05	-0.010642413	-2.394543024	0.565566398	1.024887706
46.47	0.010117322	-4.58747E-05	-0.009132638	-2.054843509	0.565592268	1.024887706
46.475	0.009889808	-4.46336E-05	-0.008883932	-1.998884694	0.565616989	1.024887706
46.48	0.011563989	-5.29168E-05	-0.010556512	-2.375215249	0.565650787	1.024887706
46.485	0.012418821	-5.71477E-05	-0.011410434	-2.567347692	0.565689766	1.024887706
46.49	0.013783317	-6.38905E-05	-0.012770826	-2.873435899	0.565737782	1.024887706
46.495	0.016006134	-7.49634E-05	-0.015003539	-3.375796355	0.565802533	1.024887706
46.5	0.016788442	-7.88793E-05	-0.015792754	-3.553369644	0.565873769	1.024887706
46.505	0.0176704	-8.32491E-05	-0.016673218	-3.751474063	0.565952685	1.024887706
46.51	0.019590939	-9.28262E-05	-0.018602141	-4.185481705	0.566049689	1.024887706
46.515	0.020734078	-9.85704E-05	-0.019758551	-4.445673929	0.566158343	1.024887706
46.52	0.021152678	-0.000100705	-0.020188168	-4.542337782	0.566271428	1.024887706
46.525	0.020822747	-9.91116E-05	-0.019866311	-4.469919944	0.566381013	1.024887706
46.53	0.019956654	-9.48155E-05	-0.018998711	-4.274709883	0.566481672	1.024887706
46.535	0.019879653	-9.44554E-05	-0.018926015	-4.258353393	0.566581555	1.024887706
46.54	0.018794748	-8.91215E-05	-0.017849259	-4.016083293	0.566670834	1.024887706
46.545	0.01573301	-7.38867E-05	-0.014776013	-3.324602945	0.566733395	1.024887706
46.55	0.013512397	-6.27809E-05	-0.012537566	-2.820952432	0.566779541	1.024887706
46.555	0.011664111	-5.35612E-05	-0.010680425	-2.403095695	0.566813927	1.024887706
46.56	0.008333892	-3.69314E-05	-0.007333779	-1.650100243	0.566831481	1.024887706
46.565	0.005504085	-2.27218E-05	-0.004477468	-1.007430367	0.566839138	1.024887706
46.57	0.003693751	-1.35886E-05	-0.002642714	-0.594610609	0.566842586	1.024887706
46.575	0.001783647	-3.94049E-06	-0.000705468	-0.158730204	0.56684339	1.024887706
46.58	0.001131892	-5.21933E-07	-1.92896E-05	-0.004340159	0.566843714	1.024887706
46.585	0.001789989	-3.65277E-06	-0.000651689	-0.146630018	0.566844524	1.024887706
46.59	0.002425271	-6.67819E-06	-0.001262631	-0.284091971	0.56684601	1.024887706
46.595	0.004287691	-1.57955E-05	-0.003102903	-0.698153151	0.566850657	1.024887706
46.6	0.007796998	-3.3163E-05	-0.006605283	-1.486188736	0.566866022	1.024887706
46.605	0.011109351	-4.95992E-05	-0.009916389	-2.23118747	0.566897215	1.024887706
46.61	0.014638831	-6.71157E-05	-0.013441676	-3.024377062	0.566951376	1.024887706
46.615	0.019391874	-9.07213E-05	-0.018187033	-4.092082504	0.567046418	1.024887706
46.62	0.023779991	-0.000112627	-0.022581827	-5.080911181	0.56718934	1.024887706
46.625	0.027176993	-0.000129636	-0.025974309	-5.8442196	0.567376012	1.024887706
46.63	0.030649707	-0.000147036	-0.029436216	-6.62314863	0.567613438	1.024887706
46.635	0.033657178	-0.000162158	-0.032435992	-7.298098299	0.567899744	1.024887706
46.64	0.035370865	-0.000170841	-0.034157701	-7.685482774	0.568215948	1.024887706
46.645	0.036614659	-0.000177176	-0.035413281	-7.96798821	0.568554782	1.024887706
46.65	0.037309421	-0.000180783	-0.036128084	-8.128818975	0.568906595	1.024887706
46.655	0.036428046	-0.000176504	-0.035263796	-7.934354035	0.569241984	1.024887706
46.66	0.035351355	-0.000171159	-0.034184682	-7.691553527	0.569557839	1.024887706
46.665	0.037256128	-0.000180639	-0.03609886	-8.122243535	0.569908648	1.024887706
46.67	0.042489418	-0.000207128	-0.041345368	-9.302707765	0.570364935	1.024887706
46.675	0.047526771	-0.000232837	-0.046431159	-10.44701084	0.570935825	1.024887706
46.68	0.048661396	-0.000238935	-0.047636084	-10.71811891	0.571534298	1.024887706
46.685	0.044744342	-0.000219708	-0.043754847	-9.844840481	0.5720403	1.024887706
46.69	0.038236071	-0.000187528	-0.037270103	-8.385773086	0.572409807	1.024887706
46.695	0.035242565	-0.000172564	-0.034258656	-7.708197564	0.572723721	1.024887706
46.7	0.03911958	-0.000191744	-0.038130308	-8.579319411	0.573110502	1.024887706
46.705	0.044424152	-0.000218272	-0.043477168	-9.782362891	0.573609287	1.024887706
46.71	0.044163007	-0.000217306	-0.043279955	-9.737989861	0.574102227	1.024887706
46.715	0.040551756	-0.000199583	-0.03970337	-8.933258209	0.574517845	1.024887706
46.72	0.039186864	-0.000192938	-0.038363442	-8.631774515	0.574905957	1.024887706
46.725	0.037735709	-0.000185971	-0.036959281	-8.31583822	0.575265857	1.024887706
46.73	0.03154667	-0.000155435	-0.030814524	-6.933267831	0.575517383	1.024887706
46.735	0.024752798	-0.000121591	-0.02401912	-5.404301927	0.575672237	1.024887706
46.74	0.023559661	-0.000115565	-0.022811182	-5.132516044	0.575812523	1.024887706
46.745	0.024357924	-0.00011964	-0.023634211	-5.317697567	0.575962477	1.024887706
46.75	0.020814942	-0.000102121	-0.020114867	-4.525845017	0.57607198	1.024887706
46.755	0.016293902	-7.95253E-05	-0.015588819	-3.507484335	0.57613908	1.024887706
46.76	0.016379361	-7.9876E-05	-0.01566454	-3.524521559	0.576206887	1.024887706
46.765	0.017937088	-8.77231E-05	-0.01724886	-3.880993588	0.576288203	1.024887706
46.77	0.017009772	-8.32215E-05	-0.016339638	-3.676418537	0.576361329	1.024887706
46.775	0.015423573	-7.5397E-05	-0.014762413	-3.321543005	0.576421453	1.024887706
46.78	0.013646728	-6.66381E-05	-0.013009635	-2.927167791	0.576468522	1.024887706
46.785	0.010802353	-5.25423E-05	-0.010190384	-2.292836453	0.576498015	1.024887706
46.79	0.0081628	-3.94583E-05	-0.007575179	-1.704415201	0.576514855	1.024887706
46.795	0.004191867	-1.97212E-05	-0.003633226	-0.817475919	0.576519296	1.024887706

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
56.50024414	0.001202486	1.888242997
56.50634766	0.000773969	1.21909968
56.51245117	0.000663302	1.040790267
56.51855469	0.001157741	1.832948183
56.5246582	0.001717696	2.786074981
56.53076172	0.001624018	2.70299846
56.53686523	0.000512231	0.869205154
56.54296875	0.001253932	2.146651009
56.54907227	0.001694834	2.895052014
56.55517578	0.00138002	2.346691942
56.5612793	0.001039869	1.770868214
56.56738281	0.001248857	2.142523429
56.57348633	0.001890577	3.260941028
56.57958984	0.00254764	4.403879382
56.58569336	0.002914909	5.024522392
56.59179688	0.002911548	4.914574055
56.59790039	0.002548157	4.193607787
56.60400391	0.002225229	3.647492141
56.61010742	0.002418371	3.999030305
56.61621094	0.00297841	4.944417215
56.62231445	0.003177129	5.2214808
56.62841797	0.002858921	4.556255432
56.63452148	0.002529551	3.900946599
56.640625	0.002051425	3.130463185
56.64672852	0.001407173	2.158709751
56.65283203	0.000995459	1.534064965
56.65893555	0.001073741	1.657156862
56.66503906	0.001432892	2.206756802
56.67114258	0.00177682	2.712920689
56.67724609	0.002050146	3.10483186
56.68334961	0.002237921	3.386222664
56.68945313	0.002019564	3.07391091
56.69555664	0.001456216	2.247598424
56.70166016	0.000873411	1.365455419
56.70776367	0.000400033	0.621203717
56.71386719	0.000356912	0.541846772
56.7199707	0.00112696	1.675134979
56.72607422	0.001765971	2.595970194
56.73217773	0.001839825	2.707998982
56.73828125	0.001510024	2.229804328
56.74438477	0.00103641	1.510933404
56.75048828	0.001024919	1.45715696
56.7565918	0.001760497	2.46148647
56.76269531	0.002374836	3.318832683
56.76879883	0.002366815	3.337785101
56.77490234	0.002153514	3.072469594
56.78100586	0.002010065	2.892704602
56.78710938	0.002017218	2.912774658
56.79321289	0.002079539	3.012268466
56.79931641	0.001961352	2.859035498
56.80541992	0.001690175	2.485576482
56.81152344	0.001294767	1.935641669
56.81762695	0.000948273	1.454274231
56.82373047	0.000905654	1.417534404
56.82983398	0.001515618	2.384042162
56.8359375	0.00198565	3.119979758
56.84204102	0.00181433	2.875062068
56.84814453	0.0015086	2.453228651
56.85424805	0.001705625	2.864026421
56.86035156	0.00201941	3.440690727
56.86645508	0.002438281	4.155334915
56.87255859	0.003123183	5.330689319
56.87866211	0.003647324	6.235015633
56.88476563	0.003640133	6.270559992
56.89086914	0.003133411	5.487944981
56.89697266	0.002495959	4.418539827
56.90307617	0.002180424	3.882209645
56.90917969	0.002327678	4.15504757
56.9152832	0.00249002	4.392897099
56.92138672	0.002504238	4.35224126
56.92749023	0.002749885	4.756630816
56.93359375	0.002659895	4.595658068
56.93969727	0.001800847	3.113788578
56.94580078	0.001245176	2.150767945
56.9519043	0.001964715	3.335964683
56.95800781	0.002619823	4.330242956
56.96411133	0.002898274	4.720159622
56.97021484	0.002885283	4.708133231
56.97631836	0.00222776	3.674732205
56.98242188	0.001377176	2.288587847
56.98852539	0.001500713	2.479766824
56.99462891	0.002200833	3.594595147
57.00073242	0.00242599	3.935003099
57.00683594	0.001748587	2.832691123
57.01293945	0.000917586	1.493129193
57.01904297	0.000797573	1.304288212
57.02514648	0.000195671	0.319188795
57.03125	0.000958188	1.54883637
57.03735352	0.001579932	2.516471941
57.04345703	0.00164264	2.569254786
57.04956055	0.001285829	1.989305599
57.05566406	0.000540694	0.839779042
57.06176758	0.000200926	0.315756809
57.06787109	0.000353359	0.557159392
57.07397461	0.00097607	1.522895053
57.08007813	0.001237785	1.902299788
57.08618164	0.001926099	2.937057919
57.09228516	0.002107954	3.24417377
57.09838867	0.001703978	2.673408092
57.10449219	0.001629725	2.571595696
57.1105957	0.001283305	2.00432875
57.11669922	0.001113513	1.72234591
57.12280273	0.001051413	1.619222369
57.12890625	0.001236958	1.910131901

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
46.8	-0.001999753	1.12792E-05	0.002551046	0.573985424	0.576520307	1.024887706
46.805	-0.006185925	3.23499E-05	0.006749455	1.518627313	0.576529978	1.025007016
46.81	-0.008866459	4.58058E-05	0.00942852	2.121417091	0.576549847	1.025617178
46.815	-0.013640726	6.98202E-05	0.014205812	3.196307716	0.576596875	1.026195793
46.82	-0.017134743	8.75184E-05	0.017723351	3.987754065	0.576671079	1.026741076
46.825	-0.018238159	9.31303E-05	0.018838158	4.238585549	0.576755149	1.027251593
46.83	-0.021636794	0.000110252	0.022237767	5.003497509	0.57687347	1.027726472
46.835	-0.0255423	0.000130066	0.026168791	5.887977878	0.57703836	1.028164401
46.84	-0.026152446	0.000133298	0.026809074	6.032041545	0.577211223	1.02856402
46.845	-0.026318989	0.000134204	0.026989194	6.072568551	0.577386294	1.028924789
46.85	-0.027879222	0.000142137	0.028561903	6.42642817	0.577582737	1.02924639
46.855	-0.028767233	0.000146734	0.029472925	6.63140817	0.577791894	1.029528243
46.86	-0.028122628	0.000143598	0.028839559	6.488900713	0.577991782	1.029769965
46.865	-0.027025103	0.000138124	0.027734215	6.240198463	0.578176373	1.02997163
46.87	-0.027014718	0.000138108	0.027731077	6.239492289	0.578360823	1.030133467
46.875	-0.02702419	0.000138242	0.02775818	6.245590501	0.578545401	1.030255491
46.88	-0.02526254	0.000129431	0.02597979	5.845452831	0.578706699	1.03033778
46.885	-0.024351727	0.000124834	0.025052628	5.63684141	0.578856577	1.030380834
46.89	-0.024884574	0.000127569	0.025605042	5.761134509	0.579013085	1.030387774
46.895	-0.023373443	0.000120029	0.024083575	5.418804334	0.579151162	1.030387774
46.9	-0.021949921	0.000112838	0.022633943	5.092637169	0.579272932	1.030387774
46.905	-0.022589358	0.000116082	0.023289307	5.24009404	0.5794019	1.030387774
46.91	-0.021150786	0.000108901	0.021840731	4.914164538	0.579514966	1.030387774
46.915	-0.0193436	9.97468E-05	0.019996714	4.499260636	0.579609535	1.030387774
46.92	-0.020535123	0.000105724	0.021203962	4.770891372	0.579716114	1.030387774
46.925	-0.019985677	0.000103009	0.020655435	4.647472834	0.579817065	1.030387774
46.93	-0.018308368	9.44852E-05	0.018937296	4.260891544	0.579901783	1.030387774
46.935	-0.020438094	0.00010513	0.021086736	4.744515706	0.580007357	1.030387774
46.94	-0.022014743	0.000113102	0.02269544	5.10647408	0.580129848	1.030387774
46.945	-0.022140104	0.000113672	0.022810362	5.132331518	0.580253738	1.030387774
46.95	-0.02616586	0.000133692	0.026846422	6.040444877	0.580426777	1.030387774
46.955	-0.029734877	0.000151506	0.030418516	6.844166203	0.580650242	1.030387774
46.96	-0.030074237	0.000153234	0.030760834	6.921187596	0.580878836	1.030387774
46.965	-0.032977381	0.000167636	0.033613161	7.562961272	0.581153694	1.030387774
46.97	-0.035909317	0.000182323	0.03652023	8.217051685	0.581479598	1.030387774
46.975	-0.034887418	0.000177349	0.035515678	7.991027537	0.581787218	1.030387774
46.98	-0.03514848	0.000178617	0.035771884	8.048673886	0.582099458	1.030387774
46.985	-0.03769474	0.000191279	0.038292053	8.615711952	0.582458576	1.030387774
46.99	-0.039810515	0.000201841	0.040380717	9.085661285	0.58285914	1.030387774
46.995	-0.04290425	0.000217281	0.043432505	9.772313589	0.583324379	1.030387774
47	-0.044892718	0.000227337	0.045419007	10.2192765	0.583833743	1.030387774
47.005	-0.043501643	0.000220567	0.044051803	9.9116557	0.584312028	1.030387774
47.01	-0.043971526	0.00022291	0.044525218	10.01817398	0.584800702	1.030387774
47.015	-0.047927579	0.000242871	0.048485973	10.9093439	0.585381262	1.030387774
47.02	-0.049251727	0.000249844	0.049862081	11.21896812	0.585994344	1.030387774
47.025	-0.046961684	0.000238435	0.047558446	10.70065028	0.586551739	1.030387774
47.03	-0.046275102	0.00023506	0.046877331	10.54739938	0.587092955	1.030387774
47.035	-0.046227564	0.000235023	0.046869779	10.5457002	0.58763306	1.030387774
47.04	-0.042062416	0.000214393	0.042709746	9.609692819	0.588080221	1.030387774
47.045	-0.038294318	0.0001957	0.038945028	8.762631286	0.588450855	1.030387774
47.05	-0.038698856	0.000197762	0.03936155	8.856348648	0.58882936	1.030387774
47.055	-0.036753577	0.000188282	0.037452009	8.426701987	0.589170769	1.030387774
47.06	-0.032481306	0.000167123	0.033197008	7.469326912	0.58943742	1.030387774
47.065	-0.030182395	0.000155752	0.030912426	6.955295914	0.589667662	1.030387774
47.07	-0.025766922	0.000133886	0.026522938	5.967661103	0.589835465	1.030387774
47.075	-0.018762182	9.89378E-05	0.019517347	4.391402964	0.589924435	1.030387774
47.08	-0.013223119	7.11383E-05	0.013953351	3.139504027	0.589968627	1.030387774
47.085	-0.009049861	5.00543E-05	0.009738376	2.191134678	0.589989326	1.030387774
47.09	-0.009644504	5.27255E-05	0.010285203	2.314170636	0.590012836	1.030387774
47.095	-0.016161517	8.49277E-05	0.016780051	3.775511511	0.59007885	1.030387774
47.1	-0.018956793	9.89618E-05	0.019606511	4.411464985	0.590169675	1.030387774
47.105	-0.015704899	8.28653E-05	0.016356868	3.680295237	0.590232012	1.030387774
47.11	-0.015753358	8.29655E-05	0.016378137	3.685080859	0.590294735	1.030387774
47.115	-0.021115665	0.000109556	0.021738722	4.89121246	0.590407425	1.030387774
47.12	-0.024151348	0.000124875	0.024819484	5.584383963	0.590554845	1.030387774
47.125	-0.021435435	0.00011158	0.022135246	4.980430291	0.590670974	1.030387774
47.13	-0.018549368	9.72688E-05	0.019248479	4.330907791	0.590757937	1.030387774
47.135	-0.019456421	0.00010185	0.02017376	4.53909592	0.590853613	1.030387774
47.14	-0.018224938	9.59686E-05	0.018986342	4.271927015	0.590937561	1.030387774
47.145	-0.011401598	6.22355E-05	0.012192654	2.743347089	0.590970416	1.030387774
47.15	-0.006498286	3.77863E-05	0.007287755	1.63974478	0.590981089	1.030387774
47.155	-0.005981562	3.52162E-05	0.00677455	1.524273689	0.590990132	1.030387774
47.16	-0.002851783	1.96821E-05	0.003673871	0.826621029	0.590992187	1.030387774
47.165	0.002629663	-7.82433E-06	-0.001811101	-0.407497644	0.590993935	1.030387774
47.17	0.005120325	-2.04266E-05	-0.004321799	-0.972404669	0.591000561	1.030387774
47.175	0.006354007	-2.66754E-05	-0.0055662	-1.252394999	0.591010765	1.030387774
47.18	0.007472763	-3.23739E-05	-0.006700697	-1.507656756	0.591024879	1.030387774
47.185	0.006125746	-2.56932E-05	-0.00535147	-1.204080641	0.591034363	1.030387774
47.19	0.004874258	-1.94076E-05	-0.004082684	-0.918603805	0.591040367	1.030387774
47.195	0.004479541	-1.7459E-05	-0.003689458	-0.830128136	0.591045439	1.030387774
47.2	0.001223026	-1.27009E-06	-0.000424566	-0.095527259	0.591045817	1.030387774
47.205	-0.00217592	1.56958E-05	0.002993525	0.673543154	0.591047014	1.030387774
47.21	-0.003161526	2.06735E-05	0.003995719	0.899036754	0.59104954	1.030387774
47.215	-0.006063251	3.51121E-05	0.006901163	1.552761603	0.591058831	1.030387774
47.22	-0.010320961	5.6448E-05	0.011190312	2.517820295	0.591085754	1.030387774
47.225	-0.011747347	6.37749E-05	0.012662112	2.848975308	0.591120632	1.030387774
47.23	-0.01187622	6.45911E-05	0.012826017	2.885853789	0.59115628	1.030387774
47.235	-0.013142758	7.10725E-05	0.014127458	3.178677958	0.591199937	1.030387774
47.24	-0.013477914	7.30052E-05	0.014514479	3.26575785	0.591245848	1.030387774
47.245	-0.010647721	5.91832E-05	0.011723952	2.637889252	0.591274502	1.030387774
47.25	-0.007598389	4.41687E-05	0.008695727	1.956538561	0.591289094	1.030387774
47.255	-0.006247127	3.76303E-05	0.007377906	1.660028844	0.591298958	1.030387774
47.26	-0.002028641	1.69059E-05	0.003204311	0.720970002	0.591299998	1.030387774
47.265	0.004160271	-1.37727E-05	-0.002965025	-0.667130543	0.591304373	1.030387774
47.27	0.007673975	-3.12173E-05	-0.00646852	-1.455417067	0.591319257	1.030387774
47.275	0.012150339	-5.35296E-05	-0.010910041	-2.454759218	0.591356569	1.030387774
47.28	0.017796007	-8.19513E-05	-0.016558946	-3.72576277	0.591436611	1.030387774
47.285	0.020322107	-9.47188E-05	-0.019094228	-4.296201378	0.59154099	1.030387774
47.29	0.022967186	-0.000107995	-0.021729039	-4.889033785	0.591674309	1.030387774
47.295	0.027062722	-0.000128637	-0.025822791	-5.810127986	0.591859415	1.030795897
47.3	0.031348259	-0.000150249	-0.030104878	-6.773597539	0.592107787	1.031324242
47.305	0.038574976	-0.0001868	-0.037338248	-8.401105732	0.592483873	1.03180917
47.31	0.044461233	-0.000216817	-0.043270434	-9.735847609	0.592983492	1.032248266
47.315	0.045210523	-0.000220802	-0.044057289	-9.912889999	0.593500092	1.03263958

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
57.13500977	0.001447922	2.267544598
57.14111328	0.001700959	2.711970059
57.1472168	0.001778378	2.866441161
57.15332031	0.001505013	2.4364466
57.15942383	0.001003342	1.62138364
57.16552734	0.000603932	0.970168524
57.17163086	0.001448327	2.335189395
57.17773438	0.002451232	4.022837795
57.18383789	0.002919348	4.886778141
57.18994141	0.002664671	4.501573844
57.19604492	0.001793187	3.004685443
57.20214844	0.001072836	1.767828671
57.20825195	0.001451113	2.383605852
57.21435547	0.002498299	4.176602429
57.22045898	0.003025931	5.181501462
57.2265625	0.002800583	4.844947763
57.23266602	0.002217793	3.809994084
57.23876953	0.001369172	2.323851434
57.24487305	0.000659765	1.113294107
57.25097656	0.00055246	0.938112075
57.25708008	0.000954189	1.638532095
57.26318359	0.001528479	2.632361167
57.26928711	0.001644958	2.82871807
57.27539063	0.001002347	1.716630562
57.28149414	0.000304363	0.51259928
57.28759766	0.000650381	1.073555908
57.29370117	0.000731802	1.199787178
57.29980469	0.001051031	1.726362542
57.3059082	0.001340946	2.202808515
57.31201172	0.000959276	1.565559669
57.31811523	0.000334003	0.534472214
57.32421875	0.000836051	1.304735398
57.33032227	0.001136236	1.759043839
57.33642578	0.0017338	2.70913896
57.3425293	0.001982959	3.118201441
57.34863281	0.001303734	2.047918961
57.35473633	0.000444661	0.695160114
57.36083984	0.000982616	1.523471005
57.36694336	0.002107405	3.264981717
57.37304688	0.003066519	4.802872251
57.37915039	0.003326455	5.249327832
57.38525391	0.00266452	4.219661031
57.39135742	0.00166014	2.653645339
57.39746094	0.001556548	2.501967771
57.40356445	0.002131425	3.410342092
57.40966797	0.002632788	4.192060171
57.41577148	0.002388366	3.805996257
57.421875	0.001857337	2.993252103
57.42797852	0.001300346	2.129031014
57.43408203	0.00046515	0.761091954
57.44018555	0.000402476	0.651275531
57.44628906	0.001185744	1.918918757
57.45239258	0.001554963	2.545072465
57.45849609	0.001507171	2.513254206
57.46459961	0.00176546	2.99278411
57.47070313	0.001628122	2.755470685
57.47680664	0.000885561	1.488787308
57.48291016	0.000441425	0.74529511
57.48901367	0.000771103	1.309514557
57.49511719	0.000894117	1.520240807
57.5012207	0.001068141	1.820428042
57.50732422	0.001714064	2.946215335
57.51342773	0.002151447	3.753429293
57.51953125	0.002287481	4.031772316
57.52563477	0.002053145	3.607765161
57.53173828	0.001449717	2.543377406
57.5378418	0.001085293	1.92964987
57.54394531	0.001263762	2.289240193
57.55004883	0.00146438	2.694689344
57.55615234	0.001570094	2.923152752
57.56225586	0.001684204	3.130685451
57.56835938	0.0014581	2.690130822
57.57446289	0.001172546	2.177535879
57.58056641	0.000942122	1.769581661
57.58666992	0.000694228	1.300759042
57.59277344	0.00092887	1.718241733
57.59887695	0.00154889	2.825681155
57.60498047	0.002212674	3.992550396
57.61108398	0.002400574	4.271919233
57.6171875	0.001844647	3.210290527
57.62329102	0.001270298	2.171040428
57.62939453	0.001098612	1.863161365
57.63549805	0.000971498	1.635611156
57.64160156	0.001285785	2.147406929
57.64770508	0.002182096	3.603940782
57.65380859	0.003129809	5.084309655
57.65991211	0.003496703	5.656364907
57.66601563	0.003243078	5.303290465
57.67211914	0.003001686	4.933256636
57.67822266	0.002979688	4.87798535
57.68432617	0.003069675	4.98088342
57.69042969	0.003435435	5.510893247
57.6965332	0.003888054	6.234819632
57.70263672	0.003631439	5.878283743
57.70874023	0.002852678	4.650030157
57.71484375	0.002580717	4.222010062
57.72094727	0.002574664	4.220478097
57.72705078	0.002491215	4.104047558
57.7331543	0.002639613	4.358474501
57.73925781	0.002784329	4.571495845
57.74536133	0.002270401	3.760298778
57.75146484	0.001516009	2.565356301
57.75756836	0.001212226	2.064204631
57.76367188	0.000694832	1.179139518

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
47.32	0.047736726	-0.000233629	-0.046589642	-10.48266937	0.594076038	1.032982413
47.325	0.05293519	-0.000260159	-0.051813149	-11.65795857	0.594784252	1.033275788
47.33	0.056388121	-0.000277917	-0.055304664	-12.44354933	0.595587873	1.033518128
47.335	0.059392496	-0.000293377	-0.058342635	-13.12709289	0.596479409	1.033708226
47.34	0.062018589	-0.000306931	-0.061004289	-13.72596508	0.597451529	1.033845132
47.345	0.064498963	-0.00031972	-0.063514479	-14.29075778	0.598502961	1.033928052
47.35	0.068032006	-0.000337912	-0.067083008	-15.09367671	0.599672737	1.033956244
47.355	0.069478577	-0.000345543	-0.068579089	-15.43029509	0.600892787	1.033956244
47.36	0.070289176	-0.000349853	-0.069423872	-15.62037113	0.602141472	1.033956244
47.365	0.073318233	-0.000365489	-0.072487726	-16.30973824	0.603500098	1.033956244
47.37	0.0740647	-0.000369602	-0.073289952	-16.49023916	0.60488653	1.033956244
47.375	0.073253671	-0.0003657	-0.072501799	-16.31290471	0.606242764	1.033956244
47.38	0.074642722	-0.000372994	-0.07395752	-16.64044193	0.60765092	1.033956244
47.385	0.074499545	-0.000372566	-0.07385943	-16.61837171	0.609053679	1.033956244
47.39	0.07312049	-0.000365778	-0.072488722	-16.30996243	0.610404987	1.033956244
47.395	0.073401638	-0.000367451	-0.072826752	-16.38601926	0.611766705	1.033956244
47.4	0.071705652	-0.000359126	-0.071146326	-16.0079233	0.613066225	1.033956244
47.405	0.068945092	-0.000345282	-0.068354254	-15.37970723	0.614267611	1.033956244
47.41	0.069024682	-0.000345886	-0.068476787	-15.40727715	0.615471772	1.033956244
47.415	0.067931132	-0.000340638	-0.067418249	-15.169106	0.616638081	1.033956244
47.42	0.064567586	-0.000323798	-0.064026103	-14.40587309	0.617691752	1.033956244
47.425	0.062518713	-0.000313625	-0.061978526	-13.94516841	0.618679614	1.033956244
47.43	0.059043913	-0.000296527	-0.05853989	-13.17147521	0.619560716	1.034010423
47.435	0.05268515	-0.000265128	-0.052232946	-11.7524129	0.620262256	1.034093745
47.44	0.047328228	-0.00023859	-0.046910432	-10.55484729	0.620828386	1.034145779
47.445	0.042460378	-0.00021448	-0.042081047	-9.468235611	0.621284049	1.034164598
47.45	0.036697406	-0.000185844	-0.036352351	-8.179278975	0.621624415	1.034164598
47.455	0.031734278	-0.000161151	-0.031418704	-7.069208431	0.621878942	1.034164598
47.46	0.026210314	-0.000133668	-0.025934223	-5.835200103	0.62205257	1.034164598
47.465	0.017990175	-9.26008E-05	-0.017751837	-3.994163422	0.622134369	1.034164598
47.47	0.007757754	-4.12305E-05	-0.007537507	-1.69593907	0.622149579	1.034164598
47.475	-0.003654333	1.63672E-05	0.003887997	0.874799338	0.622152954	1.034164598
47.48	-0.013000827	6.38637E-05	0.013288777	2.989974849	0.622195673	1.034164598
47.485	-0.016370495	8.12692E-05	0.016729104	3.764048307	0.622263406	1.034164598
47.49	-0.015326535	7.62636E-05	0.015718115	3.536575901	0.622322776	1.034164598
47.495	-0.01232689	6.12444E-05	0.012686963	2.854566564	0.62236118	1.034164598
47.5	-0.009342594	4.61316E-05	0.009639969	2.168992958	0.62238324	1.034164598
47.505	-0.011208324	5.54775E-05	0.011527254	2.593632104	0.622414991	1.034164598
47.51	-0.015857626	7.86365E-05	0.016198519	3.644666868	0.622478547	1.034164598
47.515	-0.014872582	7.39656E-05	0.015254329	3.432224009	0.622534452	1.034164598
47.52	-0.011058537	5.50791E-05	0.011443651	2.574821396	0.62256536	1.034164598
47.525	-0.011684212	5.80982E-05	0.012053973	2.71214396	0.622599864	1.034164598
47.53	-0.014210759	7.06584E-05	0.014589155	3.282559799	0.622650904	1.034164598
47.535	-0.014370679	7.15546E-05	0.014769585	3.323156555	0.622703099	1.034164598
47.54	-0.012305074	6.13644E-05	0.012712097	2.860221864	0.622741368	1.034164598
47.545	-0.011093574	5.5285E-05	0.011485346	2.584202805	0.622772472	1.034164598
47.55	-0.014085372	7.00437E-05	0.014465059	3.25463817	0.622822615	1.034164598
47.555	-0.016623296	8.27303E-05	0.0170178	3.829004916	0.622892456	1.034164598
47.56	-0.014108103	7.03337E-05	0.014514757	3.265820392	0.622942762	1.034164598
47.565	-0.013609672	6.77373E-05	0.01399139	3.148062777	0.622989575	1.034164598
47.57	-0.017681795	8.79855E-05	0.018055971	4.062593415	0.623068594	1.034164598
47.575	-0.019318889	9.62644E-05	0.019691034	4.430482557	0.623162921	1.034164598
47.58	-0.019055195	9.4927E-05	0.019420861	4.369693779	0.623254692	1.034164598
47.585	-0.021377978	0.000106484	0.021708707	4.884459055	0.623370199	1.034164598
47.59	-0.025269028	0.000125958	0.02555089	5.748950277	0.62353158	1.034164598
47.595	-0.028677012	0.000143078	0.028926137	6.508380761	0.623739427	1.034164598
47.6	-0.030448578	0.000152007	0.030685601	6.904260191	0.623973748	1.034164598
47.605	-0.032709724	0.000163307	0.032911462	7.405078883	0.624244162	1.034197319
47.61	-0.038023144	0.000190326	0.038229242	8.601579552	0.624609565	1.034202548
47.615	-0.041970421	0.000210566	0.042209129	9.497054083	0.625054772	1.034202548
47.62	-0.042635965	0.000214063	0.042896341	9.651676669	0.625514212	1.034202548
47.625	-0.045686866	0.000229615	0.045951834	10.33916272	0.626041756	1.034202548
47.63	-0.050231845	0.000252923	0.050527571	11.36870339	0.626679482	1.034202548
47.635	-0.051160508	0.000257871	0.051498281	11.58711318	0.627341006	1.034202548
47.64	-0.050843731	0.000256366	0.051194364	11.51873188	0.627994363	1.034202548
47.645	-0.052591583	0.000265357	0.052966754	11.91751956	0.628693413	1.034202548
47.65	-0.054507131	0.000275278	0.054912115	12.35522597	0.629444314	1.034202548
47.655	-0.054257661	0.00027419	0.054686797	12.30452938	0.630188357	1.034202548
47.66	-0.053011535	0.000267951	0.053426795	12.0210288	0.630898616	1.034300249
47.665	-0.053570786	0.000270878	0.054018133	12.15407986	0.63162394	1.034394698
47.67	-0.054230392	0.000274405	0.054730365	12.31433215	0.632367235	1.03446269
47.675	-0.051922023	0.000262805	0.05238815	11.78733379	0.633048599	1.034504046
47.68	-0.049944934	0.000252783	0.050366416	11.33244368	0.633679061	1.034518091
47.685	-0.050061898	0.000253476	0.050506361	11.36393131	0.634312479	1.034518091
47.69	-0.047543319	0.000240797	0.047950059	10.7887632	0.634883767	1.034518091
47.695	-0.04386685	0.000222558	0.044276734	9.962265066	0.635370117	1.034518091
47.7	-0.044063504	0.000223539	0.044475695	10.00703148	0.635860837	1.034518091
47.705	-0.042883731	0.000217812	0.043321315	9.747295878	0.636325632	1.034518091
47.71	-0.038865441	0.000197858	0.039307946	8.844287876	0.636707403	1.034518091
47.715	-0.038754863	0.000197259	0.039190262	8.817809053	0.637087005	1.034518091
47.72	-0.038997353	0.000198574	0.039455557	8.877500396	0.637471372	1.034518091
47.725	-0.034799302	0.000177751	0.035267933	7.935284878	0.637777439	1.034518091
47.73	-0.032846309	0.000167934	0.033297206	7.491871305	0.638050116	1.034518091
47.735	-0.034074211	0.000174044	0.034531067	7.769490045	0.638343562	1.034518091
47.74	-0.032965565	0.000168581	0.033427866	7.521269903	0.638618223	1.034518091
47.745	-0.031692164	0.000162222	0.032150958	7.233965468	0.638872075	1.034518091
47.75	-0.031876022	0.000163138	0.032335949	7.275588447	0.63912888	1.034518091
47.755	-0.031232388	0.000159946	0.031694172	7.131188679	0.639375419	1.034518091
47.76	-0.031470227	0.000161099	0.031928243	7.183854693	0.639625728	1.034518091
47.765	-0.033086549	0.000169159	0.033555557	7.550000381	0.639902409	1.034518091
47.77	-0.034126345	0.000174383	0.034609964	7.787241929	0.640196753	1.034518091
47.775	-0.035410487	0.000180815	0.03590747	8.07918064	0.640513665	1.034518091
47.78	-0.037304665	0.000190315	0.037822987	8.510172063	0.64086539	1.034518091
47.785	-0.039014541	0.00019894	0.039561046	8.901235357	0.641250096	1.034518091
47.79	-0.040038816	0.000204179	0.040616315	9.138670957	0.641655267	1.034518091
47.795	-0.040164911	0.00020494	0.040769672	9.173176141	0.642062994	1.034518091
47.8	-0.04060893	0.000207278	0.041240464	9.279104295	0.642479785	1.034518091
47.805	-0.040941187	0.000209088	0.041604943	9.361112286	0.642903425	1.034518091
47.81	-0.040638966	0.000207727	0.041329985	9.299246645	0.643320834	1.034518091
47.815	-0.041278617	0.000211075	0.042004853	9.451091986	0.643751485	1.034518091
47.82	-0.040769956	0.000208776	0.041540152	9.346534258	0.644171589	1.034518091
47.825	-0.038238315	0.00019637	0.039035856	8.78306751	0.644541139	1.034518091
47.83	-0.036016805	0.000185505	0.036844256	8.289957557	0.644868998	1.034518091
47.835	-0.031054549	0.000161051	0.031917137	7.181355917	0.645112737	1.034518091

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
57.76977539	0.000254927	0.428485311
57.77587891	0.000865595	1.427687543
57.78198242	0.000939764	1.546173335
57.78808594	0.000770832	1.286735448
57.79418945	0.000488266	0.819295428
57.80029297	0.000598282	0.999661263
57.80639648	0.000629999	1.042509768
57.8125	0.000536199	0.877093954
57.81860352	0.000840976	1.386855706
57.82470703	0.000830749	1.401323608
57.83081055	0.000666537	1.135083071
57.83691406	0.000781303	1.334352649
57.84301758	0.001129995	1.949176491
57.84912109	0.001453237	2.520505176
57.85522461	0.001620812	2.818765459
57.86132813	0.001540223	2.703354091
57.86743164	0.000989638	1.756310417
57.87353516	0.00047312	0.855045998
57.87963867	0.000474535	0.876905732
57.88574219	0.000360089	0.66762234
57.8918457	0.000869622	1.596569394
57.89794922	0.000573053	1.053253271
57.90405273	0.000786714	1.465733487
57.91015625	0.001590681	3.013189841
57.91625977	0.001655662	3.156777214
57.92236328	0.001383511	2.600829511
57.9284668	0.001168112	2.149735347
57.93457031	0.00103825	1.891770096
57.94067383	0.001194025	2.176965334
57.94677734	0.001848777	3.370619039
57.95288086	0.002224277	4.008321372
57.95898438	0.00245764	4.342902066
57.96508789	0.002455651	4.299501773
57.97119141	0.002044259	3.573763889
57.97729492	0.001735201	2.992884059
57.98339844	0.001967566	3.340105859
57.98950195	0.002609449	4.426620376
57.99560547	0.003216291	5.496205519
58.00170898	0.003459225	5.935373465
58.0078125	0.003428931	5.838127891
58.01391602	0.003316066	5.53762571
58.02001953	0.003019633	4.983588806
58.02612305	0.00257486	4.269442388
58.03222656	0.002208333	3.697389358
58.03833008	0.002143493	3.601804288
58.04443359	0.002571333	4.289973275
58.05053711	0.00310473	5.15740623
58.05664063	0.003159023	5.305139083
58.06274414	0.002711954	4.584600236
58.06884766	0.002097992	3.52589333
58.07495117	0.001584971	2.66430824
58.08105469	0.001614594	2.725890891
58.0871582	0.002049676	3.469379074
58.09326172	0.002034634	3.454765009
58.09936523	0.001549616	2.609427544
58.10546875	0.001130215	1.879030451
58.11157227	0.000919324	1.536671973
58.11767578	0.000809858	1.378353615
58.1237793	0.00089466	1.54033789
58.12988281	0.001381914	2.375026273
58.13598633	0.001812749	3.090726911
58.14208984	0.001959298	3.344899499
58.14819336	0.001957715	3.380876472
58.15429688	0.001744167	3.045443322
58.16040039	0.001252183	2.198844638
58.16650391	0.000879675	1.540302879
58.17260742	0.00097958	1.706271729
58.17871094	0.001164418	2.037322953
58.18481445	0.001168742	2.064663018
58.19091797	0.000748268	1.329649307
58.19702148	0.000339307	0.607853197
58.203125	0.000928857	1.697831527
58.20922852	0.001063288	1.992425222
58.21533203	0.000771405	1.458103176
58.22143555	0.000509128	0.954014193
58.22753906	0.000536486	1.002105334
58.23364258	0.00081032	1.537946601
58.23974609	0.001137839	2.203280249
58.24584961	0.001429196	2.768888451
58.25195313	0.001699368	3.238656377
58.25805664	0.002069067	3.863135001
58.26416016	0.002269791	4.152989911
58.27026367	0.002212758	4.009818669
58.27636719	0.002167849	3.931305149
58.2824707	0.002141897	3.868259638
58.28857422	0.001994025	3.58274913
58.29467773	0.001854035	3.338226233
58.30078125	0.001882272	3.373513077
58.30688477	0.002077458	3.673382839
58.31298828	0.002341864	4.125447879
58.3190918	0.002475188	4.388805718
58.32519531	0.002405479	4.285407747
58.33129883	0.002213934	3.957725724
58.33740234	0.002071661	3.695670667
58.34350586	0.002168498	3.813676367
58.34960938	0.002563285	4.448459122
58.35571289	0.002989051	5.194668166
58.36181641	0.002918596	5.129311772
58.36791992	0.002419749	4.287059656
58.37402344	0.001891404	3.340784421
58.38012695	0.001664349	2.914226838
58.38623047	0.001552178	2.711575238
58.39233398	0.001347737	2.381486129
58.3984375	0.00190841	3.439708121

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
47.84	-0.024797371	0.000129866	0.025663902	5.774378059	0.64526815	1.034518091
47.845	-0.023432397	0.000123012	0.024291075	5.465491862	0.645406925	1.034518091
47.85	-0.022694689	0.00011941	0.023569764	5.30319697	0.645537099	1.034518091
47.855	-0.020916817	0.000110556	0.021797387	4.904412096	0.645647676	1.034518091
47.86	-0.022759953	0.000119804	0.023664828	5.324586379	0.6457786	1.034518091
47.865	-0.022588367	0.000119173	0.023537035	5.295832856	0.645907557	1.034518091
47.87	-0.018545824	9.92487E-05	0.019534962	4.395366406	0.645994487	1.034518091
47.875	-0.017511191	9.41709E-05	0.018519377	4.166859742	0.646071988	1.034518091
47.88	-0.016012528	8.69141E-05	0.017068394	3.840388584	0.646136791	1.034518091
47.885	-0.011498619	6.44306E-05	0.012576046	2.829610279	0.646170208	1.034518091
47.89	-0.009088185	5.23935E-05	0.010172888	2.288899689	0.646191083	1.034518091
47.895	-0.007047337	4.22764E-05	0.008154071	1.83466593	0.646203636	1.034518091
47.9	-0.003605054	2.51152E-05	0.004731802	1.064655425	0.64620692	1.034518091
47.905	-0.001076219	1.25122E-05	0.002220215	0.49954833	0.646207213	1.034518091
47.91	0.00287604	-7.22028E-06	-0.001709318	-0.384596622	0.646209304	1.034518091
47.915	0.008276777	-3.43763E-05	-0.007111536	-1.600095508	0.646226618	1.034518091
47.92	0.011251992	-4.94175E-05	-0.010100945	-2.272712719	0.646258617	1.034518091
47.925	0.01268775	-5.66515E-05	-0.011537992	-2.596048144	0.646299303	1.034518091
47.93	0.015409638	-7.0296E-05	-0.014247259	-3.205633351	0.646359318	1.034518091
47.935	0.019955161	-9.3188E-05	-0.018789142	-4.227556989	0.646459961	1.034518091
47.94	0.025171523	-0.00011956	-0.024016068	-5.403615317	0.6466201	1.034518091
47.945	0.029743413	-0.00014275	-0.028607413	-6.436667891	0.646843692	1.034518091
47.95	0.033923983	-0.000164006	-0.032811834	-7.38266258	0.647134556	1.034518091
47.955	0.03750387	-0.000182257	-0.036418992	-8.194273133	0.647490047	1.034518091
47.96	0.040800917	-0.000199066	-0.039738712	-8.941210217	0.647910788	1.034518091
47.965	0.04487208	-0.000219871	-0.043844449	-9.865000949	0.648419684	1.034518091
47.97	0.047132953	-0.000231584	-0.046154427	-10.38474599	0.648981152	1.034518091
47.975	0.047179135	-0.000232007	-0.046237937	-10.40353582	0.649543721	1.034518091
47.98	0.048786642	-0.000240294	-0.04787154	-10.77109642	0.650145279	1.034518091
47.985	0.05012626	-0.000247298	-0.04925184	-11.0816639	0.650780327	1.034518091
47.99	0.049415386	-0.000243864	-0.048558249	-10.92560605	0.651397491	1.034518091
47.995	0.050682316	-0.000250389	-0.049860928	-11.2187088	0.652046706	1.034518091
48	0.052948813	-0.000262076	-0.052162757	-11.73662022	0.652755285	1.034518091
48.005	0.052787347	-0.000261488	-0.052038639	-11.70869376	0.65345955	1.034518091
48.01	0.052157932	-0.000258472	-0.05142946	-11.57162846	0.654147119	1.034518091
48.015	0.051847445	-0.000257067	-0.051145887	-11.50782458	0.654826527	1.034518091
48.02	0.051120364	-0.000253532	-0.050432266	-11.34725992	0.655487013	1.034518091
48.025	0.051122314	-0.000253679	-0.050461897	-11.35392674	0.65614755	1.034518091
48.03	0.051215557	-0.000254321	-0.050591712	-11.38313513	0.656810498	1.034518091
48.035	0.050360602	-0.000250156	-0.049750678	-11.1939026	0.657451498	1.034518091
48.04	0.049431284	-0.000245581	-0.048827675	-10.98622696	0.658069059	1.034518091
48.045	0.049160903	-0.000244344	-0.048578163	-10.93008674	0.658679882	1.034518091
48.05	0.048972916	-0.000243568	-0.048421483	-10.89483357	0.659286043	1.034521241
48.055	0.047079394	-0.000234163	-0.04652488	-10.46809798	0.659846236	1.03464492
48.06	0.04451938	-0.000221308	-0.043934518	-9.885266475	0.660347163	1.034732596
48.065	0.043637789	-0.000216971	-0.043060888	-9.688699739	0.660828447	1.034783005
48.07	0.041128487	-0.000204463	-0.040542864	-9.122144495	0.661255971	1.034795599
48.075	0.035948247	-0.000178827	-0.035387272	-7.962136166	0.661582583	1.034795599
48.08	0.032461495	-0.000161521	-0.031911194	-7.180018664	0.661848908	1.034795599
48.085	0.028978027	-0.000144273	-0.028449592	-6.401158265	0.662061142	1.034795599
48.09	0.02348163	-0.000116906	-0.022963389	-5.166762434	0.6622005	1.034795599
48.095	0.019032198	-9.4651E-05	-0.018507582	-4.164206028	0.662292049	1.034795599
48.1	0.015825236	-7.86013E-05	-0.015297085	-3.441844151	0.662355345	1.034795599
48.105	0.012630213	-6.26019E-05	-0.01209909	-2.72229516	0.662395663	1.034795599
48.11	0.009876784	-4.87765E-05	-0.009337575	-2.100954455	0.662420318	1.034795599
48.115	0.008235295	-4.04755E-05	-0.007680363	-1.728081666	0.662437459	1.034795599
48.12	0.008437339	-4.13995E-05	-0.007868198	-1.770344624	0.662455451	1.034795599
48.125	0.00867298	-4.25566E-05	-0.008101888	-1.822924708	0.662474463	1.034795599
48.13	0.008007275	-3.92042E-05	-0.007426626	-1.670990928	0.662490667	1.034795599
48.135	0.008548359	-4.18755E-05	-0.007966213	-1.792397976	0.662509136	1.034795599
48.14	0.008856009	-4.34469E-05	-0.008283541	-1.86379666	0.662528959	1.034795599
48.145	0.007566554	-3.70315E-05	-0.006993001	-1.573425248	0.662543429	1.034795599
48.15	0.006787523	-3.31418E-05	-0.006216805	-1.398781209	0.662555073	1.034795599
48.155	0.005749713	-2.79855E-05	-0.005188069	-1.167315501	0.662563428	1.034795599
48.16	0.003953742	-1.90125E-05	-0.00339844	-0.764649057	0.662567379	1.034795599
48.165	0.002926503	-1.38672E-05	-0.002372558	-0.533825511	0.662569543	1.034795599
48.17	0.001570597	-7.10118E-06	-0.001023906	-0.230378923	0.662570167	1.034795599
48.175	-0.00021193	1.82554E-06	0.000754804	0.169831005	0.662570178	1.034795599
48.18	-0.001604996	8.82033E-06	0.002148067	0.48331499	0.662570829	1.034795599
48.185	-0.003092623	1.63098E-05	0.003639378	0.818859979	0.662573247	1.034795599
48.19	-0.003273053	1.73023E-05	0.003834788	0.8628273	0.662575954	1.034795599
48.195	-0.00258446	1.39131E-05	0.003150246	0.708805398	0.662577642	1.034795599
48.2	-0.002498987	1.3549E-05	0.003076736	0.692265653	0.662579221	1.034795599
48.205	-0.000111272	1.71982E-06	0.000689031	0.155031959	0.662579224	1.034795599
48.21	0.004049574	-1.89412E-05	-0.003476828	-0.782286242	0.662583369	1.034795599
48.215	0.005608457	-2.67794E-05	-0.005055835	-1.137562917	0.662591318	1.034795599
48.22	0.006325855	-3.0394E-05	-0.005783765	-1.301347168	0.662601432	1.034795599
48.225	0.00837891	-4.06661E-05	-0.007851571	-1.766603375	0.662619176	1.034795599
48.23	0.009027922	-4.40574E-05	-0.008533945	-1.92013763	0.662639775	1.034795599
48.235	0.00729532	-3.5623E-05	-0.006830665	-1.536899649	0.662653227	1.034795599
48.24	0.005365432	-2.61619E-05	-0.004921352	-1.107304151	0.662660503	1.034795599
48.245	0.003602885	-1.75446E-05	-0.003183372	-0.716258783	0.662663783	1.034795599
48.25	0.000107561	-3.36759E-07	0.000284375	0.063984325	0.662663786	1.034795599
48.255	-0.003974677	1.98952E-05	0.004353136	0.979455611	0.662667779	1.034795599
48.26	-0.006567743	3.27574E-05	0.006912695	1.555356405	0.662678681	1.034795599
48.265	-0.009714781	4.83568E-05	0.010015002	2.253375439	0.662702534	1.034795599
48.27	-0.012920541	6.43208E-05	0.013187639	2.967218835	0.662744727	1.034795599
48.275	-0.013795107	6.87041E-05	0.01405836	3.163131015	0.662792825	1.034795599
48.28	-0.015502537	7.71588E-05	0.015737404	3.540915988	0.662853566	1.034795599
48.285	-0.018432824	9.17571E-05	0.01863507	4.192890833	0.662939439	1.034795599
48.29	-0.019137147	9.53401E-05	0.019346004	4.352850889	0.663032001	1.034795599
48.295	-0.018948014	9.44257E-05	0.019161282	4.311288506	0.663122742	1.034795599
48.3	-0.019283213	9.60873E-05	0.019494238	4.386203659	0.663216722	1.034795599
48.305	-0.020542812	0.000102326	0.020731746	4.664642818	0.66332338	1.034795599
48.31	-0.022696383	0.00011307	0.022862262	5.1440089	0.663453574	1.034795599
48.315	-0.021762814	0.000108519	0.021941789	4.936902579	0.663573277	1.034795599
48.32	-0.019962083	9.95001E-05	0.0201212	4.527269907	0.66367399	1.034795599
48.325	-0.022904329	0.000114019	0.023050509	5.186364607	0.66380658	1.034795599
48.33	-0.025498349	0.000126961	0.025615464	5.763479439	0.663970904	1.034795599
48.335	-0.025595247	0.000127449	0.025712045	5.785210167	0.664136479	1.034795599
48.34	-0.028231035	0.00014052	0.028301162	6.367761512	0.664337912	1.034795599
48.345	-0.030104983	0.00014992	0.03016211	6.786474718	0.664566973	1.034795599
48.35	-0.029610197	0.000147489	0.029671101	6.675997679	0.664788568	1.034795599
48.355	-0.031700754	0.000157856	0.031732781	7.139875822	0.665042557	1.034795599

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
58.40454102	0.002304145	4.195777386
58.41064453	0.00202863	3.694467463
58.41674805	0.001470104	2.692528875
58.42285156	0.00121366	2.233783537
58.42895508	0.001610272	2.955516933
58.43505859	0.002307269	4.245631222
58.44116211	0.002512448	4.649014752
58.44726563	0.001882365	3.481665667
58.45336914	0.001018231	1.882314979
58.45947266	0.000683445	1.253821295
58.46557617	0.000845353	1.518845978
58.47167969	0.000760236	1.352994866
58.4777832	0.000548919	0.992973907
58.48388672	0.000682534	1.259508348
58.48999023	0.000601	1.112636406
58.49609375	0.000689705	1.264652259
58.50219727	0.00087155	1.58400096
58.50830078	0.001045504	1.907026412
58.5144043	0.000984941	1.827478158
58.52050781	0.000673221	1.268384533
58.52661133	0.00051413	0.9735387
58.53271484	0.000605584	1.15170022
58.53881836	0.000809767	1.552571372
58.54492188	0.000986975	1.89825308
58.55102539	0.001072301	2.05044674
58.55712891	0.001176894	2.236429053
58.56323242	0.001448187	2.770417167
58.56933594	0.001603248	3.127449507
58.57543945	0.001289185	2.536532685
58.58154297	0.001144703	2.222057514
58.58764648	0.000922107	1.75401661
58.59375	9.58051E-05	0.180205609
58.59985352	0.000632398	1.198232089
58.60595703	0.000804295	1.54711123
58.61206055	0.000623626	1.194461627
58.61816406	0.000831803	1.565128621
58.62426758	0.001680556	3.130648436
58.63037109	0.001777469	3.301749358
58.63647461	0.001336071	2.469012704
58.64257813	0.001154737	2.105774683
58.64868164	0.001232863	2.220423174
58.65478516	0.001240694	2.236262115
58.66088867	0.001242481	2.245928352
58.66699219	0.001394794	2.489425281
58.6730957	0.001524209	2.661691727
58.67919922	0.001313877	2.267406083
58.68530273	0.000848789	1.476132416
58.69140625	0.000267043	0.472005661
58.69750977	0.000393461	0.698071164
58.70361328	0.000732022	1.280349591
58.7097168	0.001437872	2.481744224
58.71582031	0.002335146	4.071502574
58.72192383	0.002502534	4.482736188
58.72802734	0.002100721	3.821636763
58.73413086	0.001775178	3.231605796
58.74023438	0.001678783	3.057382459
58.74633789	0.001618798	2.952342309
58.75244141	0.001596197	2.922209781
58.75854492	0.001746762	3.219195976
58.76464844	0.001944493	3.600190953
58.77075195	0.001770657	3.311748444
58.77685547	0.001187475	2.255813851
58.78295898	0.000530781	1.009906096
58.7890625	0.000126381	0.238163126
58.79516602	0.000489286	0.918843207
58.80126953	0.000652955	1.23049312
58.80737305	0.001192425	2.279079354
58.81347656	0.001470711	2.877604581
58.81958008	0.001226672	2.418613872
58.82568359	0.000877447	1.703842916
58.83178711	0.000959138	1.837655221
58.83789063	0.001425979	2.736376348
58.84399414	0.001633441	3.166188284
58.85009766	0.001260901	2.469113626
58.85620117	0.001029436	2.020994566
58.86230469	0.000996414	1.941835455
58.8684082	0.000973719	1.883970451
58.87451172	0.001509369	2.911104209
58.88061523	0.001828006	3.520520714
58.88671875	0.001524196	2.960033864
58.89282227	0.000761368	1.497254248
58.89892578	0.001066702	2.101228876
58.9050293	0.001613721	3.174784618
58.91113281	0.001506158	2.941030907
58.91723633	0.001258292	2.412087546
58.92333984	0.0007784	1.490147534
58.92944336	0.000430682	0.841285106
58.93554688	0.001145578	2.264875852
58.94165039	0.001084759	2.129747608
58.94775391	0.0011858	2.280629213
58.95385742	0.001338171	2.523816798
58.95996094	0.001414177	2.672728016
58.96606445	0.001344023	2.589832993
58.97216797	0.001224594	2.396494198
58.97827148	0.00155996	3.049896873
58.984375	0.002048381	3.950253357
58.99047852	0.001987751	3.784497949
58.99658203	0.002058753	3.885812247
59.00268555	0.002552487	4.7897895
59.00878906	0.002714033	5.114365439
59.01489258	0.002599517	4.944275988
59.02099609	0.002592961	4.938212569
59.02709961	0.002442778	4.627229149
59.03320313	0.002189985	4.09535872

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
48.36	-0.03383117	0.000168533	0.033844898	7.615102067	0.665331831	1.034795599
48.365	-0.033451534	0.000166724	0.033479494	7.532886047	0.66561465	1.034795599
48.37	-0.033843589	0.000168691	0.033876139	7.6221313	0.665904136	1.034795599
48.375	-0.034679623	0.00017289	0.034706576	7.808979577	0.666208102	1.034795599
48.38	-0.03522945	0.000175661	0.035254654	7.932297119	0.666521783	1.034795599
48.385	-0.036248951	0.000180775	0.03626556	8.159751092	0.666853881	1.034795599
48.39	-0.036558783	0.000182375	0.036581828	8.230911188	0.667191681	1.034795599
48.395	-0.036984695	0.000184523	0.037006492	8.326460768	0.667537397	1.034795599
48.4	-0.038164158	0.000190433	0.038174435	8.58924784	0.667905516	1.034795599
48.405	-0.038819296	0.000193748	0.03882946	8.736628458	0.668286381	1.034795599
48.41	-0.039898035	0.000199156	0.039898002	8.977050376	0.668688708	1.034795599
48.415	-0.041203346	0.00020573	0.041196329	9.269174001	0.66911779	1.034795599
48.42	-0.041643587	0.000208005	0.041645656	9.370272546	0.669556091	1.034795599
48.425	-0.042725154	0.000213456	0.042721779	9.61240021	0.670017454	1.034795599
48.43	-0.043765201	0.000218757	0.043768327	9.847873644	0.670501553	1.034795599
48.435	-0.043121443	0.000215697	0.043150213	9.708797977	0.670971515	1.034795599
48.44	-0.042359387	0.000212009	0.042405395	9.541213896	0.671425013	1.034795599
48.445	-0.041850444	0.000209596	0.041918214	9.431598233	0.671867678	1.034795599
48.45	-0.040176434	0.000201402	0.040264767	9.059572679	0.672275639	1.034795599
48.455	-0.037716225	0.000189259	0.037815892	8.508575609	0.672635167	1.034795599
48.46	-0.03566756	0.00017913	0.035774628	8.049291192	0.672956698	1.034795599
48.465	-0.033396146	0.000167889	0.033510574	7.539879059	0.673238581	1.034795599
48.47	-0.030717162	0.000154566	0.030829182	6.936565849	0.673477053	1.034795599
48.475	-0.029966616	0.000150769	0.030065403	6.764715721	0.673704014	1.034795599
48.48	-0.030664736	0.000154218	0.030762127	6.921478535	0.673941673	1.034795599
48.485	-0.030472698	0.000153262	0.03056894	6.878011575	0.674176365	1.034795599
48.49	-0.031312157	0.000157396	0.03140386	7.065868538	0.674424165	1.034795599
48.495	-0.033105516	0.000166337	0.033208451	7.471901404	0.674701163	1.034795599
48.5	-0.033097016	0.000166354	0.033211677	7.472627277	0.674978019	1.034795599
48.505	-0.03336329	0.00016769	0.033481429	7.533321636	0.675259348	1.034795599
48.51	-0.034236271	0.000172089	0.034368901	7.733002703	0.675555591	1.034795599
48.515	-0.033397169	0.000167996	0.033542092	7.54697071	0.675837491	1.034795599
48.52	-0.032813852	0.000165132	0.032963787	7.416851977	0.67610963	1.034795599
48.525	-0.032158284	0.000161952	0.032321923	7.272432669	0.676371004	1.034795599
48.53	-0.029699521	0.000149792	0.029869	6.720525068	0.676593937	1.034795599
48.535	-0.028009435	0.000141392	0.028179802	6.340455491	0.676792219	1.034795599
48.54	-0.026558862	0.000134213	0.026736886	6.015799273	0.676970496	1.034795599
48.545	-0.024090866	0.000121948	0.024272785	5.461376548	0.67711718	1.034795599
48.55	-0.023063616	0.000116802	0.023239501	5.228887704	0.67725162	1.034795599
48.555	-0.02226344	0.000112836	0.022443351	5.049754002	0.677376894	1.034795599
48.56	-0.020491503	0.000104025	0.020675089	4.651894982	0.677483021	1.034795599
48.565	-0.019781956	0.000100476	0.019963048	4.491685712	0.677581925	1.034795599
48.57	-0.01863889	9.48228E-05	0.018829113	4.236550318	0.677669729	1.034795599
48.575	-0.016176167	8.25799E-05	0.016374548	3.684273233	0.677735863	1.034795599
48.58	-0.014675757	7.5073E-05	0.014870245	3.345805017	0.677790298	1.034795599
48.585	-0.013635124	6.98727E-05	0.013828466	3.111404961	0.677837287	1.034795599
48.59	-0.012151912	6.24611E-05	0.01234418	2.777440586	0.677874609	1.034795599
48.595	-0.011459758	5.89537E-05	0.011641959	2.619440845	0.6779078	1.034795599
48.6	-0.011533462	5.9278E-05	0.011707463	2.634179118	0.67794142	1.034795599
48.605	-0.010932522	5.62758E-05	0.011105885	2.498824207	0.677971628	1.034795599
48.61	-0.009766833	5.04325E-05	0.009936394	2.23568872	0.677995737	1.034795599
48.615	-0.009863544	5.08334E-05	0.010019016	2.254278612	0.678020326	1.034795599
48.62	-0.010572781	5.43176E-05	0.010722693	2.41260592	0.678048579	1.034795599
48.625	-0.01046916	5.37583E-05	0.01060971	2.387184834	0.67807628	1.034795599
48.63	-0.011647529	5.95356E-05	0.011776188	2.649642189	0.678110568	1.034795599
48.635	-0.013796466	7.01923E-05	0.013926472	3.133456311	0.678158675	1.034795599
48.64	-0.014852713	7.54319E-05	0.014983146	3.37120794	0.678214431	1.034795599
48.645	-0.017223194	8.71742E-05	0.017349959	3.903740835	0.678289404	1.034795599
48.65	-0.020489435	0.000103451	0.020627951	4.641289034	0.678395509	1.034795599
48.655	-0.021918758	0.000110635	0.022073782	4.966601053	0.678516933	1.034795599
48.66	-0.02378053	0.000119942	0.023946079	5.387867748	0.678659862	1.034795599
48.665	-0.025793676	0.00013007	0.025982442	5.84604941	0.678828014	1.034795599
48.67	-0.025657085	0.000129531	0.025872787	5.821377146	0.67899439	1.034795599
48.675	-0.02558112	0.000129248	0.02581567	5.808525709	0.679159782	1.034795599
48.68	-0.025628867	0.000129605	0.02588781	5.824757235	0.679325792	1.034795599
48.685	-0.024697794	0.000125093	0.024976536	5.619720599	0.67947996	1.034795599
48.69	-0.024010113	0.000121779	0.024307488	5.469184819	0.679625661	1.034795599
48.695	-0.022536838	0.000114575	0.022853553	5.142049508	0.679754031	1.034795599
48.7	-0.020789414	0.000105965	0.021116944	4.751312371	0.679863266	1.034795599
48.705	-0.020000645	0.000102136	0.020344838	4.577588644	0.679964368	1.034795599
48.71	-0.017510452	8.98821E-05	0.017875412	4.021967802	0.680041863	1.034795599
48.715	-0.014343931	7.41885E-05	0.014715366	3.310957257	0.680093864	1.034795599
48.72	-0.012906612	6.70719E-05	0.013283285	2.988739185	0.680135966	1.034795599
48.725	-0.010967667	5.74956E-05	0.011357159	2.555360824	0.680166368	1.034795599
48.73	-0.008710824	4.6306E-05	0.00911072	2.049912014	0.680185546	1.034795599
48.735	-0.00715168	3.85857E-05	0.007566381	1.70243573	0.680198472	1.034795599
48.74	-0.005014897	2.79902E-05	0.005447821	1.225759615	0.680204829	1.034795599
48.745	-0.003700526	2.14431E-05	0.004139264	0.931334345	0.68020829	1.034795599
48.75	-0.00337426	1.98449E-05	0.003819884	0.859473893	0.680211167	1.034795599
48.755	-0.002103328	1.35728E-05	0.002566777	0.577524933	0.680212285	1.034795599
48.76	-0.001094036	8.5715E-06	0.001567809	0.352757089	0.680212588	1.034795599
48.765	-0.00077905	7.04817E-06	0.001263587	0.284306999	0.680212741	1.034795599
48.77	0.00037829	1.37376E-06	0.000130541	0.029371799	0.680212777	1.034795599
48.775	0.002675131	-9.97261E-06	-0.002134169	-0.480188045	0.680214586	1.034795599
48.78	0.005548013	-2.42325E-05	-0.004978734	-1.120215202	0.680222366	1.034795599
48.785	0.00723859	-3.2668E-05	-0.006660576	-1.498629514	0.680235609	1.034795599
48.79	0.007678741	-3.48575E-05	-0.007097001	-1.596825225	0.680250511	1.034795599
48.795	0.008959693	-4.11935E-05	-0.008359706	-1.880933821	0.6802708	1.034795599
48.8	0.010700482	-4.98363E-05	-0.010081567	-2.268352653	0.680299739	1.034795599
48.805	0.012505939	-5.88047E-05	-0.011867574	-2.670204262	0.680339267	1.034795599
48.81	0.01451589	-6.88183E-05	-0.013860878	-3.118697462	0.680392523	1.034871922
48.815	0.015582446	-7.41522E-05	-0.014922286	-3.357514323	0.680453891	1.035209364
48.82	0.017414937	-8.32572E-05	-0.016733523	-3.765042686	0.680530543	1.03552896
48.825	0.020109639	-9.67161E-05	-0.019409561	-4.367151332	0.680632751	1.035830015
48.83	0.020433042	-9.84259E-05	-0.019747294	-4.443141107	0.680738272	1.036111705
48.835	0.021005173	-0.00010129	-0.020318556	-4.571675196	0.680849786	1.036373739
48.84	0.023357079	-0.000113058	-0.022656712	-5.097760204	0.68098767	1.036615793
48.845	0.022814531	-0.000110512	-0.022138492	-4.981160601	0.681119222	1.036837238
48.85	0.021224697	-0.000102649	-0.020550936	-4.623960573	0.681233079	1.037038114
48.855	0.02226796	-0.000107862	-0.021603856	-4.860867568	0.681358404	1.03721873
48.86	0.022026641	-0.000106779	-0.021385047	-4.81163553	0.681481027	1.037378868
48.865	0.019821906	-9.58745E-05	-0.019184052	-4.316411637	0.681580331	1.037518595
48.87	0.019253365	-9.3042E-05	-0.018612694	-4.187856065	0.68167402	1.037638446
48.875	0.018965109	-9.16433E-05	-0.018330604	-4.124385907	0.681764925	1.037738641

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
59.03930664	0.002117356	3.884253763
59.04541016	0.001909334	3.498102311
59.05151367	0.001260778	2.37287717
59.05761719	0.000592302	1.143680934
59.0637207	0.000742204	1.431029956
59.06982422	0.001216717	2.304594561
59.07592773	0.001625133	3.041214415
59.08203125	0.001834347	3.461130574
59.08813477	0.001708396	3.302624475
59.09423828	0.001092122	2.141640608
59.1003418	0.000262543	0.510271509
59.10644531	0.000628972	1.208134365
59.11254883	0.001351098	2.596030551
59.11865234	0.001913546	3.691792424
59.12475586	0.002007685	3.882379487
59.13085938	0.002035689	3.960858085
59.13696289	0.002143802	4.2135484
59.14306641	0.001742214	3.444183404
59.14916992	0.001260282	2.479229735
59.15527344	0.001556464	3.022244282
59.16137695	0.002440103	4.707148233
59.16748047	0.002929176	5.762738239
59.17358398	0.002813874	5.769663923
59.1796875	0.002570835	5.374364855
59.18579102	0.001948368	4.000132414
59.19189453	0.001045796	2.114071359
59.19799805	0.000497704	1.007588281
59.20410156	0.000495243	1.012975797
59.21020508	0.000688275	1.432046808
59.21630859	0.000569512	1.188967497
59.22241211	0.000948904	1.946274692
59.22851563	0.001322704	2.678160045
59.23461914	0.001202704	2.416244849
59.24072266	0.000841917	1.669382055
59.24682617	0.00032046	0.633209545
59.25292969	0.000727604	1.454316364
59.2590332	0.000831567	1.694066739
59.26513672	0.000451773	0.935315481
59.27124023	0.000166262	0.339826041
59.27734375	0.000926776	1.829784986
59.28344727	0.001427534	2.780662572
59.28955078	0.001143589	2.253821197
59.2956543	0.000559369	1.117227448
59.30175781	0.000519076	1.030694695
59.30786133	0.00114884	2.200491497
59.31396484	0.001246427	2.308920598
59.32006836	0.001122964	2.07592414
59.32617188	0.001146988	2.129344798
59.33227539	0.000893723	1.654839777
59.33837891	0.000604402	1.121037726
59.34448242	0.000925838	1.718327528
59.35058594	0.001206889	2.249967842
59.35668945	0.001193172	2.234672729
59.36279297	0.001145458	2.119184587
59.36889648	0.001249565	2.304899052
59.375	0.001399403	2.644482923
59.38110352	0.001403883	2.704597652
59.38720703	0.001172827	2.252261194
59.39331055	0.001000181	1.890060217
59.39941406	0.001366181	2.540870805
59.40551758	0.001877144	3.515715631
59.41162109	0.002063089	3.968683716
59.41772461	0.002084737	4.062665529
59.42382813	0.002384735	4.610676199
59.42993164	0.002995909	5.72908549
59.43603516	0.003447151	6.541627531
59.44213867	0.003429896	6.513644712
59.44824219	0.003116088	5.975702003
59.4543457	0.002972121	5.744315576
59.46044922	0.003289774	6.365412642
59.46655273	0.003794938	7.327988499
59.47265625	0.003882694	7.461059042
59.47875977	0.003504979	6.672515062
59.48486328	0.003088851	5.837887722
59.4909668	0.002711312	5.176903858
59.49707031	0.0022602	4.414829407
59.50317383	0.001939051	3.826117864
59.50927734	0.001832993	3.587695263
59.51538086	0.001902826	3.668917452
59.52148438	0.002200205	4.185977099
59.52758789	0.002539697	4.832196492
59.53369141	0.002768299	5.343780681
59.53979492	0.002878617	5.612914119
59.54589844	0.002712891	5.268118135
59.55200195	0.00236594	4.543422134
59.55810547	0.002222993	4.217908887
59.56420898	0.002234519	4.220132322
59.5703125	0.00175607	3.345959667
59.57641602	0.001076291	2.076551785
59.58251953	0.001077987	2.092215321
59.58862305	0.000941165	1.821051191
59.59472656	0.0007744	1.477813152
59.60083008	0.001198853	2.261585901
59.60693359	0.001803339	3.400942701
59.61303711	0.001940796	3.656407518
59.61914063	0.001748477	3.305232914
59.62524414	0.00179276	3.440490366
59.63134766	0.001874952	3.596700805
59.63745117	0.001704248	3.186659778
59.64355469	0.00155624	2.852752939
59.6496582	0.001351197	2.478679994
59.65576172	0.001670745	3.112189714
59.66186523	0.002252614	4.295137274
59.66796875	0.002663562	5.121451155

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
48.88	0.017620564	-8.49639E-05	-0.016983793	-3.82135339	0.681843397	1.037819316
48.885	0.017655358	-8.50858E-05	-0.017008956	-3.827015181	0.681922179	1.037880805
48.89	0.018842047	-9.0969E-05	-0.018197025	-4.094330631	0.682011908	1.037923121
48.895	0.019387835	-9.36801E-05	-0.018744321	-4.217472263	0.682106911	1.037945979
48.9	0.020739518	-0.000100368	-0.020093889	-4.521124965	0.682215622	1.037950053
48.905	0.023102843	-0.000112132	-0.022466478	-5.054957619	0.68235052	1.037950053
48.91	0.02429137	-0.000118096	-0.023657286	-5.322889395	0.682499655	1.037950053
48.915	0.025455427	-0.000123911	-0.024811863	-5.582669182	0.682663426	1.037950053
48.92	0.027162577	-0.000132459	-0.026508715	-5.964460789	0.6828499	1.037950053
48.925	0.027627294	-0.000134844	-0.026981975	-6.070944272	0.683042809	1.037950053
48.93	0.029060239	-0.000141997	-0.028401208	-6.390271779	0.683256248	1.037950053
48.935	0.031589342	-0.000154682	-0.030916991	-6.956323002	0.683508455	1.037950053
48.94	0.031231013	-0.000153073	-0.030587439	-6.88217373	0.683754973	1.037950053
48.945	0.030286228	-0.000148458	-0.029655619	-6.672514329	0.683986801	1.037950053
48.95	0.031269587	-0.000153445	-0.030662724	-6.899113001	0.684233928	1.037950053
48.955	0.030531619	-0.000149944	-0.029955637	-6.740018326	0.684469528	1.037950053
48.96	0.028631371	-0.000140601	-0.028069812	-6.3157077	0.684676714	1.037950053
48.965	0.028230028	-0.000138693	-0.027684794	-6.229078683	0.684878132	1.037950053
48.97	0.027004229	-0.000132732	-0.026482395	-5.958538823	0.685062438	1.037950053
48.975	0.024962446	-0.000122663	-0.024452372	-5.501783604	0.685219927	1.037950053
48.98	0.024527404	-0.000120554	-0.024027252	-5.406131636	0.685371975	1.037950053
48.985	0.024151036	-0.000118783	-0.023670463	-5.325854202	0.685519392	1.037950053
48.99	0.022938473	-0.000112841	-0.022473481	-5.056533231	0.685652377	1.037950053
48.995	0.022662798	-0.000111533	-0.022209935	-4.997235405	0.685782186	1.037950053
49	0.022703693	-0.000111837	-0.022271416	-5.011068575	0.685912463	1.037950053
49.005	0.021713799	-0.000107028	-0.021302795	-4.793128853	0.686031628	1.037950053
49.01	0.02078256	-0.000102484	-0.020387907	-4.587279058	0.68614079	1.037950053
49.015	0.020139813	-9.93907E-05	-0.019765195	-4.447168857	0.686243305	1.037950053
49.02	0.018405276	-9.08814E-05	-0.018052952	-4.061914296	0.686328922	1.037950053
49.025	0.016292037	-8.04415E-05	-0.015953315	-3.589495885	0.686396007	1.037950053
49.03	0.015031104	-7.42157E-05	-0.01470178	-3.307900607	0.68645311	1.037950053
49.035	0.013873232	-6.85055E-05	-0.013554251	-3.049706549	0.686501755	1.037950053
49.04	0.013321333	-6.57902E-05	-0.013008717	-2.926961277	0.686546605	1.037950053
49.045	0.013462774	-6.65607E-05	-0.013164363	-2.961981668	0.686592414	1.037950053
49.05	0.01221537	-6.04654E-05	-0.011939103	-2.686298108	0.686630127	1.037950053
49.055	0.010436799	-5.16913E-05	-0.010177276	-2.289887032	0.686657657	1.037950053
49.06	0.009210058	-4.56685E-05	-0.00896838	-2.01788549	0.686679096	1.037950053
49.065	0.006777244	-3.36698E-05	-0.006561083	-1.476243713	0.686690704	1.037950053
49.07	0.004007863	-1.99512E-05	-0.003810529	-0.857369137	0.686694764	1.037950053
49.075	0.001779079	-8.91853E-06	-0.001599847	-0.359965604	0.686695564	1.037950053
49.08	-0.001229068	5.98954E-06	0.001385462	0.311728845	0.686695946	1.037950053
49.085	-0.003791721	1.87204E-05	0.003933077	0.884942421	0.68669958	1.037950053
49.09	-0.006052539	2.99242E-05	0.006173819	1.389109175	0.686708838	1.037950053
49.095	-0.009582172	4.74424E-05	0.009675069	2.176890637	0.686732045	1.037950053
49.1	-0.012524629	6.20864E-05	0.012599662	2.834923987	0.686771691	1.037950053
49.105	-0.015367962	7.62075E-05	0.015417923	3.469032744	0.686831382	1.037950053
49.11	-0.019600466	9.7463E-05	0.019656652	4.422746621	0.68692848	1.037950053
49.115	-0.022907957	0.000114138	0.022979131	5.170304483	0.687061112	1.037950053
49.12	-0.025928004	0.000129343	0.026006458	5.85145314	0.68723102	1.037950053
49.125	-0.030143919	0.000150633	0.030241991	6.804447883	0.687460675	1.037950053
49.13	-0.032940641	0.000164854	0.033068876	7.440497061	0.68773492	1.037950053
49.135	-0.034882188	0.000174743	0.035033695	7.882581404	0.688042448	1.037950053
49.14	-0.037495825	0.000188036	0.037673362	8.476506448	0.688397786	1.037950053
49.145	-0.038697396	0.000194263	0.038909553	8.754649428	0.688776263	1.037950053
49.15	-0.039325814	0.00019757	0.039565834	8.902312589	0.689167132	1.037950053
49.155	-0.040539511	0.000203843	0.040810368	9.182332709	0.6895825	1.037950053
49.16	-0.040283535	0.000202751	0.040587442	9.132174441	0.689992639	1.037950053
49.165	-0.039418196	0.000198548	0.039738648	8.941195812	0.690385346	1.037950053
49.17	-0.039187841	0.000197546	0.039536413	8.895692914	0.690773478	1.037950053
49.175	-0.037774045	0.000190624	0.038139194	8.581318607	0.691134108	1.037950053
49.18	-0.034930817	0.000176477	0.035285759	7.939295751	0.691442494	1.037950053
49.185	-0.03202471	0.000161961	0.032360507	7.281113968	0.6917017	1.037950053
49.19	-0.029596961	0.000149826	0.029916961	6.731316271	0.691923096	1.037950053
49.195	-0.027287351	0.000138285	0.027594618	6.208789004	0.692111287	1.037950053
49.2	-0.024429159	0.000123973	0.024716711	5.561259988	0.692262119	1.037950053
49.205	-0.021416914	0.000108843	0.021676709	4.877259635	0.692378048	1.037950053
49.21	-0.019100483	9.71795E-05	0.019334938	4.350361045	0.692470255	1.037950053
49.215	-0.017443815	8.8827E-05	0.017658776	3.973224581	0.69254716	1.037950053
49.22	-0.016079245	8.19434E-05	0.016277937	3.662535731	0.692612505	1.037950053
49.225	-0.01477409	7.53494E-05	0.014955632	3.365017271	0.692667671	1.037950053
49.23	-0.014063315	7.17242E-05	0.014228834	3.201487759	0.692717658	1.037950053
49.235	-0.014204243	7.23975E-05	0.014364857	3.232092842	0.692768651	1.037950053
49.24	-0.014006796	7.13933E-05	0.014162507	3.18656403	0.692818236	1.037950053
49.245	-0.013738597	7.00086E-05	0.013884944	3.124112419	0.692865941	1.037950053
49.25	-0.014398064	7.32985E-05	0.014549469	3.273630564	0.692918335	1.037950053
49.255	-0.014492703	7.3787E-05	0.014648075	3.295816799	0.692971421	1.037950053
49.26	-0.013785357	7.02105E-05	0.013925712	3.133285235	0.693019451	1.037950053
49.265	-0.01408909	7.16946E-05	0.014225517	3.200741358	0.69306962	1.037950053
49.27	-0.014737608	7.49494E-05	0.014882856	3.348642623	0.693124515	1.037950053
49.275	-0.014713284	7.48281E-05	0.014858335	3.343125279	0.693179229	1.037950053
49.28	-0.014695191	7.47278E-05	0.014838084	3.338568841	0.693233808	1.037950053
49.285	-0.014599017	7.42398E-05	0.014739491	3.316385542	0.693287675	1.037950053
49.29	-0.014525413	7.38605E-05	0.014662872	3.299146273	0.693341	1.037950053
49.295	-0.014593642	7.42129E-05	0.014734074	3.31516669	0.693394827	1.037950053
49.3	-0.013640809	6.94419E-05	0.01377135	3.098553854	0.693441855	1.037950053
49.305	-0.012278365	6.25655E-05	0.012393294	2.788491153	0.693479958	1.037950053
49.31	-0.011888608	6.05683E-05	0.011993137	2.698455883	0.69351568	1.037950053
49.315	-0.011272271	5.74577E-05	0.011369966	2.558242246	0.693547795	1.037950053
49.32	-0.0100509	5.12768E-05	0.010131985	2.279696576	0.693573327	1.037950053
49.325	-0.009641661	4.91541E-05	0.009706914	2.184055638	0.693596822	1.037950053
49.33	-0.009641047	4.9104E-05	0.009696883	2.181798626	0.693620314	1.037950053
49.335	-0.009500225	4.83431E-05	0.00954454	2.147521416	0.693643125	1.037950053
49.34	-0.010009128	5.08451E-05	0.010049933	2.261234865	0.693668445	1.037950053
49.345	-0.010817956	5.48804E-05	0.010864816	2.444583528	0.693698023	1.037950053
49.35	-0.011403835	5.78036E-05	0.011454944	2.577362332	0.693730892	1.037950053
49.355	-0.012134845	6.14632E-05	0.012193591	2.743557891	0.693768109	1.037950053
49.36	-0.012775705	6.46798E-05	0.012842643	2.889594627	0.693809361	1.037950053
49.365	-0.013583041	6.87278E-05	0.01365928	3.073338075	0.693855991	1.037950053
49.37	-0.014882895	7.52779E-05	0.014980197	3.370544345	0.693911974	1.037950053
49.375	-0.01553993	7.86213E-05	0.015654241	3.522204187	0.693973008	1.037950053
49.38	-0.01599648	8.09317E-05	0.016119937	3.626985866	0.694037681	1.037950053
49.385	-0.017429693	8.81687E-05	0.017578252	3.955106755	0.694114463	1.037950053
49.39	-0.018307001	9.26578E-05	0.018482541	4.158571807	0.694199168	1.037950053
49.395	-0.018202003	9.21868E-05	0.018387374	4.137159148	0.694282904	1.037950053

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
59.67407227	0.002831238	5.33125995
59.68017578	0.002477084	4.575807991
59.6862793	0.001846855	3.420892465
59.69238281	0.001608315	3.010958819
59.69848633	0.001895226	3.591278202
59.70458984	0.002352126	4.489130275
59.71069336	0.002718596	5.192622497
59.71679688	0.00283608	5.447769761
59.72290039	0.002632965	5.023640977
59.72900391	0.002251708	4.224259223
59.73510742	0.001779063	3.374522634
59.74121094	0.001149087	2.241731399
59.74731445	0.000785645	1.557155596
59.75341797	0.001220383	2.419273387
59.75952148	0.002131924	4.137737573
59.765625	0.002628847	5.012312526
59.77172852	0.002366051	4.57248785
59.77783203	0.001620194	3.201364439
59.78393555	0.000820677	1.642775303
59.79003906	0.001072078	2.139986255
59.79614258	0.001768385	3.435865262
59.80224609	0.002642938	5.052137091
59.80834961	0.002868285	5.585847447
59.81445313	0.00196387	3.888537106
59.82055664	0.000606751	1.200420248
59.82666016	0.000319816	0.637459024
59.83276367	0.000673823	1.355792223
59.83886719	0.001499953	2.996028827
59.8449707	0.002402301	4.740362934
59.85107422	0.002733891	5.391980272
59.85717773	0.002392637	4.798490364
59.86328125	0.001708689	3.518749057
59.86938477	0.001234302	2.565644545
59.87548828	0.001081286	2.193899261
59.8815918	0.001633007	3.199035129
59.88769531	0.001976617	3.81335437
59.89379883	0.001786762	3.481903023
59.89990234	0.001485828	2.943497718
59.90600586	0.001493436	2.971426867
59.91210938	0.001839812	3.615676898
59.91821289	0.001969964	3.799308882
59.92431641	0.001741673	3.340419829
59.93041992	0.001628683	3.152541827
59.93652344	0.00167005	3.259184095
59.94262695	0.001602594	3.151101018
59.94873047	0.001438777	2.864525532
59.95483398	0.001451127	2.896034932
59.9609375	0.001197168	2.337135623
59.96704102	0.000712178	1.350910259
59.97314453	0.0003618	0.678202721
59.97924805	0.000612055	1.1544682
59.98535156	0.000564118	1.076153496
59.99145508	0.000340869	0.648227314
59.99755859	0.000906737	1.683570993
60.00366211	0.001104995	2.010428051
60.00976563	0.000826615	1.503868713
60.01586914	0.000356677	0.657898908
60.02197266	0.000259214	0.486673298
60.02807617	0.000818169	1.544069764
60.03417969	0.001305832	2.44036044
60.0402832	0.001432654	2.676868265
60.04638672	0.000989941	1.865798558
60.05249023	0.000718448	1.354000408
60.05859375	0.00089186	1.692901531
60.06469727	0.001158512	2.249698745
60.07080078	0.00084745	1.665872986
60.0769043	0.000471067	0.923817783
60.08300781	0.001331534	2.597850157
60.08911133	0.001132542	2.191411384
60.09521484	0.001017033	1.986890158
60.10131836	0.000891471	1.805847666
60.10742188	0.000428258	0.886259745
60.11352539	0.000747596	1.535687204
60.11962891	0.001289294	2.611344968
60.12573242	0.001311768	2.615324705
60.13183594	0.000789167	1.565129831
60.13793945	0.000585731	1.172214776
60.14404297	0.000722476	1.449289912
60.15014648	0.000525589	1.049356977
60.15625	0.001114961	2.206793428
60.16235352	0.001597399	3.102846008
60.16845703	0.001435884	2.753927144
60.17456055	0.001452079	2.778122565
60.18066406	0.001615269	3.081189946
60.18676758	0.001331491	2.551157163
60.19287109	0.000837812	1.608708817
60.19897461	0.001008087	1.902349613
60.20507813	0.001485351	2.759552977
60.21118164	0.001942191	3.589568939
60.21728516	0.001985778	3.650406407
60.22338867	0.001811803	3.365383976
60.22949219	0.001656176	3.149522379
60.2355957	0.001203803	2.298027724
60.24169922	0.000844143	1.5970375
60.24780273	0.001055659	2.002558164
60.25390625	0.00148529	2.847122105
60.26000977	0.001785724	3.479811493
60.26611328	0.001946692	3.877029637
60.2722168	0.001941766	3.888582032
60.27832031	0.001759448	3.462459081
60.28442383	0.001563153	3.027426191
60.29052734	0.001432058	2.761066467
60.29663086	0.001393773	2.677121591
60.30273438	0.001371416	2.62747728

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
49.4	-0.018823623	9.53469E-05	0.019024102	4.280422961	0.694372458	1.037950053
49.405	-0.020073162	0.000101689	0.020301112	4.567750166	0.694474295	1.037950053
49.41	-0.021382577	0.00010836	0.021643775	4.869849465	0.694589852	1.037950053
49.415	-0.022394355	0.000113577	0.022693352	5.106004161	0.694716603	1.037950053
49.42	-0.022030435	0.000111895	0.022353512	5.029540154	0.694839269	1.037950053
49.425	-0.020885285	0.000106255	0.021214556	4.773275089	0.694949513	1.037950053
49.43	-0.01978926	0.000100856	0.020124708	4.528059341	0.695048491	1.037950053
49.435	-0.017986317	9.19033E-05	0.018318573	4.121679033	0.695130254	1.037950053
49.44	-0.015481097	7.93873E-05	0.015795212	3.55392281	0.695190827	1.037950053
49.445	-0.012858458	6.62302E-05	0.013144692	2.957555608	0.695232615	1.037950053
49.45	-0.011457831	5.91587E-05	0.011720964	2.637216921	0.695265796	1.037950053
49.455	-0.012524433	6.45157E-05	0.012802916	2.880656155	0.695305441	1.037950053
49.46	-0.013550875	6.97684E-05	0.013863343	3.119252105	0.695351851	1.037950053
49.465	-0.012578632	6.49768E-05	0.012895562	2.901501358	0.69539184	1.037950053
49.47	-0.011636438	6.02878E-05	0.011948881	2.688498309	0.695426063	1.037950053
49.475	-0.011383859	5.9068E-05	0.011702708	2.633109318	0.695458816	1.037950053
49.48	-0.011475457	5.95826E-05	0.011806796	2.656529153	0.695492099	1.037950053
49.485	-0.012236048	6.34956E-05	0.012597115	2.834350982	0.695529939	1.037950053
49.49	-0.011943837	6.21713E-05	0.012329558	2.774150596	0.695565994	1.037950053
49.495	-0.010001481	5.2528E-05	0.010386501	2.336962782	0.695591276	1.037950053
49.5	-0.008074464	4.29197E-05	0.008458743	1.903217228	0.695607754	1.037950053
49.505	-0.006514772	3.51493E-05	0.006903561	1.55330123	0.695618481	1.037950053
49.51	-0.005290244	2.90714E-05	0.005687528	1.27969374	0.695625554	1.037950053
49.515	-0.003488963	2.01255E-05	0.003898341	0.877126671	0.695628631	1.037950053
49.52	-4.81043E-05	2.90584E-06	0.000456503	0.102713078	0.695628631	1.037950053
49.525	0.002646364	-1.06336E-05	-0.002247779	-0.505750381	0.695630401	1.037950053
49.53	0.003921704	-1.70024E-05	-0.003519268	-0.791835214	0.695634288	1.037950053
49.535	0.006767692	-3.12292E-05	-0.006358179	-1.43059033	0.695645864	1.037950053
49.54	0.010728628	-5.10689E-05	-0.010314025	-2.320655566	0.695674956	1.037950053
49.545	0.014086673	-6.79237E-05	-0.013671946	-3.076187746	0.695725108	1.037950053
49.55	0.017422481	-8.46912E-05	-0.017009957	-3.827240309	0.695801826	1.037950053
49.555	0.01971487	-9.62642E-05	-0.019312403	-4.345290575	0.69590006	1.037950053
49.56	0.020782721	-0.000101662	-0.020385841	-4.586814258	0.696009225	1.037950053
49.565	0.022827508	-0.000111926	-0.022426431	-5.04594701	0.696140927	1.037950053
49.57	0.025485547	-0.000125308	-0.025085424	-5.644220455	0.696305086	1.037950053
49.575	0.027231779	-0.000134146	-0.026840803	-6.039180643	0.696492511	1.037950053
49.58	0.028191854	-0.000139034	-0.027811268	-6.257535229	0.696693385	1.037950053
49.585	0.028874933	-0.000142509	-0.028501072	-6.412741257	0.69690411	1.037950053
49.59	0.030141073	-0.000148894	-0.029768428	-6.697896349	0.697133722	1.037950053
49.595	0.031671245	-0.000156639	-0.031305021	-7.043629807	0.697387238	1.037950053
49.6	0.032027054	-0.000158507	-0.031675258	-7.126932996	0.697646483	1.037950053
49.605	0.032172368	-0.000159276	-0.031827773	-7.161248972	0.697908086	1.037950053
49.61	0.033313568	-0.000165044	-0.03297107	-7.418490783	0.698188576	1.037950053
49.615	0.034104059	-0.000169091	-0.033773009	-7.5989271	0.698482536	1.037950053
49.62	0.034074742	-0.000169014	-0.033757006	-7.595326263	0.698775991	1.037950053
49.625	0.03438569	-0.000170624	-0.034076885	-7.667299037	0.699074826	1.037950053
49.63	0.034961179	-0.00017358	-0.034662445	-7.799050173	0.699383747	1.037950053
49.635	0.034985188	-0.00017378	-0.034700939	-7.80771126	0.699693093	1.037950053
49.64	0.034727103	-0.00017255	-0.034452351	-7.751778963	0.699997892	1.037950053
49.645	0.034779425	-0.000172869	-0.034516879	-7.766297881	0.700303609	1.037950053
49.65	0.034835039	-0.000173214	-0.034586566	-7.781977338	0.700610306	1.037950053
49.655	0.034718801	-0.000172694	-0.034481481	-7.758333263	0.700914959	1.037950053
49.66	0.034774354	-0.000173035	-0.034550381	-7.773835768	0.701220587	1.037950053
49.665	0.034684756	-0.000172656	-0.034473796	-7.756604098	0.701524643	1.037950053
49.67	0.034481917	-0.000171699	-0.034280432	-7.713097163	0.701825153	1.037950053
49.675	0.034691551	-0.000172813	-0.034505535	-7.763745301	0.702129328	1.037950053
49.68	0.034645032	-0.000172663	-0.034475249	-7.756931051	0.702432687	1.037950053
49.685	0.034122816	-0.000170119	-0.033961409	-7.641317072	0.702726971	1.037950053
49.69	0.033794475	-0.000168541	-0.033642783	-7.569626147	0.703015618	1.037950053
49.695	0.033195095	-0.000165611	-0.03305121	-7.436522146	0.703294117	1.037950053
49.7	0.032254787	-0.000160955	-0.032111502	-7.225087927	0.703557062	1.037950053
49.705	0.03140839	-0.000156759	-0.031264742	-7.034566867	0.703806387	1.037950053
49.71	0.030493477	-0.000152198	-0.030344663	-6.827549168	0.704041399	1.037950053
49.715	0.030508335	-0.000152277	-0.030360952	-6.831214145	0.70427664	1.037950053
49.72	0.03121101	-0.000155844	-0.03108135	-6.993303673	0.704522842	1.037950053
49.725	0.030985355	-0.000154764	-0.030863167	-6.944212616	0.704765497	1.037950053
49.73	0.031193161	-0.000155821	-0.031076828	-6.99228629	0.705011418	1.037950053
49.735	0.032264542	-0.000161241	-0.032171072	-7.238491305	0.705274521	1.037950053
49.74	0.03264507	-0.000163211	-0.032568591	-7.327933084	0.705543868	1.037950053
49.745	0.03356187	-0.000167854	-0.033505547	-7.538748021	0.705828555	1.037950053
49.75	0.034785786	-0.000174087	-0.034762809	-7.821631974	0.706134385	1.037950053
49.755	0.03488196	-0.000174666	-0.034877532	-7.847444759	0.706441908	1.037950053
49.76	0.035869789	-0.0001797	-0.035874844	-8.071839851	0.706767095	1.037950053
49.765	0.036994317	-0.0001855	-0.03702333	-8.330249157	0.707112991	1.037950053
49.77	0.035994611	-0.000180662	-0.036046348	-8.110428407	0.707440446	1.037950053
49.775	0.034894181	-0.000175295	-0.034962606	-7.866586387	0.707748184	1.037950053
49.78	0.032850922	-0.000165254	-0.032936556	-7.410725212	0.708020938	1.037950053
49.785	0.027629334	-0.000139499	-0.027745825	-6.242810542	0.708213876	1.037950053
49.79	0.022713725	-0.000115096	-0.02283468	-5.137802955	0.708344268	1.037950053
49.795	0.019869794	-0.000100954	-0.019991613	-4.498112899	0.708444053	1.037950053
49.8	0.017931114	-9.13173E-05	-0.018055483	-4.062483661	0.708525315	1.037950053
49.805	0.017161012	-8.75159E-05	-0.017292026	-3.89070575	0.708599748	1.037950053
49.81	0.015796063	-8.08259E-05	-0.015948777	-3.588474925	0.708662811	1.037950053
49.815	0.012293672	-6.3491E-05	-0.01247038	-2.805835481	0.708701008	1.037950053
49.82	0.008979579	-4.70124E-05	-0.009166635	-2.062492798	0.708721388	1.037950053
49.825	0.007319991	-3.87441E-05	-0.007509961	-1.689741255	0.70873493	1.037950053
49.83	0.006262371	-3.35036E-05	-0.006460299	-1.45356729	0.708744842	1.037950053
49.835	0.004671548	-2.56357E-05	-0.004884883	-1.099098632	0.708750358	1.037950053
49.84	0.002520256	-1.4962E-05	-0.002748628	-0.61844124	0.708751963	1.037950053
49.845	0.000866561	-6.73444E-06	-0.001102677	-0.248102432	0.708752153	1.037950053
49.85	-5.36834E-05	-2.16119E-06	-0.000188069	-0.042315437	0.708752153	1.037950053
49.855	-0.000803521	1.54831E-06	0.000553651	0.124571563	0.708752317	1.037950053
49.86	-0.001691641	5.92964E-06	0.001429539	0.321646234	0.70875304	1.037950053
49.865	-0.003202059	1.34079E-05	0.00292412	0.657926942	0.708755631	1.037950053
49.87	-0.004321375	1.89796E-05	0.004037335	0.908400324	0.708760351	1.037950053
49.875	-0.003918996	1.69605E-05	0.003629473	0.816631495	0.708764233	1.037950053
49.88	-0.004392878	1.92223E-05	0.004085822	0.919309851	0.70876911	1.037950053
49.885	-0.006963509	3.19416E-05	0.006625966	1.490842421	0.708781366	1.037950053
49.89	-0.008603985	4.01091E-05	0.008256297	1.857666873	0.708800076	1.037950053
49.895	-0.008799614	4.10574E-05	0.008445555	1.900249871	0.708819646	1.037950053
49.9	-0.010080663	4.73671E-05	0.009704561	2.183526312	0.70884533	1.037950053
49.905	-0.011793282	5.58671E-05	0.011400042	2.56500936	0.708880481	1.037950053
49.91	-0.012325309	5.85017E-05	0.011925436	2.683223127	0.708918876	1.037950053
49.915	-0.01304076	6.20096E-05	0.012624876	2.840597131	0.708961857	1.037950053

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
60.30883789	0.001167674	2.235864578
60.31494141	0.000964572	1.834101521
60.32104492	0.001013901	1.904634348
60.32714844	0.001272733	2.353189963
60.33325195	0.001277423	2.318326886
60.33935547	0.001076411	1.943634785
60.34545898	0.001015112	1.861806414
60.3515625	0.001009604	1.880572256
60.35766602	0.00084599	1.56251521
60.36376953	0.000633585	1.140531376
60.36987305	0.000357574	0.633581213
60.37597656	0.000169999	0.303929852
60.38208008	0.000272954	0.500908392
60.38818359	0.000246424	0.462116262
60.39428711	0.000152961	0.288893019
60.40039063	0.000151196	0.288279853
60.40649414	0.000384308	0.745464178
60.41259766	0.00048327	0.946439156
60.41870117	0.000140527	0.277243638
60.42480469	0.000701769	1.408738635
60.4309082	0.001432421	2.934599212
60.43701172	0.001792315	3.724382465
60.44311523	0.001543616	3.189677622
60.44921875	0.000922618	1.855991115
60.45532227	0.000934494	1.849765061
60.46142578	0.000893292	1.790684473
60.4675293	0.000535664	1.093963199
60.47363281	0.000524059	1.072448165
60.47973633	0.001382132	2.791919488
60.48583984	0.00146193	2.903026058
60.49194336	0.001505378	2.975057895
60.49804688	0.001589699	3.184032127
60.50415039	0.001205994	2.440564245
60.51025391	0.00082883	1.669001444
60.51635742	0.000733925	1.466131295
60.52246094	0.000966013	1.913054373
60.52856445	0.00130134	2.547782578
60.53466797	0.001890656	3.671820399
60.54077148	0.002186324	4.227804406
60.546875	0.001889712	3.657846493
60.55297852	0.001594101	3.109630655
60.55908203	0.001587786	3.096845869
60.56518555	0.002110367	4.046423466
60.57128906	0.002688373	5.065645943
60.57739258	0.002979205	5.609031852
60.58349609	0.003074152	5.88441556
60.58959961	0.002585684	5.042111236
60.59570313	0.001736913	3.382029574
60.60180664	0.001234143	2.352348248
60.60791016	0.001313168	2.45340607
60.61401367	0.001459316	2.70005994
60.62011719	0.001565379	2.883782603
60.6262207	0.001158132	2.124970155
60.63232422	0.00067335	1.227095434
60.63842773	0.00077719	1.400208331
60.64453125	0.001102698	1.957206544
60.65063477	0.001270177	2.220626625
60.65673828	0.001405868	2.427410472
60.6628418	0.001539677	2.645200711
60.66894531	0.001448878	2.507852979
60.67504883	0.001191187	2.086098332
60.68115234	0.001029768	1.804569866
60.68725586	0.001152048	2.005000167
60.69335938	0.001392609	2.426091305
60.69946289	0.001350817	2.38175359
60.70556641	0.001069431	1.916475046
60.71166992	0.000906932	1.647692177
60.71777344	0.000860205	1.575106449
60.72387695	0.001013891	1.861080099
60.72998047	0.001510563	2.772285324
60.73608398	0.002202172	4.059768116
60.7421875	0.002280294	4.253426892
60.74829102	0.001754424	3.29372132
60.75439453	0.001353083	2.537114293
60.76049805	0.001337929	2.522284847
60.76660156	0.001267512	2.40007306
60.77270508	0.00085226	1.603241067
60.77880859	0.000494049	0.932759207
60.78491211	0.000604386	1.158446346
60.79101563	0.001374564	2.649634468
60.79711914	0.001831638	3.543193321
60.80322266	0.001495984	2.898662737
60.80932617	0.000805925	1.54315027
60.81542969	0.00059931	1.143285448
60.8215332	0.000572966	1.106452266
60.82763672	0.000702817	1.366920108
60.83374023	0.001029881	2.01297399
60.83984375	0.000910551	1.791954135
60.84594727	0.000620778	1.213017468
60.85205078	0.000520113	1.003358755
60.8581543	0.000425359	0.819346667
60.86425781	4.75136E-05	0.091709956
60.87036133	0.000640533	1.235804132
60.87646484	0.00069907	1.348241536
60.88256836	0.000193541	0.371618133
60.88867188	0.000520523	0.993316058
60.89477539	0.000546094	1.035789926
60.90087891	0.0016182	0.303347246
60.90698242	0.000690356	1.284984562
60.91308594	0.000947619	1.773753579
60.91918945	0.000830306	1.559501731
60.92529297	0.000705654	1.316096861
60.93139648	0.000638613	1.176616598
60.9375	0.000495508	0.900707338

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
49.92	-0.014488903	6.91715E-05	0.014052544	3.161822299	0.709014915	1.037950053
49.925	-0.015569871	7.45192E-05	0.015118249	3.401606125	0.709076185	1.037950053
49.93	-0.016887673	8.10289E-05	0.016415198	3.693419603	0.709148265	1.037950053
49.935	-0.018691337	8.99727E-05	0.018196477	4.094207252	0.709236564	1.037950053
49.94	-0.02005888	9.67585E-05	0.019547484	4.398183922	0.709338257	1.037950053
49.945	-0.021680104	0.000104795	0.021146886	4.758049243	0.709457052	1.037950053
49.95	-0.023536346	0.000114022	0.022982781	5.171125779	0.70959706	1.037950053
49.955	-0.024853456	0.000120567	0.024284462	5.464003875	0.709753177	1.037950053
49.96	-0.026956818	0.000131009	0.026360345	5.931077597	0.709936836	1.037950053
49.965	-0.029269749	0.000142543	0.028652241	6.446754121	0.710153364	1.037950053
49.97	-0.03028744	0.000147635	0.029663818	6.674359072	0.710385211	1.037950053
49.975	-0.032144366	0.000156866	0.031496782	7.086775838	0.710646358	1.037950053
49.98	-0.03459697	0.000169113	0.033927702	7.633732887	0.710948877	1.037950053
49.985	-0.035522796	0.000173773	0.03485236	7.841780906	0.711267803	1.037950053
49.99	-0.037409873	0.000183168	0.036715724	8.261037923	0.711621514	1.037950053
49.995	-0.040276546	0.000197502	0.039557587	8.900457184	0.712031511	1.037950053
50	-0.041066382	0.000201536	0.040357026	9.080330822	0.712457745	1.037950053
50.005	-0.042114128	0.000206787	0.04139746	9.314428513	0.712906007	1.037950053
50.01	-0.044577911	0.000219122	0.043840288	9.864064804	0.713408252	1.037950053
50.015	-0.045523928	0.000223951	0.044793381	10.07851082	0.713932039	1.037950053
50.02	-0.04622337	0.000227507	0.045494937	10.23636081	0.714472046	1.037950053
50.025	-0.047962696	0.000236256	0.047220894	10.62470104	0.715053457	1.037950053
50.03	-0.048635314	0.000239733	0.047906604	10.77898594	0.715651289	1.037950053
50.035	-0.049062689	0.000241953	0.04834434	10.87747647	0.716259674	1.037950053
50.04	-0.050403555	0.000248725	0.049679544	11.1778975	0.716901768	1.037950053
50.045	-0.051251253	0.000253075	0.050537024	11.37083044	0.717565641	1.037950053
50.05	-0.051794609	0.000255898	0.051093406	11.49601627	0.718243665	1.037950053
50.055	-0.052745357	0.000260748	0.052049178	11.71106514	0.718946809	1.037950053
50.06	-0.053677294	0.000265518	0.052988989	11.92252247	0.71967502	1.037950053
50.065	-0.054643768	0.000270467	0.053963941	12.14188683	0.72042969	1.037950053
50.07	-0.055582811	0.000275296	0.054914824	12.35583538	0.721210521	1.037950053
50.075	-0.056294009	0.000279002	0.055642185	12.51949157	0.722011461	1.037950053
50.08	-0.056662838	0.000281018	0.056037378	12.60840999	0.722822931	1.037950053
50.085	-0.056399039	0.000279886	0.055808731	12.55696445	0.723626864	1.037950053
50.09	-0.056104114	0.000278578	0.055544528	12.49751871	0.72442241	1.037950053
50.095	-0.056087814	0.000278661	0.05556124	12.50127892	0.725217493	1.037950053
50.1	-0.055747323	0.000277139	0.055253981	12.43214566	0.726002953	1.037950053
50.105	-0.05538177	0.000275488	0.054920426	12.35709588	0.726778146	1.037950053
50.11	-0.055027571	0.00027391	0.054601848	12.28541586	0.727543454	1.037950053
50.115	-0.054042317	0.000269208	0.053652686	12.07185429	0.728281603	1.037950053
50.12	-0.052590831	0.000262186	0.052235885	11.75307419	0.728980633	1.037950053
50.125	-0.05068353	0.000252904	0.050364045	11.33191023	0.72962988	1.037950053
50.13	-0.048287113	0.000241199	0.048004991	10.80112289	0.730219183	1.037950053
50.135	-0.044726509	0.000223722	0.044485794	10.0093037	0.730724781	1.037950053
50.14	-0.039460971	0.000197726	0.039257585	8.832956551	0.731118342	1.037950053
50.145	-0.034168772	0.000171505	0.033991407	7.648066523	0.731413418	1.037950053
50.15	-0.02861109	0.00014392	0.028459052	6.403286629	0.731620311	1.037950053
50.155	-0.021811639	0.000110033	0.021673188	4.876467234	0.731740552	1.037950053
50.16	-0.016194803	8.19291E-05	0.016053685	3.612079103	0.731806839	1.037950053
50.165	-0.011788194	5.98681E-05	0.011647708	2.62073421	0.73184196	1.037950053
50.17	-0.00655394	3.36223E-05	0.006411812	1.442657591	0.731852816	1.037950053
50.175	-0.001960009	1.04957E-05	0.001803354	0.405754583	0.731853787	1.037950053
50.18	0.001177517	-5.33235E-06	-0.001347966	-0.303292265	0.731854137	1.037950053
50.185	0.00374003	-1.82647E-05	-0.003921113	-0.882250436	0.731857673	1.037950053
50.19	0.005581938	-2.75666E-05	-0.005770994	-1.298473666	0.731865548	1.037950053
50.195	0.007517265	-3.73067E-05	-0.00770722	-1.73412451	0.73187983	1.037950053
50.2	0.009964973	-4.9625E-05	-0.010154773	-2.28482383	0.731904927	1.037950053
50.205	0.012280831	-6.12894E-05	-0.012471186	-2.80601684	0.731943045	1.037950053
50.21	0.014964091	-7.48034E-05	-0.015153466	-3.409529784	0.73199964	1.037950053
50.215	0.017587067	-8.80542E-05	-0.017781989	-4.000947447	0.732077814	1.037950053
50.22	0.019160623	-9.60545E-05	-0.019368261	-4.35785872	0.732170603	1.037950053
50.225	0.020067836	-0.000100698	-0.020288725	-4.564963164	0.732272386	1.037950053
50.23	0.020686637	-0.000103875	-0.020918364	-4.706631855	0.732380544	1.037950053
50.235	0.021817708	-0.00010961	-0.022054679	-4.962302732	0.732500852	1.037950053
50.24	0.02334323	-0.000117365	-0.023591065	-5.307989684	0.732638572	1.037950053
50.245	0.023484813	-0.000118202	-0.023754016	-5.344653554	0.732777968	1.037950053
50.25	0.022819979	-0.000114951	-0.023097436	-5.196923003	0.732909583	1.037950053
50.255	0.022516897	-0.000113505	-0.022805445	-5.131225179	0.733037726	1.037950053
50.26	0.021852686	-0.00011025	-0.022148373	-4.983383936	0.733158419	1.037950053
50.265	0.021009856	-0.000106087	-0.021308114	-4.794325647	0.733269983	1.037950053
50.27	0.01962891	-9.92242E-05	-0.019923353	-4.482754385	0.733367363	1.037950053
50.275	0.017599578	-8.90556E-05	-0.017872832	-4.021387309	0.733445648	1.037950053
50.28	0.016945516	-8.57532E-05	-0.017207184	-3.87161636	0.733518223	1.037950053
50.285	0.016604428	-8.40547E-05	-0.016864879	-3.794597873	0.733587905	1.037950053
50.29	0.015680689	-7.93949E-05	-0.015925941	-3.583336831	0.73365005	1.037950053
50.295	0.016482524	-8.33691E-05	-0.016728662	-3.763948995	0.733718713	1.037950053
50.3	0.017878783	-9.03808E-05	-0.018144248	-4.082455781	0.733799502	1.037950053
50.305	0.018720884	-9.46047E-05	-0.01899667	-4.274250846	0.733888081	1.037950053
50.31	0.020590774	-0.000103985	-0.020888875	-4.699996808	0.733995238	1.037950053
50.315	0.022438458	-0.000113295	-0.022765644	-5.122270004	0.734122489	1.037950053
50.32	0.02397683	-0.000121047	-0.024320198	-5.472044564	0.734267787	1.037950053
50.325	0.025958496	-0.000131046	-0.026299851	-5.917466415	0.734438095	1.037950053
50.33	0.027082214	-0.000136757	-0.027430281	-6.171813154	0.734623467	1.037950053
50.335	0.028022947	-0.000141521	-0.028372915	-6.383905769	0.734821941	1.037950053
50.34	0.029437402	-0.000148664	-0.02978605	-6.701861251	0.735040957	1.037950053
50.345	0.030969927	-0.000156384	-0.031313015	-7.04542841	0.73528337	1.037950053
50.35	0.034260969	-0.000172948	-0.034587163	-7.782111655	0.735580041	1.037950053
50.355	0.03726693	-0.000188194	-0.037598796	-8.459729116	0.735931054	1.037950053
50.36	0.037156212	-0.000187783	-0.037510948	-8.439963211	0.736279984	1.037950053
50.365	0.037862288	-0.000191377	-0.038227309	-8.601144596	0.736642302	1.037950053
50.37	0.040594922	-0.000205203	-0.040956623	-9.215240077	0.737058806	1.037950053
50.375	0.041568115	-0.000210258	-0.041954175	-9.439689396	0.73749552	1.037950053
50.38	0.041660743	-0.000210844	-0.042069625	-9.465665519	0.737934182	1.037950053
50.385	0.042817746	-0.000216772	-0.043239207	-9.728821553	0.738397547	1.037950053
50.39	0.043693565	-0.000221331	-0.044138259	-9.931108226	0.738880062	1.037950053
50.395	0.043629264	-0.000221175	-0.044104875	-9.923596804	0.739361158	1.037950053
50.4	0.04319615	-0.00021915	-0.043695952	-9.831589167	0.739832749	1.037950053
50.405	0.04312495	-0.000218939	-0.043653317	-9.821996423	0.740302788	1.037950053
50.41	0.042777494	-0.000217376	-0.043337661	-9.750973681	0.740765282	1.037950053
50.415	0.041101878	-0.000209141	-0.041675174	-9.376914048	0.741192254	1.037950053
50.42	0.039556453	-0.000201524	-0.040138401	-9.031140255	0.741587721	1.037950053
50.425	0.038209874	-0.00019493	-0.038808551	-8.731923948	0.741956722	1.037950053
50.43	0.035742913	-0.000182712	-0.036346007	-8.177851536	0.742279613	1.037950053
50.435	0.033235846	-0.000170262	-0.033838504	-7.613663507	0.742558796	1.037950053

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
60.94360352	0.000972261	1.755471907
60.94970703	0.001477943	2.680112814
60.95581055	0.001707432	3.108714175
60.96191406	0.00157264	2.840022294
60.96801758	0.001194004	2.127507849
60.97412109	0.001030713	1.825301759
60.98022461	0.001197266	2.123984758
60.98632813	0.001282728	2.294216894
60.99243164	0.001154494	2.085514747
60.99853516	0.000977043	1.765629332
61.00463867	0.001044641	1.875828315
61.01074219	0.00129022	2.315433822
61.0168457	0.001112318	2.001079229
61.02294922	0.001193326	2.141316226
61.02905273	0.001581714	2.828320496
61.03515625	0.001620825	2.903153873
61.04125977	0.001664249	2.986066836
61.04736328	0.001843361	3.283580798
61.0534668	0.001873095	3.285663323
61.05957031	0.001728747	3.002903593
61.06567383	0.001644927	2.889444009
61.07177734	0.001861023	3.34856963
61.07788086	0.002000467	3.63101436
61.08398438	0.001655949	2.988669489
61.09008789	0.001525149	2.754518229
61.09619141	0.00151111	2.743657525
61.10229492	0.001340839	2.455677029
61.10839844	0.001131559	2.095522866
61.11450195	0.000997001	1.843991242
61.12060547	0.001305393	2.413447899
61.12670898	0.001668429	3.135677388
61.1328125	0.001740798	3.286947748
61.13891602	0.00178355	3.331506511
61.14501953	0.001979824	3.716884779
61.15112305	0.00212391	4.043265609
61.15722656	0.001996518	3.850027562
61.16333008	0.001495141	2.932826061
61.16943359	0.001119594	2.189282786
61.17553711	0.00107729	2.069842108
61.18164063	0.001414034	2.726508294
61.18774414	0.002023603	3.923833829
61.19384766	0.002335004	4.465570346
61.19995117	0.002335297	4.405404347
61.20605469	0.002413606	4.491542724
61.2121582	0.002238814	4.100277284
61.21826172	0.001846142	3.36158369
61.22436523	0.001690269	3.057539379
61.23046875	0.001843053	3.294484115
61.23657227	0.001897047	3.393648891
61.24267578	0.001521541	2.740923247
61.2487793	0.000830443	1.490937043
61.25488281	0.000579828	1.0334679
61.26098633	0.000473061	0.839668578
61.26708984	0.000286663	0.509891729
61.27319336	0.000599793	1.078658417
61.27929688	0.00052321	0.945856134
61.28540039	0.000374703	0.670836428
61.29150391	0.000252241	0.44618598
61.29760742	0.00048197	0.847186939
61.30371094	0.000986098	1.737890945
61.30981445	0.001185953	2.111858231
61.31591797	0.000961653	1.722654277
61.32202148	0.000709492	1.271164581
61.328125	0.000809524	1.453801131
61.33422852	0.001091132	1.963203616
61.34033203	0.000975196	1.750345227
61.34643555	0.000562342	1.006775815
61.35253906	0.000643948	1.158038257
61.35864258	0.000471607	0.856358272
61.36474609	0.000214954	0.391699542
61.37084961	0.000338511	0.616644539
61.37695313	0.000594372	1.089549348
61.38305664	0.000937741	1.734568039
61.38916016	0.001251785	2.333134379
61.39526367	0.001389876	2.619402442
61.40136719	0.001524052	2.914303802
61.4074707	0.001693431	3.283126908
61.41357422	0.001760449	3.452827672
61.41967773	0.001501519	2.964398486
61.42578125	0.001417517	2.8071064
61.43188477	0.001676605	3.350097431
61.43798828	0.001770914	3.574865898
61.4440918	0.001651421	3.328168993
61.45019531	0.001467937	2.951455593
61.45629883	0.001364378	2.767214976
61.46240234	0.001321398	2.698681347
61.46850586	0.001129214	2.302307711
61.47460938	0.001118387	2.267024926
61.48071289	0.001487361	2.979051216
61.48681641	0.001732808	3.424065646
61.49291992	0.001516247	2.974716503
61.49902344	0.000739425	1.44171797
61.50512695	0.000105697	0.203926682
61.51123047	0.000238549	0.454601139
61.51733398	0.00048864	0.922051968
61.5234375	0.001043621	1.964439411
61.52954102	0.001180555	2.21603389
61.53564453	0.000839263	1.554571434
61.54174805	0.000747263	1.371442306
61.54785156	0.001338755	2.466689643
61.55395508	0.001988507	3.685578963
61.56005859	0.002041063	3.810122407
61.56616211	0.001977822	3.706425017
61.57226563	0.002030446	3.77807269

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
50.44	0.030687371	-0.000157613	-0.031293002	-7.040925559	0.742796806	1.037950053
50.445	0.027390478	-0.000141191	-0.027990649	-6.297896005	0.742986422	1.037950053
50.45	0.024339583	-0.000125985	-0.024935341	-5.610451737	0.74313615	1.037950053
50.455	0.020706088	-0.000107861	-0.021296974	-4.79181916	0.743244511	1.037950053
50.46	0.016297858	-8.59393E-05	-0.016900774	-3.80267412	0.743311644	1.037950053
50.465	0.012844685	-6.87354E-05	-0.013454016	-3.027153553	0.743353343	1.037950053
50.47	0.009539703	-5.22634E-05	-0.010156614	-2.285238151	0.743376344	1.037950053
50.475	0.006978576	-3.945E-05	-0.007593414	-1.708518219	0.743388652	1.037950053
50.48	0.006529777	-3.72019E-05	-0.007143875	-1.607371805	0.743399429	1.037950053
50.485	0.005199488	-3.06384E-05	-0.005831644	-1.312119948	0.743406261	1.037950053
50.49	0.001911197	-1.42731E-05	-0.00256155	-0.57634875	0.743407185	1.037950053
50.495	-0.001041749	4.82042E-07	0.000384663	0.086549132	0.743407459	1.037950053
50.5	-0.003081858	1.07022E-05	0.002424189	0.545442595	0.743409859	1.037950053
50.505	-0.004158241	1.6102E-05	0.003501364	0.787806841	0.743414229	1.037950053
50.51	-0.005887535	2.47127E-05	0.00521855	1.174173787	0.74342299	1.037950053
50.515	-0.009303575	4.17891E-05	0.008621984	1.939946359	0.743444867	1.037950053
50.52	-0.010834626	4.95395E-05	0.010165843	2.28731468	0.743474536	1.037950053
50.525	-0.010765053	4.92293E-05	0.010103172	2.273213808	0.743503825	1.037950053
50.53	-0.012953045	6.01509E-05	0.012278715	2.762710887	0.74354623	1.037950053
50.535	-0.015095347	7.09308E-05	0.014424109	3.245424544	0.743603822	1.037950053
50.54	-0.015384109	7.24417E-05	0.014724711	3.313059932	0.743663639	1.037950053
50.545	-0.016855768	7.98007E-05	0.01618862	3.642439555	0.743735447	1.037950053
50.55	-0.019368546	9.24011E-05	0.018694044	4.206159922	0.74383026	1.037950053
50.555	-0.020981639	0.000100546	0.020312734	4.570365064	0.743941524	1.037950053
50.56	-0.022128555	0.000106346	0.02146523	4.829676764	0.744065285	1.037950053
50.565	-0.023747013	0.000114485	0.023081731	5.193389538	0.744207811	1.037950053
50.57	-0.026044653	0.000126038	0.02537557	5.709503169	0.744379251	1.037950053
50.575	-0.027508012	0.000133472	0.026850883	6.041448573	0.744570498	1.037950053
50.58	-0.027855343	0.000135304	0.027214445	6.12325009	0.744766605	1.037950053
50.585	-0.029419163	0.000143179	0.028776617	6.474738918	0.744985349	1.037950053
50.59	-0.031204274	0.000152216	0.030568788	6.877977266	0.745231445	1.037950053
50.595	-0.031460049	0.000153616	0.030846287	6.940414599	0.745481591	1.037950053
50.6	-0.032681964	0.000159794	0.032071032	7.215982189	0.745751547	1.037950053
50.605	-0.034764538	0.000170332	0.034159328	7.685848705	0.746057003	1.037950053
50.61	-0.034885319	0.000171116	0.034310937	7.719960815	0.746364585	1.037950053
50.615	-0.034534502	0.000169492	0.033983004	7.646175881	0.746666012	1.037950053
50.62	-0.035226533	0.000173084	0.034704474	7.808506598	0.746979641	1.037950053
50.625	-0.0350122	0.000172194	0.034522296	7.767516656	0.747289465	1.037950053
50.63	-0.033800393	0.000166301	0.033332204	7.499745949	0.747578213	1.037950053
50.635	-0.033113323	0.000163014	0.032668725	7.350463056	0.747855342	1.037950053
50.64	-0.031870794	0.000156991	0.031453183	7.076966227	0.748112063	1.037950053
50.645	-0.029121396	0.000143422	0.028716802	6.461280511	0.748326402	1.037950053
50.65	-0.026975939	0.000132812	0.026578785	5.980226582	0.748510322	1.037950053
50.655	-0.025453213	0.000125339	0.025073591	5.641558064	0.748674064	1.037950053
50.66	-0.022532174	0.000110895	0.022166347	4.987427995	0.74880238	1.037950053
50.665	-0.019527836	9.59817E-05	0.019166986	4.312571848	0.74889876	1.037950053
50.67	-0.017110294	8.40004E-05	0.016759104	3.77079839	0.748972753	1.037950053
50.675	-0.013840782	6.77613E-05	0.01349797	3.037043303	0.74902117	1.037950053
50.68	-0.010936728	5.32981E-05	0.010595777	2.384049929	0.749051401	1.037950053
50.685	-0.008643007	4.18924E-05	0.008308614	1.869438063	0.749070281	1.037950053
50.69	-0.005619876	2.68367E-05	0.005291508	1.190589259	0.749078263	1.037950053
50.695	-0.003251337	1.50028E-05	0.002921588	0.657357321	0.749080935	1.037950053
50.7	-0.001579154	6.66042E-06	0.001251736	0.281640564	0.749081565	1.037950053
50.705	0.000594817	-4.19453E-06	-0.00092005	-0.207011285	0.749081655	1.037950053
50.71	0.001915073	-1.08247E-05	-0.002246022	-0.50535484	0.749082581	1.037950053
50.715	0.002388221	-1.32066E-05	-0.002722263	-0.612509127	0.749084023	1.037950053
50.72	0.002927177	-1.59092E-05	-0.003262574	-0.734079045	0.749086189	1.037950053
50.725	0.002781096	-1.5194E-05	-0.003117737	-0.70149084	0.749088143	1.037950053
50.73	0.002376031	-1.31546E-05	-0.002705814	-0.608808141	0.74908957	1.037950053
50.735	0.002137048	-1.19292E-05	-0.002458351	-0.553128954	0.749090725	1.037950053
50.74	0.001792862	-1.01566E-05	-0.002100401	-0.472590171	0.749091537	1.037950053
50.745	0.002208119	-1.21493E-05	-0.00250293	-0.563159208	0.749092769	1.037950053
50.75	0.00315145	-1.67911E-05	-0.003438879	-0.77374767	0.749095279	1.037950053
50.755	0.003932572	-2.0624E-05	-0.004205	-0.946124994	0.749099188	1.037950053
50.76	0.005102272	-2.63853E-05	-0.005356332	-1.205174706	0.749105768	1.037950053
50.765	0.006715743	-3.43667E-05	-0.00695082	-1.563934519	0.749117167	1.037950053
50.77	0.008775143	-4.45845E-05	-0.008991185	-2.023016632	0.749136628	1.037950053
50.775	0.010969214	-5.55031E-05	-0.011170441	-2.513349213	0.749167039	1.037950053
50.78	0.012717313	-6.42073E-05	-0.012906958	-2.904065662	0.749207915	1.037950053
50.785	0.014726748	-7.42158E-05	-0.014902804	-3.353130957	0.749262729	1.037950053
50.79	0.016677823	-8.39592E-05	-0.016844914	-3.790105588	0.749333029	1.037950053
50.795	0.018261582	-9.18652E-05	-0.018420178	-4.14453994	0.749417314	1.037950053
50.8	0.020584203	-0.000103472	-0.020731782	-4.664650994	0.749524403	1.037950053
50.805	0.022069583	-0.000110955	-0.022221496	-4.999836581	0.749647505	1.037950053
50.81	0.022149161	-0.000111388	-0.022307709	-5.019234617	0.749771496	1.037950053
50.815	0.023417945	-0.000117724	-0.023568493	-5.302910992	0.749910099	1.037950053
50.82	0.024706283	-0.000124205	-0.024857993	-5.593048351	0.750064372	1.037950053
50.825	0.024957971	-0.00012549	-0.025113526	-5.650543452	0.750221805	1.037950053
50.83	0.02641538	-0.000132768	-0.026561017	-5.97622886	0.750398161	1.037950053
50.835	0.027881342	-0.000140136	-0.028025997	-6.305849365	0.750594634	1.037950053
50.84	0.028647354	-0.000143991	-0.02879219	-6.478242804	0.750802051	1.037950053
50.845	0.030683982	-0.000154183	-0.030817322	-6.933897383	0.751040009	1.037950053
50.85	0.032409088	-0.000162877	-0.032544283	-7.322463718	0.751305475	1.037950053
50.855	0.033191096	-0.000166851	-0.033333419	-7.500019293	0.751583907	1.037950053
50.86	0.03464218	-0.000174159	-0.034784246	-7.826455376	0.751887217	1.037950053
50.865	0.035581287	-0.000178935	-0.035732161	-8.039736226	0.752207194	1.037950053
50.87	0.0365549	-0.00018385	-0.036707427	-8.259170992	0.752544922	1.037950053
50.875	0.038800877	-0.000195138	-0.038946512	-8.762965269	0.752925426	1.037950053
50.88	0.040216056	-0.000202327	-0.040371839	-9.083663792	0.753334192	1.037950053
50.885	0.041277815	-0.000207723	-0.041441526	-9.32434337	0.753764827	1.037950053
50.89	0.043304591	-0.000217954	-0.043468898	-9.780502121	0.754238789	1.037950053
50.895	0.044593856	-0.00022454	-0.044771072	-10.07349111	0.754741393	1.037950053
50.9	0.045800537	-0.000230691	-0.045983821	-10.34635971	0.755271566	1.038000612
50.905	0.047858159	-0.000241118	-0.048038975	-10.80876946	0.755850445	1.038234115
50.91	0.04902407	-0.000247139	-0.049225338	-11.07570111	0.756457873	1.038434781
50.915	0.049625052	-0.000250332	-0.049854226	-11.21720093	0.757080284	1.038602321
50.92	0.050224325	-0.000253534	-0.050484979	-11.3591202	0.75771782	1.038736423
50.925	0.049716507	-0.000251223	-0.050018076	-11.25406704	0.758342528	1.038836861
50.93	0.048837471	-0.000247027	-0.049170732	-11.06341472	0.75894534	1.038903282
50.935	0.048207686	-0.000244074	-0.048574659	-10.9292983	0.759532706	1.038935366
50.94	0.04694341	-0.000237959	-0.047340611	-10.65163749	0.760089667	1.038938485
50.945	0.04554986	-0.000231164	-0.04596986	-10.3432185	0.760614052	1.038938485
50.95	0.045245642	-0.000229799	-0.045694489	-10.2812601	0.761131456	1.038938485
50.955	0.045193316	-0.000229754	-0.045685349	-10.27920359	0.761647663	1.038938485

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
61.57836914	0.001714895	3.184204174
61.58447266	0.001281484	2.388418807
61.59057617	0.001203145	2.225877311
61.59667969	0.001241205	2.275604093
61.6027832	0.001124479	2.058631868
61.60888672	0.001202199	2.193906284
61.61499023	0.001548729	2.810911566
61.62109375	0.001365626	2.46196982
61.62719727	0.000924633	1.649040517
61.63330078	0.00078028	1.382543771
61.6394043	0.000740304	1.313278349
61.64550781	0.00073152	1.294306353
61.65161133	0.000694232	1.219111879
61.65771484	0.000425359	0.744394027
61.66381836	0.000216033	0.377644448
61.66992188	3.81984E-05	0.066788702
61.67602539	0.000665715	1.169724002
61.68212891	0.000903436	1.594843311
61.68823242	0.000517624	0.916967453
61.69433594	0.000360936	0.643727525
61.70043945	0.000423054	0.760395339
61.70654297	0.000885139	1.601218433
61.71264648	0.001184294	2.152972696
61.71875	0.001043105	1.910503749
61.72485352	0.000711942	1.323243262
61.73095703	0.000693745	1.30696754
61.73706055	0.000893458	1.698688328
61.74316406	0.000921432	1.776488938
61.74926758	0.000887175	1.737436606
61.75537109	0.000938471	1.862050779
61.76147461	0.000876038	1.764195092
61.76757813	0.000512357	1.04331242
61.77368164	0.000381082	0.77734672
61.77978516	0.000920224	1.874573599
61.78588867	0.001225096	2.49615875
61.79199219	0.001010183	2.063993767
61.7980957	0.000644848	1.323102711
61.80419922	0.000537274	1.104768566
61.81030273	0.000701408	1.442274427
61.81640625	0.000749231	1.540200069
61.82250977	0.000613064	1.259848016
61.82861328	0.000879063	1.802630765
61.8347168	0.00134818	2.750743878
61.84082031	0.00170685	3.472987692
61.84692383	0.001758033	3.587061598
61.85302734	0.001617586	3.2992299
61.85913086	0.001414711	2.860619003
61.86523438	0.001202528	2.397764791
61.87133789	0.000980208	1.920752166
61.87744141	0.000762915	1.476566897
61.88354492	0.000702097	1.353609604
61.88964844	0.000633983	1.215622765
61.89575195	0.000811751	1.545339645
61.90185547	0.001174691	2.223270869
61.90795898	0.001419983	2.653750304
61.9140625	0.001640125	3.018332527
61.92016602	0.001588375	2.906642601
61.92626953	0.001269752	2.324134636
61.93237305	0.000746665	1.36525393
61.93847656	0.000704026	1.288943546
61.94458008	0.001276998	2.33881091
61.95068359	0.001363061	2.467032687
61.95678711	0.000971112	1.732267645
61.96289063	0.000736571	1.313960869
61.96899414	0.000564481	1.011788826
61.97509766	0.000499499	0.894552178
61.98120117	0.000729197	1.31287353
61.98730469	0.000724482	1.31819315
61.9934082	0.000808581	1.480947781
61.99951172	0.000942385	1.743358565
62.00561523	0.000859508	1.611350154
62.01171875	0.000670472	1.269303824
62.01782227	0.000516042	0.98689267
62.02392578	0.000373313	0.718025713
62.0300293	0.000247123	0.474431183
62.03613281	0.000187645	0.361547996
62.04223633	0.000385252	0.750720481
62.04833984	0.000332711	0.654833548
62.05444336	0.000516912	1.019145219
62.06054688	0.000768173	1.5043027
62.06665039	0.000862905	1.687906561
62.07275391	0.000921679	1.80924604
62.07885742	0.00075759	1.481628597
62.08496094	0.000541242	1.065615413
62.09106445	0.00072026	1.446469335
62.09716797	0.000431414	0.876538314
62.10327148	0.000256973	0.528193431
62.109375	0.000496592	1.032871868
62.11547852	0.000290217	0.604771894
62.12158203	0.000733587	1.544875266
62.12768555	0.000822097	1.761847619
62.13378906	0.00074278	1.613023745
62.13989258	0.001117401	2.468556989
62.14599609	0.001641339	3.636351428
62.15209961	0.001791927	3.923027675
62.15820313	0.001437056	3.160816712
62.16430664	0.000961391	2.124054193
62.17041016	0.000852213	1.865713179
62.17651367	0.001129894	2.483593317
62.18261719	0.001628262	3.595807767
62.1887207	0.002124591	4.627313798
62.19482422	0.0021228	4.570740595
62.20092773	0.001439776	3.068922349
62.20703125	0.000881794	1.845154475

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
50.96	0.043194964	-0.000220045	-0.043728104	-9.838823391	0.762119229	1.039024037
50.965	0.039298054	-0.000200866	-0.03986486	-8.96959341	0.762509546	1.039195575
50.97	0.035401106	-0.000181679	-0.036004478	-8.101007582	0.762826291	1.039323909
50.975	0.031277048	-0.000161335	-0.031915524	-7.180992983	0.763073536	1.039407573
50.98	0.026728023	-0.000138801	-0.027391547	-6.163098122	0.763254091	1.039445219
50.985	0.022555943	-0.000118107	-0.023241632	-5.229367234	0.763382678	1.039446384
50.99	0.017810215	-9.45334E-05	-0.018519351	-4.166853992	0.763462849	1.039446384
50.995	0.012446788	-6.78106E-05	-0.013172801	-2.963880295	0.763502004	1.039446384
51	0.006933342	-4.02875E-05	-0.007673205	-1.726471135	0.763514154	1.039446384
51.005	0.000187022	-6.51098E-06	-0.000933686	-0.210079398	0.763514163	1.039446384
51.01	-0.006477777	2.701E-05	0.005744633	1.292542515	0.763524768	1.039446384
51.015	-0.01113538	5.05373E-05	0.010425945	2.345837649	0.763556107	1.039446384
51.02	-0.014397276	6.70558E-05	0.013709791	3.08470297	0.763608496	1.039446384
51.025	-0.016115353	7.58056E-05	0.015448279	3.475862726	0.763674134	1.039446384
51.03	-0.016917547	7.98833E-05	0.016258244	3.658104877	0.763746469	1.039446384
51.035	-0.019175099	9.12291E-05	0.018511138	4.1650061	0.763839398	1.039446384
51.04	-0.022765928	0.000109314	0.0221	4.97250005	0.763970391	1.039446384
51.045	-0.026253225	0.000126936	0.025594103	5.758673267	0.764144588	1.039446384
51.05	-0.02854733	0.000138601	0.027905837	6.278813395	0.764350559	1.039446384
51.055	-0.029138432	0.00014168	0.028515724	6.41603792	0.764565149	1.039465276
51.06	-0.030291909	0.00014752	0.029672421	6.67629462	0.764797064	1.039821858
51.065	-0.033109478	0.000161761	0.032491957	7.310690357	0.765074128	1.040154424
51.07	-0.03498879	0.000171358	0.034391055	7.737987463	0.765383538	1.040462082
51.075	-0.035236425	0.000172738	0.034663923	7.799382639	0.765697342	1.040744171
51.08	-0.035412718	0.000173722	0.034858592	7.843183181	0.766014295	1.041000478
51.085	-0.036046361	0.000177001	0.035507349	7.989153485	0.766342692	1.041230869
51.09	-0.036878639	0.000181305	0.036358487	8.180659513	0.766686428	1.041435098
51.095	-0.036732234	0.000180714	0.036236173	8.15313884	0.767027441	1.041612905
51.1	-0.035396092	0.000174109	0.034902202	7.852995392	0.767344096	1.041764319
51.105	-0.034615974	0.000170258	0.034124862	7.678093949	0.767646947	1.041889682
51.11	-0.034419489	0.000169364	0.033944496	7.637511635	0.76794637	1.041989236
51.115	-0.033236247	0.000163528	0.032766973	7.372568875	0.76822556	1.042063107
51.12	-0.031068782	0.000152701	0.030583592	6.881308173	0.768469523	1.042111688
51.125	-0.029765401	0.000146163	0.029265784	6.584801338	0.768693447	1.042135628
51.13	-0.029819981	0.000146476	0.029328995	6.599023833	0.768918192	1.042138509
51.135	-0.028913695	0.000141993	0.028425678	6.395777538	0.769129484	1.042138509
51.14	-0.027336046	0.000134073	0.026830319	6.036821809	0.769318347	1.042138509
51.145	-0.027738474	0.00013608	0.027236029	6.128106511	0.769512812	1.042138509
51.15	-0.028548745	0.000140201	0.028068313	6.315370353	0.769718804	1.042138509
51.155	-0.028212836	0.000138547	0.027734138	6.240180976	0.769919977	1.042138509
51.16	-0.028929973	0.000142149	0.028461564	6.403851881	0.770131507	1.042163951
51.165	-0.030527723	0.000150218	0.03008995	6.77023867	0.770367047	1.042486035
51.17	-0.031568903	0.000155504	0.031156204	7.010145927	0.770618927	1.042764622
51.175	-0.032885405	0.000162163	0.032498991	7.312272976	0.770892254	1.042999128
51.18	-0.034616848	0.000170924	0.034264913	7.709605365	0.771195121	1.043189224
51.185	-0.036390839	0.000179918	0.03607664	8.117244015	0.771529824	1.043334891
51.19	-0.038078089	0.000188503	0.037781806	8.500906455	0.771896284	1.043436335
51.195	-0.039140797	0.000193963	0.038861139	8.743756232	0.772283484	1.043594775
51.2	-0.039915309	0.000197976	0.039654158	8.922185466	0.772686159	1.044076882
51.205	-0.040063492	0.000198854	0.039826418	8.960943995	0.773091829	1.044496814
51.21	-0.039253286	0.000194882	0.039024022	8.780404918	0.773481258	1.044867345
51.215	-0.039318212	0.000195259	0.039100389	8.79758743	0.773871976	1.045187148
51.22	-0.040804877	0.000202807	0.040608962	9.137016374	0.7742928	1.045455328
51.225	-0.042726236	0.000212591	0.042541662	9.57187397	0.774754186	1.045671587
51.23	-0.044265834	0.000220522	0.044107846	9.924265339	0.775249424	1.045835986
51.235	-0.043322426	0.000216011	0.043196721	9.719262146	0.775723776	1.045948611
51.24	-0.040631519	0.000202625	0.040494805	9.111331194	0.776141032	1.046009071
51.245	-0.040155328	0.00020031	0.040028044	9.006309827	0.776548564	1.046019526
51.25	-0.040709289	0.000203276	0.040627191	9.141117997	0.776967419	1.046019526
51.255	-0.038455855	0.000192168	0.038386057	8.63686293	0.777341186	1.046019526
51.26	-0.035422776	0.000177058	0.03534108	7.951742894	0.777658318	1.046305865
51.265	-0.033583812	0.000167967	0.033510582	7.539881038	0.777943378	1.04686469
51.27	-0.029765569	0.000149114	0.029717163	6.686361636	0.778167304	1.047363056
51.275	-0.023357167	0.000117341	0.023332946	5.249912884	0.778305189	1.047798557
51.28	-0.017865286	8.9975E-05	0.017842664	4.014599501	0.778385856	1.048168329
51.285	-0.014123632	7.12949E-05	0.014099337	3.172350724	0.778436272	1.048469911
51.29	-0.011204722	5.67204E-05	0.011181115	2.515750785	0.778468002	1.04870155
51.295	-0.009062201	4.60452E-05	0.009044964	2.035116985	0.778488758	1.048862018
51.3	-0.00574581	2.95469E-05	0.005745701	1.292782794	0.778497102	1.048950475
51.305	-0.001234017	6.92169E-06	0.001225401	0.275715 18	0.778497487	1.048967423
51.31	0.000135165	-3.9188E-08	-0.000164359	-0.036980816	0.778497492	1.048967423
51.315	6.18959E-05	3.47772E-07	-8.61953E-05	-0.019393947	0.778497493	1.048967423
51.32	0.003378653	-1.62395E-05	-0.003397069	-0.764340447	0.778500378	1.048967423
51.325	0.005538968	-2.71759E-05	-0.005578023	-1.255055128	0.778508132	1.048967423
51.33	0.004176125	-2.03727E-05	-0.004204077	-0.945917304	0.77851254	1.048967423
51.335	0.005534845	-2.71038E-05	-0.005563474	-1.251781659	0.778520283	1.048995868
51.34	0.008474472	-4.18685E-05	-0.008506366	-1.913932448	0.778538434	1.049385284
51.345	0.008828036	-4.36832E-05	-0.008867525	-1.995193085	0.778558131	1.049698755
51.35	0.010260287	-5.0828E-05	-0.010291088	-2.315494754	0.778584738	1.049935576
51.355	0.01311597	-6.51746E-05	-0.013147447	-2.958175647	0.778628216	1.050095047
51.36	0.014322091	-7.12828E-05	-0.014363002	-3.231675368	0.778680059	1.050176363
51.365	0.015832364	-7.88777E-05	-0.015873968	-3.571642703	0.778743412	1.050187614
51.37	0.017909151	-8.93536E-05	-0.017957276	-4.040387028	0.778824476	1.050187614
51.375	0.018766073	-9.37274E-05	-0.018826777	-4.236024845	0.778913483	1.050187614
51.38	0.019716278	-9.85364E-05	-0.019782627	-4.451091031	0.779011731	1.050187614
51.385	0.021214424	-0.000106099	-0.02128541	-4.78921716	0.779125478	1.050187614
51.39	0.022879761	-0.000114512	-0.022956495	-5.165211284	0.779257784	1.050187614
51.395	0.024724307	-0.00012385	-0.024810755	-5.582419779	0.779412282	1.050187614
51.4	0.025803106	-0.000129364	-0.025905263	-5.828684238	0.779580557	1.050187614
51.405	0.026978724	-0.000135348	-0.02709277	-6.095873154	0.779764515	1.050187614
51.41	0.028364294	-0.00014243	-0.028497632	-6.411967155	0.779967854	1.050187614
51.415	0.027767539	-0.000139584	-0.027922746	-6.282617859	0.780162726	1.050187614
51.42	0.026870411	-0.000135151	-0.027027745	-6.081242585	0.78034521	1.050187614
51.425	0.027510791	-0.000138428	-0.027689522	-6.230142384	0.780536496	1.050187614
51.43	0.027431019	-0.000138125	-0.027628272	-6.216361115	0.780726674	1.050187614
51.435	0.027051927	-0.000136276	-0.027254801	-6.132330239	0.780911631	1.050187614
51.44	0.027763391	-0.0001399	-0.02798692	-6.297056984	0.781106446	1.050187614
51.445	0.027658747	-0.00013946	-0.027897919	-6.277031687	0.781299794	1.050187614
51.45	0.027204242	-0.000137215	-0.027444479	-6.175007717	0.78148684	1.050187614
51.455	0.028192512	-0.000142197	-0.028450615	-6.401388421	0.781687724	1.050187614
51.46	0.02913043	-0.000146971	-0.029398369	-6.614633061	0.781902195	1.050187614
51.465	0.029430903	-0.000148541	-0.029709845	-6.684715122	0.782121114	1.050187614
51.47	0.030218886	-0.000152552	-0.030505127	-6.863653556	0.782351912	1.050187614
51.475	0.030862992	-0.000155868	-0.031162477	-7.011557255	0.782592654	1.050187614

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
62.21313477	0.001148085	2.385693283
62.21923828	0.001628409	3.397761546
62.2253418	0.001973446	4.088080674
62.23144531	0.001861677	3.792365944
62.23754883	0.001553772	3.126157005
62.24365234	0.001366671	2.743850239
62.24975586	0.00120955	2.440825963
62.25585938	0.001001739	2.017485814
62.26196289	0.000821007	1.63263823
62.26806641	0.000439915	0.86910003
62.27416992	0.000880123	1.745755309
62.28027344	0.001456503	2.89342215
62.28637695	0.001355632	2.695163941
62.29248047	0.000835407	1.674991385
62.29858398	0.000412935	0.835696261
62.3046875	0.00073948	1.506470896
62.31079102	0.001513312	3.095977271
62.31689453	0.001825924	3.722110908
62.32299805	0.001453164	2.950601165
62.32910156	0.00073143	1.495026711
62.33520508	0.00040691	0.837001681
62.34130859	0.00081422	1.668234618
62.34741211	0.001200431	2.445643785
62.35351563	0.001315291	2.672738441
62.35961914	0.001107554	2.236073802
62.36572266	0.000810482	1.624089404
62.37182617	0.000904089	1.817182258
62.37792969	0.001401802	2.838214822
62.3840332	0.001604155	3.24203227
62.39013672	0.001476294	2.978280986
62.39624023	0.001042563	2.115893113
62.40234375	0.000342321	0.697800821
62.40844727	0.00010895	0.223956295
62.41455078	0.000241796	0.507164393
62.4206543	0.000936723	1.991279149
62.42675781	0.001296096	2.767818585
62.43286133	0.001229987	2.669243451
62.43896484	0.001128662	2.493065003
62.44506836	0.001177284	2.619707506
62.45117188	0.00137483	3.096330155
62.45727539	0.001721386	3.929454899
62.46337891	0.001877203	4.321826644
62.46948242	0.001698228	3.946281669
62.47558594	0.001506385	3.487355425
62.48168945	0.00155175	3.560036181
62.48779297	0.001553067	3.591654876
62.49389648	0.001382433	3.204873857
62.5	0.001650977	3.766720662
62.50610352	0.002165744	4.877096107
62.51220703	0.002270911	5.06725734
62.51831055	0.001784236	3.949089669
62.52441406	0.001191489	2.629920938
62.53051758	0.001133047	2.493914592
62.53662109	0.001597821	3.504722281
62.54272461	0.0019832	4.329508696
62.54882813	0.001971999	4.295073293
62.55493164	0.002224255	4.837535204
62.56103516	0.00243337	5.269159242
62.56713867	0.002016544	4.33942824
62.57324219	0.001348883	2.916999832
62.5793457	0.001130569	2.480804141
62.58544922	0.001223427	2.721437343
62.59155273	0.001475907	3.307870333
62.59765625	0.001922146	4.299145148
62.60375977	0.002047475	4.56646178
62.60986328	0.001795544	4.040002683
62.6159668	0.001640845	3.736525072
62.62207031	0.001658833	3.793324599
62.62817383	0.00154227	3.52519203
62.63427734	0.001317039	2.994909472
62.64038086	0.00136399	3.077897226
62.64648438	0.001829188	4.121486962
62.65258789	0.002092521	4.738203291
62.65869141	0.001842291	4.199857066
62.66479492	0.001467651	3.352466128
62.67089844	0.001291191	2.942621908
62.67700195	0.001460906	3.355754967
62.68310547	0.002082482	4.844393394
62.68920898	0.002613172	6.074181759
62.6953125	0.002546691	5.941363852
62.70141602	0.002332512	5.562236706
62.70751953	0.00221121	5.331834911
62.71362305	0.001761215	4.212033433
62.71972656	0.001220665	2.912514177
62.72583008	0.001382231	3.319186776
62.73193359	0.001877549	4.547331301
62.73803711	0.001966729	4.823796497
62.74414063	0.001744523	4.317045571
62.75024414	0.001523937	3.777102542
62.75634766	0.001391021	3.453634341
62.76245117	0.001337859	3.340874406
62.76855469	0.001379281	3.493459259
62.7746582	0.001361089	3.51343068
62.78076172	0.001104197	2.88544579
62.78686523	0.000641911	1.685647951
62.79296875	0.000717717	1.884596997
62.79907227	0.001467134	3.830220304
62.80517578	0.001803791	4.686640416
62.8112793	0.001477633	3.855115043
62.81738281	0.000936003	2.470331158
62.82348633	0.000648025	1.726427992
62.82958984	0.0076731	2.048244845
62.83569336	0.001178578	3.11612864
62.84179688	0.001531058	4.004200728

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
51.48	0.031095801	-0.000157117	-0.031410068	-7.067265385	0.782837042	1.050187614
51.485	0.031788067	-0.000160673	-0.032115123	-7.225902659	0.783092432	1.050187614
51.49	0.032093318	-0.000162329	-0.032443219	-7.299724312	0.783352751	1.050187614
51.495	0.031285375	-0.000158398	-0.031649307	-7.121094089	0.783600127	1.050187614
51.5	0.030724464	-0.000155683	-0.031100972	-6.997718738	0.783838713	1.050187614
51.505	0.030280601	-0.000153586	-0.030677619	-6.902464287	0.784070455	1.050187614
51.51	0.028548987	-0.000145041	-0.028953283	-6.514488569	0.784276451	1.050187614
51.515	0.026528691	-0.000135015	-0.02693112	-6.059502035	0.784454323	1.050187614
51.52	0.024573857	-0.000125325	-0.024978096	-5.620071602	0.784606947	1.050187614
51.525	0.021457187	-0.000109793	-0.021849857	-4.9162179	0.784723311	1.050187614
51.53	0.019004841	-9.75306E-05	-0.01938204	-4.360959021	0.784814597	1.050187614
51.535	0.017724668	-9.11819E-05	-0.018105047	-4.073635572	0.784893999	1.050308441
51.54	0.014626145	-7.57444E-05	-0.01500178	-3.375400401	0.784948067	1.050453783
51.545	0.010908495	-5.72458E-05	-0.011286512	-2.539465279	0.784978142	1.050537084
51.55	0.008694354	-4.62068E-05	-0.009071121	-2.041002318	0.784997247	1.050557332
51.555	0.006485148	-3.51967E-05	-0.00686279	-1.544127762	0.785007877	1.050557332
51.56	0.004925764	-2.73893E-05	-0.005297564	-1.191951796	0.785014009	1.050557332
51.565	0.004277166	-2.4136E-05	-0.004645526	-1.045243317	0.785018633	1.050637449
51.57	0.003266664	-1.90776E-05	-0.003631905	-0.8171786	0.78502133	1.050960211
51.575	0.003376697	-1.95798E-05	-0.003734695	-0.840306479	0.785024211	1.051206784
51.58	0.003855675	-2.19694E-05	-0.004217315	-0.948895781	0.785027969	1.051376841
51.585	0.003325242	-1.93167E-05	-0.003681488	-0.828334788	0.785030763	1.051470382
51.59	0.004297613	-2.41153E-05	-0.004650657	-1.046397811	0.785035431	1.051488462
51.595	0.005985854	-3.25439E-05	-0.00635198	-1.429195577	0.785044487	1.051488462
51.6	0.006714425	-3.62055E-05	-0.007090764	-1.595422007	0.785055882	1.051488462
51.605	0.008234071	-4.38149E-05	-0.008625512	-1.940740262	0.785073017	1.051488462
51.61	0.00885829	-4.7034E-05	-0.009274557	-2.086775213	0.78509285	1.051488462
51.615	0.007731146	-4.15066E-05	-0.008158204	-1.835595815	0.785107956	1.051488462
51.62	0.007135833	-3.86124E-05	-0.007573866	-1.704119811	0.785120826	1.051488462
51.625	0.005276894	-2.94581E-05	-0.00572643	-1.288446716	0.785127864	1.051488462
51.63	0.00232263	-1.47756E-05	-0.00277005	-0.623261142	0.785129227	1.051488462
51.635	0.001217613	-9.27558E-06	-0.001668469	-0.375405458	0.785129602	1.051488462
51.64	-0.00030245	-1.76867E-06	-0.0001654	-0.03721499	0.785129625	1.051488462
51.645	-0.003144196	1.23519E-05	0.0026604	0.59858991	0.785132124	1.051488462
51.65	-0.005379288	2.34731E-05	0.004884636	1.099043137	0.785139437	1.051628254
51.655	-0.008394484	3.84715E-05	0.007882441	1.773549152	0.785157247	1.05169458
51.66	-0.011532048	5.41432E-05	0.011012577	2.477829758	0.785190859	1.051698886
51.665	-0.013047933	6.17414E-05	0.012529352	2.819104101	0.785233887	1.051698886
51.67	-0.01521639	7.25488E-05	0.014685844	3.304314856	0.785292407	1.051698886
51.675	-0.01807788	8.68528E-05	0.017538401	3.946140306	0.785375005	1.051698886
51.68	-0.019779192	9.53972E-05	0.01924147	4.329330746	0.785473881	1.051698886
51.685	-0.021696259	0.000104988	0.021152252	4.759256809	0.785592854	1.051698886
51.69	-0.02428709	0.000117964	0.023736297	5.340666717	0.785741936	1.051698886
51.695	-0.026101396	0.000127108	0.025556283	5.750163736	0.785914124	1.051698886
51.7	-0.027317387	0.000133265	0.026781409	6.025817041	0.78610273	1.051698886
51.705	-0.028547306	0.000139491	0.02801992	6.304481888	0.786308701	1.051698886
51.71	-0.029513199	0.000144414	0.028998994	6.524773586	0.786528846	1.051698886
51.715	-0.030125021	0.000147575	0.029627409	6.666167	0.786758213	1.051698886
51.72	-0.030693956	0.000150521	0.030213088	6.797944803	0.786996325	1.051698886
51.725	-0.031061996	0.000152476	0.03060184	6.885414072	0.787240182	1.051698886
51.73	-0.031088017	0.000152728	0.030651801	6.89665525	0.787484447	1.051698886
51.735	-0.031206325	0.000153443	0.030794002	6.928650442	0.787730575	1.051698886
51.74	-0.030675769	0.000150952	0.030290785	6.815426548	0.787968405	1.051698886
51.745	-0.029041669	0.000142943	0.028673779	6.451600314	0.788181572	1.051698886
51.75	-0.027850645	0.000137113	0.027497128	6.186853799	0.788377612	1.051698886
51.755	-0.026396613	0.000130002	0.026062799	5.864129876	0.788553718	1.051698886
51.76	-0.023452252	0.000115444	0.023128186	5.203841905	0.788692727	1.051698886
51.765	-0.02097689	0.000103162	0.020654475	4.647256902	0.788803941	1.051698886
51.77	-0.019050865	9.36212E-05	0.018734061	4.215163627	0.78889567	1.051698886
51.775	-0.016617913	8.15409E-05	0.016303944	3.668387313	0.788965466	1.051698886
51.78	-0.014637398	7.1685E-05	0.014322462	3.222553906	0.789019616	1.051698886
51.785	-0.012861997	6.28449E-05	0.012546116	2.822876192	0.789061427	1.051698886
51.79	-0.011542782	5.62475E-05	0.011220949	2.524713424	0.789095102	1.051698886
51.795	-0.011347046	5.52598E-05	0.011022603	2.480085629	0.789127643	1.051698886
51.8	-0.010634161	5.17212E-05	0.010312062	2.320214017	0.789156225	1.051698886
51.805	-0.010181896	4.94433E-05	0.009854729	2.217313927	0.789182427	1.051698886
51.81	-0.011133751	5.41885E-05	0.01081315	2.432958767	0.789213757	1.051698886
51.815	-0.011109531	5.41244E-05	0.010800114	2.430025597	0.78924495	1.051698886
51.82	-0.010536828	5.12962E-05	0.010228899	2.301502308	0.789273011	1.051698886
51.825	-0.01082684	5.27758E-05	0.010527793	2.368753329	0.789302637	1.051698886
51.83	-0.010343147	5.04331E-05	0.010054609	2.26228698	0.789329676	1.051698886
51.835	-0.009526298	4.64071E-05	0.009245252	2.080181799	0.789352612	1.051698886
51.84	-0.009058823	4.41328E-05	0.008788776	1.977474529	0.789373352	1.051698886
51.845	-0.007827656	3.80635E-05	0.007570853	1.703441967	0.789388838	1.051698886
51.85	-0.006518674	3.15858E-05	0.006271399	1.411064874	0.789399578	1.051698886
51.855	-0.005042011	2.42821E-05	0.004806752	1.081519115	0.789406003	1.051698886
51.86	-0.002831336	1.32997E-05	0.002605392	0.586213167	0.789408029	1.051698886
51.865	-0.00115537	4.95047E-06	0.000932656	0.209847496	0.789408367	1.051698886
51.87	0.000553513	-3.54867E-06	-0.000769419	-0.173119351	0.789408444	1.051698886
51.875	0.002993962	-1.57158E-05	-0.003204844	-0.721089871	0.78941071	1.051698886
51.88	0.005038122	-2.59463E-05	-0.005251516	-1.181591018	0.789417125	1.051698886
51.885	0.006816159	-3.48671E-05	-0.007035346	-1.582952788	0.789428867	1.051698886
51.89	0.008073659	-4.12266E-05	-0.008306566	-1.868977393	0.789445342	1.051698886
51.895	0.008306423	-4.24835E-05	-0.00855777	-1.925498226	0.78946278	1.051698886
51.9	0.008302909	-4.25565E-05	-0.008572184	-1.928741373	0.789480204	1.051698886
51.905	0.007488365	-3.85968E-05	-0.007772389	-1.748787487	0.789494377	1.051698886
51.91	0.006046005	-3.14678E-05	-0.006333132	-1.424954789	0.789503615	1.051698886
51.915	0.005369543	-2.81309E-05	-0.005659692	-1.273430663	0.789510902	1.051698886
51.92	0.004443109	-2.35615E-05	-0.004737799	-1.066004844	0.789515892	1.051698886
51.925	0.00323628	-1.75605E-05	-0.003527464	-0.793679297	0.789518539	1.051698886
51.93	0.002880136	-1.5782E-05	-0.003168868	-0.712995398	0.789520635	1.051698886
51.935	0.002303828	-1.29143E-05	-0.002590724	-0.582912881	0.789521977	1.051698886
51.94	0.001870085	-1.07156E-05	-0.002147518	-0.483191575	0.789522861	1.051698886
51.945	0.00280736	-1.5337E-05	-0.003080926	-0.693208332	0.789524853	1.051698886
51.95	0.004075237	-2.16316E-05	-0.004351719	-0.979136805	0.78952905	1.051698886
51.955	0.005512664	-2.87692E-05	-0.005792022	-1.303204911	0.789536731	1.051698886
51.96	0.007561543	-3.89682E-05	-0.007848878	-1.765997501	0.789551182	1.051698886
51.965	0.009526907	-4.878E-05	-0.009815943	-2.208587211	0.789574121	1.051698886
51.97	0.011154066	-5.69206E-05	-0.011442053	-2.574461938	0.789605565	1.051698886
51.975	0.012520143	-6.37625E-05	-0.01280826	-2.881858502	0.789645183	1.051698886
51.98	0.014064328	-7.14833E-05	-0.014349465	-3.228629644	0.789695177	1.051698886
51.985	0.016229524	-8.23106E-05	-0.016509827	-3.714711153	0.789761748	1.051698886
51.99	0.01851637	-9.3782E-05	-0.018797572	-4.229453673	0.789848402	1.051698886
51.995	0.020237504	-0.000102476	-0.020530549	-4.619373625	0.789951914	1.051698886

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
62.84790039	0.001747631	4.626585322
62.85400391	0.00146654	3.974602324
62.86010742	0.000747599	2.047587203
62.86621094	0.000250992	0.693585957
62.87231445	0.000313464	0.866648016
62.87841797	0.000938718	2.564233887
62.88452148	0.001967256	5.380652905
62.890625	0.00210379	5.78379158
62.89672852	0.001120014	3.070872127
62.90283203	0.000412717	1.137974778
62.90893555	0.000653468	1.80877527
62.91503906	0.001491202	4.10191842
62.92114258	0.001859556	5.048945238
62.92724609	0.002058056	5.458787511
62.93334961	0.0020719	5.416118886
62.93945313	0.001498322	3.920082313
62.94555664	0.000879668	2.277441799
62.95166016	0.000773602	1.954725357
62.95776367	0.001008856	2.50239721
62.96386719	0.001053319	2.589626142
62.9699707	0.000923783	2.264888095
62.97607422	0.001131386	2.780992144
62.98217773	0.001124465	2.78299825
62.98828125	0.000732264	1.816659249
62.99438477	0.000995639	2.44589934
63.00048828	0.001540155	3.756621864
63.0065918	0.001674083	4.1303763
63.01269531	0.00137794	3.4496703
63.01879883	0.000760894	1.916001349
63.02490234	0.000170083	0.433456392
63.03100586	4.52365E-05	0.116904294
63.03710938	0.00051475	1.331313759
63.04321289	0.000782086	2.020960922
63.04931641	0.000429411	1.117274305
63.05541992	0.00031876	0.84274042
63.06152344	0.000563591	1.52737601
63.06762695	0.00049052	1.347000397
63.07373047	0.00043377	1.18385492
63.07983398	0.00042628	1.156137337
63.0859375	0.00037796	1.029794019
63.09204102	0.000202044	0.561437502
63.09814453	0.000138622	0.394845711
63.10424805	0.000280295	0.808056173
63.11035156	0.000302047	0.875563495
63.11645508	0.000605957	1.763913443
63.12255859	0.00092861	2.722770047
63.12866211	0.000850258	2.560701565
63.13476563	0.000495322	1.536421569
63.14086914	0.000442698	1.388555787
63.14697266	0.000616209	1.96597629
63.15307617	0.000865182	2.820513905
63.15917969	0.00124623	4.052243855
63.1652832	0.001582905	5.11364666
63.17138672	0.001676531	5.462854479
63.17749023	0.001542463	5.095672001
63.18359375	0.001255227	4.226348041
63.18969727	0.00088693	2.990608583
63.19580078	0.000679469	2.220124919
63.2019043	0.000836313	2.687424404
63.20800781	0.001149901	3.74079214
63.21411133	0.001265063	4.152598552
63.22021484	0.001214167	4.029422018
63.22631836	0.001247395	4.1913613
63.23242188	0.001191842	3.955696868
63.23852539	0.001270996	4.14871098
63.24462891	0.001656296	5.403701453
63.25073242	0.001680742	5.467433575
63.25683594	0.000924561	3.000049635
63.26293945	0.000313442	1.022742296
63.26904297	0.000734279	2.380476275
63.27514648	0.000501995	1.61307
63.28125	0.000550808	1.766195596
63.28735352	0.000787272	2.468266285
63.29345703	0.000706566	2.173654351
63.29956055	0.000212711	0.667196091
63.30566406	0.000414378	1.328538417
63.31176758	0.001013769	3.235168588
63.31787109	0.001493608	4.689509785
63.32397461	0.001906823	5.887624781
63.33007813	0.002112213	6.541677922
63.33618164	0.001687784	5.339459708
63.34228516	0.001039237	3.316775223
63.34838867	0.000771207	2.459396364
63.35449219	0.000883498	2.819093486
63.3605957	0.001705731	5.426240789
63.36669922	0.002294735	7.339228213
63.37280273	0.001987166	6.419737067
63.37890625	0.001099093	3.534516644
63.38500977	0.000548152	1.76002649
63.39111328	0.000817529	2.661093818
63.3972168	0.001622291	5.293758382
63.40332031	0.002197612	7.103076091
63.40942383	0.002141923	6.977445499
63.41552734	0.001583209	5.308436876
63.42163086	0.001143423	3.982122055
63.42773438	0.000793761	2.88420223
63.43383789	0.000919042	3.4562247
63.43994141	0.001420764	5.452842179
63.44604492	0.001860891	7.37444919
63.45214844	0.002029603	8.512303469
63.45825195	0.001759744	7.772383992
63.46435547	0.001363647	6.207535344
63.47045898	0.00137424	6.369924166
63.4765625	0.001708848	7.976848365

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
52	0.0207577	-0.000105206	-0.021074559	-4.74177572	0.790060816	1.051698886
52.005	0.020727427	-0.000105167	-0.021066754	-4.740019564	0.7901694	1.051698886
52.01	0.021287076	-0.000108078	-0.021647027	-4.870580975	0.790283927	1.051698886
52.015	0.020613435	-0.000104899	-0.021004886	-4.726099313	0.79039132	1.051698886
52.02	0.018101746	-9.25241E-05	-0.018506767	-4.164022565	0.790474136	1.051698886
52.025	0.016315804	-8.37148E-05	-0.016729799	-3.764204771	0.790541418	1.051698886
52.03	0.014576187	-7.51706E-05	-0.01500727	-3.37663586	0.790595116	1.051698886
52.035	0.011505262	-5.99817E-05	-0.011947361	-2.688156251	0.790628572	1.051698886
52.04	0.008471062	-4.49461E-05	-0.008920998	-2.007224541	0.790646708	1.051698886
52.045	0.004551559	-2.55128E-05	-0.005013194	-1.12796872	0.790651944	1.051698886
52.05	-0.000244679	-1.62216E-06	-0.000214648	-0.048295721	0.790651959	1.051698886
52.055	-0.003283399	1.35811E-05	0.002835908	0.638079311	0.790654684	1.051698886
52.06	-0.005485786	2.45995E-05	0.005045308	1.135194376	0.79066229	1.051698886
52.065	-0.007445664	3.44332E-05	0.0070161	1.578622404	0.790676302	1.051698886
52.07	-0.008044607	3.74727E-05	0.007625082	1.715643515	0.790692658	1.051698886
52.075	-0.009472842	4.46026E-05	0.009053183	2.036966285	0.790715337	1.051698886
52.08	-0.011395236	5.42604E-05	0.010986857	2.472042863	0.790748156	1.051698886
52.085	-0.010886637	5.18258E-05	0.010494618	2.361289026	0.790778111	1.051698886
52.09	-0.009998518	4.74217E-05	0.009605273	2.161186352	0.790803377	1.051698886
52.095	-0.010324735	4.90699E-05	0.009938223	2.236100163	0.79083032	1.051698886
52.1	-0.009773403	4.63774E-05	0.009394443	2.113749628	0.790854461	1.051698886
52.105	-0.008297626	3.90466E-05	0.007914893	1.78085091	0.790871863	1.051698886
52.11	-0.007083281	3.29827E-05	0.006691592	1.505608284	0.790884544	1.051698886
52.115	-0.006344811	2.92816E-05	0.005945199	1.337669873	0.790894718	1.051698886
52.12	-0.005511325	2.5118E-05	0.005105737	1.148790713	0.790902395	1.051698886
52.125	-0.004066753	1.78851E-05	0.003647973	0.820793949	0.790906575	1.051698886
52.13	-0.00353732	1.51685E-05	0.003100613	0.697638018	0.790909737	1.051698886
52.135	-0.004032596	1.75901E-05	0.003589776	0.807699697	0.790913847	1.051698886
52.14	-0.003559147	1.52015E-05	0.003107274	0.699136596	0.790917049	1.051698886
52.145	-0.003430613	1.44836E-05	0.002963004	0.666675826	0.790920024	1.051698886
52.15	-0.004664557	2.0577E-05	0.004193595	0.943558764	0.790925523	1.051698886
52.155	-0.00529828	2.37156E-05	0.004827207	1.086121605	0.790932618	1.051698886
52.16	-0.005888591	2.66162E-05	0.005412627	1.217841003	0.790941382	1.051698886
52.165	-0.007158658	3.29251E-05	0.006685575	1.504254438	0.790954334	1.051698886
52.17	-0.007803572	3.61378E-05	0.007333577	1.650054819	0.790969724	1.051698886
52.175	-0.008613573	4.01532E-05	0.008143309	1.832244624	0.790988476	1.051698886
52.18	-0.009866606	4.64027E-05	0.009403155	2.115709975	0.791013081	1.051698886
52.185	-0.010395442	4.90533E-05	0.009937355	2.235904956	0.791040393	1.051698886
52.19	-0.011277723	5.34382E-05	0.010820882	2.434698358	0.791072539	1.051698886
52.195	-0.012719646	6.06386E-05	0.012263388	2.759262249	0.791113429	1.051698886
52.2	-0.013444013	6.42801E-05	0.012992031	2.923206919	0.79115911	1.051698886
52.205	-0.01421771	6.81422E-05	0.013764665	3.097049538	0.7912102	1.051698886
52.21	-0.015489001	7.4485E-05	0.015033271	3.382486025	0.791270835	1.051698886
52.215	-0.016962642	8.18394E-05	0.016503716	3.713336065	0.791343556	1.051698886
52.22	-0.019144348	9.27395E-05	0.018682164	4.20348679	0.791436188	1.051698886
52.225	-0.020817762	0.000101156	0.020363551	4.581799046	0.79154572	1.051698886
52.23	-0.021053306	0.000102394	0.020610644	4.637394937	0.791657746	1.051698886
52.235	-0.022016753	0.000107207	0.021571854	4.853667127	0.791780259	1.051698886
52.24	-0.024266464	0.00011846	0.02381812	5.359077104	0.791929088	1.051698886
52.245	-0.025684549	0.000125615	0.025245902	5.680327899	0.792095821	1.051698886
52.25	-0.026445045	0.00012947	0.0260148	5.853329994	0.792272573	1.051698886
52.255	-0.028261262	0.000138575	0.027830528	6.261868819	0.792474437	1.051698886
52.26	-0.030268215	0.000148686	0.029846132	6.715379656	0.792705989	1.051698886
52.265	-0.030892069	0.000151927	0.030491866	6.860669932	0.792947185	1.051698886
52.27	-0.031311908	0.000154114	0.030927365	6.958657134	0.793194982	1.051698886
52.275	-0.032673351	0.000161005	0.032296784	7.266776293	0.793464795	1.051698886
52.28	-0.033561547	0.000165582	0.033206194	7.471393647	0.793749477	1.051698886
52.285	-0.033501829	0.000165435	0.033175908	7.464579397	0.794033146	1.051698886
52.29	-0.033478919	0.000165471	0.033183219	7.466224314	0.794316428	1.051698886
52.295	-0.032851408	0.000162521	0.032587384	7.332161391	0.79458919	1.051698886
52.3	-0.03085822	0.000152765	0.030617854	6.889017167	0.794829858	1.051698886
52.305	-0.027966495	0.000138503	0.027740973	6.241718864	0.795027533	1.051698886
52.31	-0.024638569	0.000122017	0.02441884	5.494239098	0.795180962	1.051698886
52.315	-0.022087131	0.000109339	0.021866133	4.919879815	0.795304259	1.051698886
52.32	-0.021569096	0.000106792	0.021353569	4.804552922	0.795421841	1.051698886
52.325	-0.021758632	0.000107848	0.021566931	4.852559584	0.795541498	1.051698886
52.33	-0.02042731	0.000101403	0.02026924	4.56057891	0.795646961	1.051698886
52.335	-0.016356721	8.13542E-05	0.016237961	3.653541125	0.79571458	1.051698886
52.34	-0.009005876	4.48847E-05	0.008915966	2.006092269	0.795735079	1.051698886
52.345	-0.000385302	1.84175E-06	0.000291568	0.065602828	0.795735116	1.051698886
52.35	0.005995834	-3.02202E-05	-0.006120885	-1.377199231	0.795744202	1.051698886
52.355	0.009129513	-4.60917E-05	-0.009291641	-2.09061932	0.795765268	1.051698886
52.36	0.009526783	-4.82491E-05	-0.009721343	-2.187302225	0.795788206	1.051698886
52.365	0.008395862	-4.26689E-05	-0.008594374	-1.933734239	0.795806022	1.051698886
52.37	0.008561592	-4.34858E-05	-0.008759497	-1.97088686	0.795824548	1.051698886
52.375	0.010900654	-5.51973E-05	-0.011109657	-2.499672776	0.79585458	1.051698886
52.38	0.013106723	-6.63222E-05	-0.013329802	-2.999205517	0.795897998	1.051698886
52.385	0.013352466	-6.76661E-05	-0.013596088	-3.059119772	0.795943058	1.051698886
52.39	0.012017941	-6.10416E-05	-0.012258278	-2.758112463	0.795979562	1.051698886
52.395	0.011950332	-6.06681E-05	-0.012183087	-2.741194621	0.796015656	1.051698886
52.4	0.014469624	-7.32822E-05	-0.014718215	-3.311598294	0.796068573	1.051698886
52.405	0.015463646	-7.83741E-05	-0.015733673	-3.540076456	0.796129009	1.051698886
52.41	0.013531842	-6.87608E-05	-0.013792408	-3.103291762	0.796175289	1.051698886
52.415	0.013627722	-6.91886E-05	-0.01387916	-3.122810957	0.796222227	1.051698886
52.42	0.015973616	-8.09545E-05	-0.016248184	-3.655841398	0.796286715	1.051698886
52.425	0.016105448	-8.17156E-05	-0.016395735	-3.689040486	0.796352272	1.051698886
52.43	0.014737892	-7.49062E-05	-0.015020707	-3.379659033	0.796407169	1.051698886
52.435	0.01479762	-7.51981E-05	-0.015079797	-3.392954264	0.796462512	1.051698886
52.44	0.01537514	-7.81293E-05	-0.015671818	-3.526159041	0.796522259	1.051698886
52.445	0.014429427	-7.34621E-05	-0.01472918	-3.314065402	0.796574881	1.051698886
52.45	0.012699812	-6.48118E-05	-0.012983609	-2.921311947	0.796615645	1.051698886
52.455	0.012587476	-6.42172E-05	-0.012863956	-2.894390157	0.79665569	1.051698886
52.46	0.012885284	-6.57455E-05	-0.013172634	-2.963842648	0.796697653	1.051698886
52.465	0.010818469	-5.54428E-05	-0.01109415	-2.496183822	0.796727234	1.051698886
52.47	0.009224246	-4.73982E-05	-0.009472663	-2.131349179	0.796748738	1.051698886
52.475	0.010007288	-5.12745E-05	-0.010255614	-2.307513125	0.796774049	1.051698886
52.48	0.009361815	-4.80636E-05	-0.009607043	-2.161584639	0.796796201	1.051698886
52.485	0.008122927	-4.18021E-05	-0.008345167	-1.877662591	0.796812877	1.051698886
52.49	0.009206323	-4.71566E-05	-0.009426634	-2.120992567	0.796834298	1.051698886
52.495	0.009553221	-4.88899E-05	-0.009776531	-2.199719522	0.796857365	1.051698886
52.5	0.009306438	-4.75904E-05	-0.00951405	-2.140661258	0.796879254	1.051698886
52.505	0.011500053	-5.85035E-05	-0.011716867	-2.636295169	0.79691268	1.051698886
52.51	0.013182107	-6.69461E-05	-0.013419759	-3.019445872	0.796956598	1.051698886
52.515	0.013509112	-6.85727E-05	-0.013747742	-3.093241889	0.797002722	1.051698886

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
63.48266602	0.001626837	7.645676992
63.48876953	0.001058354	5.011744952
63.49487305	0.000964502	4.531462829
63.50097656	0.001260268	5.925724645
63.50708008	0.001519475	7.327447147
63.51318359	0.001604734	7.782444144
63.51928711	0.001409905	6.580080927
63.52539063	0.000807198	3.624852952
63.53149414	0.000285548	1.274838923
63.53759766	0.000450163	2.040154707
63.54370117	0.001084942	5.026332012
63.54980469	0.001570924	7.423270126
63.5559082	0.001679877	7.736482902
63.56201172	0.001379409	6.057843428
63.56811523	0.000822199	3.595185524
63.57421875	0.000547752	2.418973785
63.58032227	0.000752165	3.310194729
63.58642578	0.00091767	4.055094762
63.5925293	0.000692268	3.002052458
63.59863281	0.000823881	3.463601973
63.60473633	0.001159177	4.870004735
63.61083984	0.001260729	5.242657439
63.61694336	0.001245118	5.041301311
63.62304688	0.001133618	4.561428096
63.62915039	0.001071406	4.29737797
63.63525391	0.001399475	5.587933795
63.64135742	0.001892574	7.504285682
63.64746094	0.002016786	7.78821803
63.65356445	0.001824063	6.991687171
63.65966797	0.001612861	6.348964967
63.66577148	0.001453769	5.839158473
63.671875	0.001539914	6.208383495
63.67797852	0.002157677	8.630959354
63.68408203	0.002594193	10.26931847
63.69018555	0.002910693	11.77181539
63.69628906	0.002831584	11.97032643
63.70239258	0.001979319	8.574268122
63.70849609	0.001131302	4.934880166
63.71459961	0.000905288	3.956153578
63.72070313	0.001338496	5.854726595
63.72680664	0.001910729	8.543667001
63.73291016	0.002449812	11.35165613
63.73901367	0.00293718	13.93671318
63.74511719	0.002999796	14.66343185
63.7512207	0.002381862	12.23347096
63.75732422	0.001440399	7.647699067
63.76342773	0.000939708	4.992692088
63.76953125	0.00117493	6.286506578
63.77563477	0.001556111	8.735820234
63.78173828	0.001510733	9.11286137
63.7878418	0.000966293	6.060655082
63.79394531	0.000230136	1.431971978
63.80004883	0.00024505	1.530179942
63.80615234	0.000234102	1.499715523
63.81225586	0.000986051	6.488941541
63.81835938	0.001390482	9.601245382
63.82446289	0.001116766	8.082758106
63.83056641	0.000707926	5.126226378
63.83666992	0.000580253	4.235933604
63.84277344	0.000490431	3.698394193
63.84887695	0.000349396	2.636887737
63.85498047	0.000676151	5.125734439
63.86108398	0.000786736	6.184314029
63.8671875	0.000578747	4.670583296
63.87329102	0.001293341	10.7370861
63.87939453	0.001471933	12.44509916
63.88549805	0.000962034	7.863930792
63.89160156	0.001118334	8.800011038
63.89770508	0.001208532	9.589880386
63.90380859	0.000860778	7.154565834
63.90991211	0.000709125	6.094977877
63.91601563	0.001074866	8.746960316
63.92211914	0.001864823	13.53635147
63.92822266	0.002179345	14.90487204
63.93432617	0.001902687	12.95687277
63.94042969	0.002037122	13.6237602
63.9465332	0.002106597	13.54187518
63.95263672	0.001843437	11.20803
63.95874023	0.001997645	11.45870227
63.96484375	0.002586975	14.58378435
63.97094727	0.002840141	15.86726718
63.97705078	0.002835104	15.58737333
63.9831543	0.00315007	18.07411429
63.98925781	0.003113809	18.9918886
63.99536133	0.002429329	14.85269866
64.00146484	0.001512284	9.198249324
64.00756836	0.001427072	8.742961761
64.01367188	0.002198781	13.62135655
64.01977539	0.002493927	16.50486227
64.02587891	0.00210299	14.79107108
64.03198242	0.001748504	11.90017121
64.03808594	0.001918688	12.39460617
64.04418945	0.001884229	12.05972111
64.05029297	0.001572515	10.30512831
64.05639648	0.001522521	10.3066709
64.0625	0.00173805	11.95911628
64.06860352	0.001941202	13.53744812
64.07470703	0.001965035	14.00859958
64.08081055	0.0016741	11.94891869
64.08691406	0.0015241	10.86329192
64.09301758	0.001501139	11.14307855
64.09912109	0.000999102	7.762193154
64.10522461	0.000435597	3.532800963
64.11132813	0.000700437	5.870234405

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
52.52	0.015500056	-7.85087E-05	-0.015750479	-3.543857754	0.797063444	1.051698886
52.525	0.017288264	-8.75069E-05	-0.017554416	-3.949743678	0.797138984	1.051698886
52.53	0.017556922	-8.88824E-05	-0.017828588	-4.011432204	0.79721689	1.051698886
52.535	0.018973933	-9.59708E-05	-0.019241142	-4.329256925	0.79730788	1.051698886
52.54	0.020661206	-0.000104471	-0.020934533	-4.710269827	0.797415771	1.051698886
52.545	0.020763976	-0.000105044	-0.021047545	-4.735697597	0.797524739	1.051698886
52.55	0.021269597	-0.000107575	-0.021552567	-4.849327646	0.797639078	1.051698886
52.555	0.023090672	-0.000116699	-0.023369247	-5.258080632	0.797773834	1.051698886
52.56	0.024842853	-0.000125511	-0.025122981	-5.652670696	0.797929818	1.051698886
52.565	0.026732342	-0.000135005	-0.027011771	-6.077648448	0.798110431	1.051698886
52.57	0.029238728	-0.000147621	-0.029520381	-6.64208569	0.7983265	1.051698886
52.575	0.030480036	-0.000153958	-0.030780044	-6.925509825	0.798561305	1.051698886
52.58	0.030331167	-0.000153285	-0.030644003	-6.894900772	0.798793822	1.051698886
52.585	0.032175892	-0.000162537	-0.032484411	-7.308992393	0.799055482	1.051698886
52.59	0.035087906	-0.000177233	-0.035396298	-7.964166999	0.799366647	1.051698886
52.595	0.03501039	-0.000177015	-0.035344862	-7.952594051	0.799676438	1.051698886
52.6	0.034625724	-0.000175157	-0.034969583	-7.868156093	0.79997946	1.051698886
52.605	0.03668921	-0.00018558	-0.037049286	-8.336089337	0.800319674	1.051698886
52.61	0.036926989	-0.00018697	-0.037317624	-8.396465314	0.800664313	1.051698886
52.615	0.03495356	-0.000177226	-0.035350233	-7.953802449	0.8009731	1.051698886
52.62	0.034785822	-0.000176472	-0.035198232	-7.9196023	0.80127893	1.051698886
52.625	0.034675147	-0.000176086	-0.035120183	-7.902041116	0.801582817	1.051698886
52.63	0.03235354	-0.000164634	-0.032809892	-7.382225748	0.801847374	1.051698886
52.635	0.03018371	-0.000153891	-0.030644235	-6.894952856	0.802077636	1.051698886
52.64	0.028332235	-0.000144776	-0.028807641	-6.481719149	0.802280515	1.051698886
52.645	0.024622559	-0.000126438	-0.025116037	-5.6511083	0.802433744	1.051698886
52.65	0.020470981	-0.000105865	-0.020979097	-4.720296858	0.802539658	1.051698886
52.655	0.01796188	-9.34465E-05	-0.018484029	-4.158906574	0.8026212	1.051698886
52.66	0.015406536	-8.08495E-05	-0.015954786	-3.589826941	0.802681191	1.051698886
52.665	0.01170798	-6.25705E-05	-0.012287634	-2.764717558	0.802715836	1.051698886
52.67	0.007207496	-4.02246E-05	-0.007809111	-1.757050006	0.802728965	1.051698886
52.675	0.000397969	-6.27892E-06	-0.001015174	-0.228414046	0.802729005	1.051698886
52.68	-0.007048015	3.10756E-05	0.006448355	1.45087989	0.80274156	1.051698886
52.685	-0.01030677	4.76003E-05	0.009745894	2.192826045	0.802768409	1.051698886
52.69	-0.010025695	4.63049E-05	0.009483604	2.133810962	0.802793813	1.051698886
52.695	-0.009809781	4.52393E-05	0.009268383	2.085386195	0.802818135	1.051698886
52.7	-0.010799005	5.01793E-05	0.010260319	2.308571724	0.802847609	1.051698886
52.705	-0.013257846	6.25194E-05	0.012720894	2.862201132	0.802892033	1.051698886
52.71	-0.014423676	6.8479E-05	0.013908716	3.129461064	0.802944614	1.051698886
52.715	-0.011968142	5.62484E-05	0.011439179	2.573815242	0.802980816	1.051698886
52.72	-0.010603588	4.93436E-05	0.01004599	2.260347729	0.803009233	1.051698886
52.725	-0.012340057	5.80361E-05	0.011801364	2.655306907	0.80304772	1.051698886
52.73	-0.011803702	5.54537E-05	0.011279596	2.53790919	0.803082934	1.051698886
52.735	-0.008216364	3.75058E-05	0.007658905	1.723253693	0.803099996	1.051698886
52.74	-0.005631783	2.44776E-05	0.005033825	1.132610661	0.803108012	1.051698886
52.745	-0.004669982	1.95841E-05	0.004048341	0.910876832	0.803113524	1.051698886
52.75	-0.003747784	1.49129E-05	0.003107888	0.699274799	0.803117074	1.051698886
52.755	-0.002519667	8.68934E-06	0.001855284	0.417439011	0.803118679	1.051698886
52.76	-0.002124719	6.61246E-06	0.001437373	0.323408814	0.80311982	1.051698886
52.765	-0.002750183	9.68227E-06	0.002057447	0.462925583	0.803121731	1.051698886
52.77	-0.002401788	7.8959E-06	0.001696592	0.381733217	0.803123189	1.051698886
52.775	-0.002026559	5.90572E-06	0.001295314	0.291445654	0.803124227	1.051698886
52.78	-0.004261376	1.69954E-05	0.003534544	0.795272417	0.803128817	1.051698886
52.785	-0.006632727	2.88611E-05	0.005928475	1.333906924	0.803139936	1.051698886
52.79	-0.007560234	3.34729E-05	0.006858426	1.543145924	0.803154381	1.051698886
52.795	-0.010003281	4.56473E-05	0.009312028	2.095206217	0.803179672	1.051698886
52.8	-0.013203828	6.16822E-05	0.01254096	2.821716024	0.803223735	1.051698886
52.805	-0.015538765	7.33832E-05	0.014885952	3.349339282	0.803284761	1.051698886
52.81	-0.01892274	9.03402E-05	0.018263248	4.109230807	0.80337526	1.051698886
52.815	-0.022105053	0.000106354	0.021450369	4.826332945	0.803498757	1.051698886
52.82	-0.023703081	0.000114399	0.023050543	5.1863721	0.803640756	1.051698886
52.825	-0.026735338	0.000129571	0.026067035	5.865082833	0.80382141	1.051698886
52.83	-0.031524227	0.000153702	0.030860473	6.943606495	0.804072579	1.051698886
52.835	-0.037038399	0.000181555	0.036387012	8.1870778	0.8044193	1.051698886
52.84	-0.043570208	0.000214673	0.042949684	9.663678808	0.804899094	1.051698886
52.845	-0.047393841	0.000234293	0.046825931	10.53583457	0.805466795	1.051698886
52.85	-0.047938751	0.00023723	0.047405427	10.66622097	0.806047626	1.051698886
52.855	-0.051747983	0.000256618	0.051229399	11.52661478	0.806724429	1.051698886
52.86	-0.057486457	0.000286036	0.057020782	12.82967584	0.807559661	1.051698886
52.865	-0.058354758	0.000290799	0.057948081	13.03831833	0.808420315	1.051698886
52.87	-0.057898981	0.000288672	0.057518433	12.94164738	0.809267577	1.051698886
52.875	-0.060730416	0.000303282	0.060399463	13.58987921	0.810199733	1.051698886
52.88	-0.061822012	0.000309175	0.061552593	13.84933339	0.811165699	1.051698886
52.885	-0.059577947	0.000298023	0.059300837	13.34268829	0.812062812	1.051698886
52.89	-0.059097748	0.000295752	0.058842702	13.23960795	0.812945522	1.051698886
52.895	-0.059791143	0.000299536	0.059607007	13.41157655	0.813849066	1.051698886
52.9	-0.057848133	0.000289943	0.057670336	12.97582563	0.814694841	1.051698886
52.905	-0.05532122	0.000277298	0.055120741	12.40216674	0.815468339	1.051698886
52.91	-0.054349051	0.000272587	0.054171331	12.18854938	0.816214891	1.051698886
52.915	-0.051483605	0.000258321	0.051297862	11.5420189	0.816884797	1.051698886
52.92	-0.046314788	0.000232857	0.046174781	10.38932576	0.817426942	1.051742226
52.925	-0.042776318	0.000215449	0.042676479	9.602207682	0.817889411	1.051827141
52.93	-0.038625355	0.000195046	0.038580506	8.680613893	0.81826648	1.05185839
52.935	-0.031731243	0.000160889	0.031732736	7.139865666	0.818520958	1.05185839
52.94	-0.024743707	0.000126153	0.024780702	5.575657852	0.818675699	1.05185839
52.945	-0.0162398	8.37719E-05	0.016314063	3.670664168	0.818742354	1.05185839
52.95	-0.004759676	2.62443E-05	0.004847967	1.090792543	0.81874808	1.05185839
52.955	0.006228204	-2.91355E-05	-0.00616232	-1.386522014	0.818757884	1.05185839
52.96	0.014760583	-7.23869E-05	-0.014742885	-3.317149073	0.81881295	1.05185839
52.965	0.01895725	-9.39102E-05	-0.019006966	-4.276567388	0.818903779	1.05185839
52.97	0.017346544	-8.60452E-05	-0.017418645	-3.919195184	0.81897983	1.05185839
52.975	0.015290293	-7.56955E-05	-0.015329968	-3.449242867	0.819038919	1.05185839
52.98	0.018039724	-8.95345E-05	-0.018124104	-4.077923397	0.819121169	1.051866505
52.985	0.023020471	-0.00011473	-0.023128018	-5.203803944	0.819255107	1.052106858
52.99	0.025010125	-0.000125026	-0.025164624	-5.662040321	0.819413198	1.05226093
52.995	0.022812788	-0.000114095	-0.022957379	-5.165410318	0.819544731	1.052328145
53	0.021175492	-0.00010581	-0.021285663	-4.789274251	0.81965806	1.052329406
53.005	0.024760258	-0.000123677	-0.024892504	-5.600813337	0.819813008	1.052329406
53.01	0.028548537	-0.000142992	-0.028716408	-6.46119186	0.820018997	1.052329406
53.015	0.027147375	-0.000136131	-0.027330785	-6.149426526	0.820205262	1.052329406
53.02	0.025619181	-0.000128463	-0.025782987	-5.801172102	0.820371147	1.052329406
53.025	0.02769847	-0.000139018	-0.027914348	-6.280728312	0.820565051	1.052329406
53.03	0.028783764	-0.00014469	-0.029051993	-6.536698449	0.820774449	1.052329406
53.035	0.026074009	-0.000131187	-0.02632568	-5.923278109	0.820946276	1.052329406

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
64.11743164	0.000682846	5.68710789
64.12353516	0.000662744	5.602409255
64.12963867	0.001333576	12.00298491
64.13574219	0.001783541	17.21030743
64.1418457	0.001654766	17.79496059
64.14794922	0.001390389	16.5684353
64.15405273	0.000731431	8.664657422
64.16015625	0.000524373	6.299835133
64.16625977	0.001328125	18.01190129
64.17236328	0.000950786	14.68494986
64.1784668	0.000302782	5.317637975
64.18457031	0.001018892	19.41174052
64.19067383	0.001377111	25.81864392
64.19677734	0.001256172	24.80032649
64.20288086	0.000970426	21.25833432
64.20898438	0.000478273	10.72498968
64.21508789	6.34407E-05	1.602240711
64.22119141	0.000156054	4.518115117
64.22729492	0.000110786	3.026937498
64.23339844	0.000360302	10.23009106
64.23950195	0.000858389	22.76151827
64.24560547	0.001348543	26.20206582
64.25170898	0.001252492	21.03582786
64.2578125	0.00097066	16.37511623
64.26391602	0.001096674	17.80264006
64.27001953	0.000951092	14.77714029
64.27612305	0.000659448	9.459141468
64.28222656	0.000800732	10.29605583
64.28833008	0.001035518	13.14891842
64.29443359	0.000876521	11.8960789
64.30053711	0.000598868	8.49188967
64.30664063	0.001210181	17.10966657
64.31274414	0.001602504	21.73153551
64.31884766	0.001463064	19.59863793
64.32495117	0.001675044	23.04265003
64.33105469	0.001801671	23.30510526
64.3371582	0.001525747	18.29654982
64.34326172	0.001185837	14.41404506
64.34936523	0.00128889	15.47520358
64.35546875	0.001302381	14.54538999
64.36157227	0.001442863	15.03627004
64.36767578	0.001921575	18.70040571
64.3737793	0.001586251	15.30224155
64.37988281	0.001161992	11.90472586
64.38598633	0.001022829	10.32514905
64.39208984	0.001051882	9.658608779
64.39819336	0.001369556	11.87401491
64.40429688	0.001625	14.16758103
64.41040039	0.001518222	14.12287233
64.41650391	0.00093885	9.236831003
64.42260742	0.000517743	4.989423021
64.42871094	0.000367418	3.491378208
64.43481445	9.46282E-05	0.927834966
64.44091797	0.000724282	7.216744905
64.44702148	0.001375865	13.83141361
64.453125	0.001782321	18.53027638
64.45922852	0.001406484	15.87895174
64.46533203	0.000389622	4.834625676
64.47143555	0.000865226	10.37464886
64.47753906	0.001037492	11.47940085
64.48364258	0.000540861	6.126159369
64.48974609	0.000167197	2.027215594
64.49584961	0.000702139	9.038403872
64.50195313	0.000855573	11.13338869
64.50805664	0.000794771	9.455321803
64.51416016	0.000528182	6.02522277
64.52026367	0.000232021	2.830643252
64.52636719	0.000435511	5.576861595
64.5324707	0.000581345	7.695792024
64.53857422	0.000254596	3.628952722
64.54467773	0.000340539	5.117415765
64.55078125	0.000685669	10.97000984
64.55688477	0.000696866	12.05546556
64.56298828	0.000764749	13.85579003
64.5690918	0.000967951	20.23190185
64.57519531	0.001206985	31.56565913
64.58129883	0.00142727	40.6465076
64.58740234	0.001530852	42.85779245
64.59350586	0.001593222	43.76344187
64.59960938	0.001222642	29.3466713
64.60571289	0.000901128	21.70161895
64.61181641	0.000922684	25.86852098
64.61791992	0.001233686	37.06935718
64.62402344	0.001791789	46.24987525
64.63012695	0.002033298	41.63989984
64.63623047	0.001752023	31.21850077
64.64233398	0.001402502	24.64406553
64.6484375	0.001346056	23.99248502
64.65454102	0.001611315	27.43830314
64.66064453	0.002221546	34.57257506
64.66674805	0.002747254	38.83153052
64.67285156	0.002520101	32.2422632
64.67895508	0.002046833	24.00704417
64.68505859	0.002004683	22.08875915
64.69116211	0.002134308	22.33821652
64.69726563	0.002097754	21.76131243
64.70336914	0.002297655	24.61152409
64.70947266	0.002286033	23.78117468
64.71557617	0.001832486	17.66070741
64.72167969	0.001676123	15.30975639
64.7277832	0.00203183	18.0772507
64.73388672	0.002426854	21.99619643
64.73999023	0.002392367	21.59904631
64.74609375	0.002047278	16.85574681

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
53.04	0.023045177	-0.000115938	-0.023249814	-5.231208116	0.821080501	1.052329406
53.045	0.022594924	-0.000113678	-0.022794395	-5.128738979	0.821209533	1.052329406
53.05	0.021503997	-0.000108262	-0.021702854	-4.883142047	0.821326406	1.052329406
53.055	0.018162053	-9.1405E-05	-0.018307676	-4.119227186	0.821409776	1.052329406
53.06	0.017758086	-8.92688E-05	-0.01787913	-4.02280434	0.821489478	1.052329406
53.065	0.019558407	-9.83803E-05	-0.019718809	-4.436731983	0.821586159	1.052329406
53.07	0.017668906	-8.89175E-05	-0.017807909	-4.006779627	0.821665062	1.052329406
53.075	0.015448979	-7.76225E-05	-0.015534229	-3.495201452	0.821725384	1.052329406
53.08	0.017331799	-8.70207E-05	-0.017432086	-3.922219271	0.821801305	1.052329406
53.085	0.019361135	-9.72674E-05	-0.019499745	-4.387442564	0.821896046	1.052329406
53.09	0.020395223	-0.000102474	-0.020549867	-4.62372004	0.822001178	1.052329406
53.095	0.022940354	-0.00011532	-0.023139134	-5.206305126	0.822134185	1.052329406
53.1	0.024429883	-0.000122916	-0.02466943	-5.550621695	0.822285026	1.052329406
53.105	0.024112058	-0.000121331	-0.0243492	-5.478570014	0.822431968	1.052329406
53.11	0.026014356	-0.00013091	-0.026278937	-5.912760849	0.822603009	1.052329406
53.115	0.028222484	-0.000142145	-0.028539958	-6.421490516	0.82280432	1.052329406
53.12	0.027364607	-0.000137896	-0.027681725	-6.228388135	0.822993578	1.052329406
53.125	0.027419949	-0.000138162	-0.027735699	-6.240532282	0.823183602	1.052329406
53.13	0.028843469	-0.000145412	-0.029194645	-6.568795154	0.823393869	1.052329406
53.135	0.027336192	-0.000137896	-0.027676744	-6.22726743	0.823582734	1.052329406
53.14	0.025604654	-0.000129133	-0.025908012	-5.829302669	0.823748431	1.052329406
53.145	0.026024847	-0.000131251	-0.026335977	-5.925594815	0.823919611	1.052329406
53.15	0.024705595	-0.000124646	-0.0250029	-5.625652591	0.824073875	1.052329406
53.155	0.022274199	-0.000112329	-0.02251957	-5.06690327	0.82419927	1.052329406
53.16	0.022318223	-0.000112466	-0.022547836	-5.073263197	0.824325161	1.052329406
53.165	0.022944993	-0.000115619	-0.023184706	-5.216558818	0.824458223	1.052329406
53.17	0.021835846	-0.000110005	-0.022051189	-4.961517413	0.824578731	1.052329406
53.175	0.021369891	-0.000107554	-0.021557427	-4.850421143	0.824694151	1.052329406
53.18	0.023567594	-0.000118561	-0.023780063	-5.350514155	0.824834531	1.052632302
53.185	0.025712511	-0.000129399	-0.025966558	-5.842475583	0.825001627	1.05288895
53.19	0.026234521	-0.000132037	-0.026498539	-5.962171335	0.825175576	1.053083497
53.195	0.028025889	-0.000141051	-0.028315763	-6.371046679	0.825374091	1.053215909
53.2	0.030127124	-0.000151715	-0.030439922	-6.848982388	0.82560349	1.053286622
53.205	0.029793947	-0.000150093	-0.03011104	-6.774984109	0.825827843	1.053299066
53.21	0.030167329	-0.000151955	-0.0304872235	-6.8596279	0.826057855	1.053299066
53.215	0.032182673	-0.000162146	-0.032500105	-7.312523529	0.826319625	1.053299066
53.22	0.03332784	-0.000167966	-0.033649234	-7.571077662	0.826600356	1.053299066
53.225	0.035857819	-0.000180744	-0.036170972	-8.138468602	0.826925326	1.053299066
53.23	0.040218527	-0.000202978	-0.0400556025	-9.125105676	0.827334143	1.053299066
53.235	0.041952493	-0.000212011	-0.042336438	-9.525698613	0.82777897	1.053299066
53.24	0.040817029	-0.000206448	-0.041213015	-9.272928384	0.828200044	1.053299066
53.245	0.039749517	-0.000201161	-0.040145595	-9.032758833	0.828599381	1.053299066
53.25	0.039602955	-0.000200539	-0.040020044	-9.00450987	0.828995779	1.053299066
53.255	0.03937947	-0.000199567	-0.03982389	-8.960375258	0.829387715	1.053299066
53.26	0.037856232	-0.000191996	-0.038296277	-8.616662392	0.829749917	1.053661968
53.265	0.036679865	-0.000186127	-0.03711269	-8.350355243	0.830089958	1.053981967
53.27	0.036616689	-0.000185937	-0.037074321	-8.341722302	0.830428829	1.054231133
53.275	0.035367742	-0.000179747	-0.035826541	-8.060971761	0.830744977	1.054408987
53.28	0.034732997	-0.000176604	-0.035193042	-7.918434355	0.831049879	1.054515056
53.285	0.036070123	-0.000183513	-0.036588478	-8.232407597	0.831378709	1.054549268
53.29	0.03617164	-0.000184207	-0.03672837	-8.263883226	0.831709392	1.054549268
53.295	0.037014808	-0.000188612	-0.03761761	-8.463962153	0.832055672	1.054549268
53.3	0.039837778	-0.000203171	-0.040554597	-9.124784258	0.832456784	1.054549268
53.305	0.039221123	-0.000200386	-0.039991565	-8.998102202	0.832845575	1.054549268
53.31	0.036961673	-0.000189176	-0.037728631	-8.488942068	0.833190861	1.054549268
53.315	0.036090547	-0.00018505	-0.036896254	-8.301657217	0.833520064	1.054549268
53.32	0.031667297	-0.000163273	-0.032507604	-7.314210846	0.833773517	1.054549268
53.325	0.025061317	-0.000130631	-0.025940945	-5.836712522	0.833932256	1.054549268
53.33	0.020290731	-0.000107018	-0.02119784	-4.769514104	0.834036313	1.054549268
53.335	0.015094176	-8.123E-05	-0.016024438	-3.605498461	0.834093896	1.054549268
53.34	0.01156357	-6.36313E-05	-0.012497771	-2.81199837	0.834127692	1.054549268
53.345	0.011114664	-6.14687E-05	-0.012064598	-2.714534522	0.834158914	1.054549268
53.35	0.009465608	-5.34065E-05	-0.010450181	-2.351290614	0.834181559	1.054549268
53.355	0.006781803	-4.0156E-05	-0.007798177	-1.754589808	0.834193183	1.054549268
53.36	0.003898699	-2.59128E-05	-0.004949383	-1.113611118	0.834197025	1.054549268
53.365	0.000161286	-7.36949E-06	-0.001243398	-0.279764638	0.834197032	1.054549268
53.37	-0.002131288	3.99068E-06	0.001025404	0.230715945	0.83419818	1.054549268
53.375	-0.004928488	1.77937E-05	0.003780471	0.850605883	0.834204319	1.054549268
53.38	-0.010634585	4.63125E-05	0.009467293	2.13014084	0.834232902	1.054549268
53.385	-0.014785725	6.71757E-05	0.013622888	3.065149779	0.834288156	1.054549268
53.39	-0.016607955	7.62922E-05	0.015437526	3.473443258	0.834357868	1.054549268
53.395	-0.020611931	9.63173E-05	0.019420933	4.369710021	0.834465246	1.054549268
53.4	-0.026893534	0.000127932	0.025702624	5.783090492	0.834648044	1.054549268
53.405	-0.031714807	0.000152352	0.03054892	6.873506896	0.834902258	1.054549268
53.41	-0.03341396	0.000161024	0.032268786	7.260476899	0.835184442	1.054549268
53.415	-0.036051934	0.000174311	0.034902403	7.853040635	0.83551294	1.054549268
53.42	-0.042570993	0.000207288	0.041432857	9.322392769	0.83597098	1.054549268
53.425	-0.047527568	0.000232577	0.046434589	10.44778244	0.836541889	1.054549268
53.43	-0.049077511	0.000240591	0.048018479	10.80415771	0.837150642	1.054549268
53.435	-0.053013778	0.00026061	0.05197286	11.69389342	0.837860961	1.054549268
53.44	-0.058651283	0.000289403	0.057654792	12.97232819	0.838730384	1.054549268
53.445	-0.062014141	0.00030675	0.061074831	13.74183688	0.839702364	1.054549268
53.45	-0.064827312	0.000321285	0.063918367	14.38163247	0.840764529	1.054549268
53.455	-0.067912398	0.00033723	0.067031372	15.08205865	0.841930195	1.054549268
53.46	-0.070196739	0.000349132	0.069353936	15.60463566	0.843175597	1.054549268
53.465	-0.072418446	0.000360723	0.071614664	16.11329929	0.844501081	1.054549268
53.47	-0.074129326	0.000369752	0.073375201	16.50942021	0.845889933	1.054549268
53.475	-0.074847702	0.000373733	0.07415123	16.68402665	0.847305834	1.054549268
53.48	-0.076072458	0.000380254	0.07542211	16.9699747	0.848768452	1.054549268
53.485	-0.078023394	0.000390485	0.077415218	17.41842407	0.850307051	1.054652156
53.49	-0.079336926	0.00039753	0.078787304	17.72714344	0.851897892	1.054998857
53.495	-0.079251881	0.000397482	0.078772072	17.72371613	0.853485324	1.055293935
53.5	-0.07892585	0.000396152	0.078503566	17.66330244	0.855059721	1.055534355
53.505	-0.079919713	0.000401511	0.079562514	17.90156576	0.856674019	1.055717697
53.51	-0.080830421	0.000406507	0.080535205	18.12042114	0.858325318	1.05584798
53.515	-0.080466031	0.000405029	0.080236602	18.053233534	0.859961762	1.055973197
53.52	-0.080547576	0.000405784	0.080389215	18.08757346	0.861601524	1.056263784
53.525	-0.080941465	0.000408162	0.080856606	18.19273637	0.863257363	1.056489654
53.53	-0.080356581	0.000405595	0.080338078	18.07606759	0.864889358	1.05665587
53.535	-0.079422074	0.000401259	0.07946255	17.87907384	0.866483615	1.056786212
53.54	-0.077531827	0.000392106	0.077615128	17.46340381	0.868002888	1.057060223
53.545	-0.074275758	0.000376	0.074367106	16.73259894	0.869397233	1.058061606
53.55	-0.071465107	0.000362129	0.071572444	16.10379995	0.870688048	1.059033239
53.555	-0.069016602	0.000350148	0.069160531	15.56111941	0.871891928	1.060021709

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
64.75219727	0.001745733	13.26494844
64.75830078	0.001463769	10.71270783
64.7644043	0.00128546	9.054617908
64.77050781	0.001300437	9.022611438
64.77661133	0.00131304	9.061890838
64.78271484	0.001035797	6.901635858
64.78881836	0.000819179	5.308256301
64.79492188	0.001256396	8.071587158
64.80102539	0.001488826	9.391519507
64.80712891	0.001222179	7.751659238
64.81323242	0.000762674	5.063464653
64.81933594	0.000596744	4.035883812
64.82543945	0.00049693	3.265354888
64.83154297	0.000374742	2.388474028
64.83764648	0.000395627	2.473819777
64.84375	0.000319514	2.028482345
64.84985352	0.000172101	1.164923049
64.85595703	0.000172042	1.212277687
64.86206055	0.00055948	3.861686528
64.86816406	0.001093066	7.442957647
64.87426758	0.001447815	10.10145098
64.88037109	0.001492298	10.72444657
64.88647461	0.001345164	9.839305655
64.89257813	0.001005411	7.483899679
64.89868164	0.000831138	6.376479483
64.90478516	0.001368174	10.77978482
64.91088867	0.001846742	14.55295878
64.91699219	0.001865892	14.41046309
64.9230957	0.001726803	13.23875998
64.92919922	0.001930669	15.25392241
64.93530273	0.002435891	19.85610573
64.94140625	0.002524659	20.53556236
64.94750977	0.002095067	16.4882351
64.95361328	0.0016022	12.00878988
64.9597168	0.00118136	8.749560881
64.96582031	0.001263335	9.60144539
64.97192383	0.001811136	13.7569598
64.97802734	0.002146664	16.05961724
64.98413086	0.001997146	14.84902173
64.99023438	0.001569506	11.44107055
64.99633789	0.001420292	10.22975573
65.00244141	0.001840046	13.40220012
65.00854492	0.00218468	15.96385126
65.01464844	0.001983874	14.38997707
65.02075195	0.001739867	12.59447848
65.02685547	0.001817828	13.06190626
65.03295898	0.002076201	14.4272303
65.0390625	0.002265595	14.8631005
65.04516602	0.002065894	12.95613213
65.05126953	0.001484867	9.187858147
65.05737305	0.001138976	6.991232947
65.06347656	0.001275741	7.653310974
65.06958008	0.001480531	8.42906159
65.07568359	0.001461385	7.712018623
65.08178711	0.001631881	8.20886391
65.08789063	0.001627933	8.187372563
65.09399414	0.001217388	6.134229698
65.10009766	0.000839545	4.13670123
65.10620117	0.000712934	3.418102131
65.11230469	0.000730829	3.413961362
65.1184082	0.000677881	3.077363959
65.12451172	0.000354232	1.581258996
65.13061523	0.00020157	0.89368818
65.13671875	0.000732244	3.209911621
65.14282227	0.001119618	4.899358309
65.14892578	0.001072254	4.716101682
65.1550293	0.000457498	1.965166644
65.16113281	0.000110612	0.459402448
65.16723633	6.39577E-05	0.264956257
65.17333984	0.000428437	1.813594971
65.17944336	0.000662562	2.862471802
65.18554688	0.000674736	2.90224267
65.19165039	0.000835117	3.515450339
65.19775391	0.001186841	4.964552208
65.20385742	0.001614113	6.784622067
65.20996094	0.001775215	7.541026674
65.21606445	0.001527282	6.6243299
65.22216797	0.001140394	4.966075692
65.22827148	0.000785986	3.38814667
65.234375	0.000817337	3.544131632
65.24047852	0.000636067	2.771430154
65.24658203	0.000701519	3.056387901
65.25268555	0.001013759	4.50465676
65.25878906	0.000870718	3.980042555
65.26489258	0.000524463	2.426766538
65.27099609	0.001470644	6.763995617
65.27709961	0.001958855	8.985243009
65.28320313	0.001780769	8.298936897
65.28930664	0.001566945	7.512271078
65.29541016	0.001140537	5.613876851
65.30151367	0.000477795	2.369329437
65.30761719	0.000121734	0.599012146
65.3137207	0.000460504	2.248287481
65.31982422	0.00102444	4.958171846
65.32592773	0.0015679	7.64414805
65.33203125	0.001862746	9.254923786
65.33813477	0.001748129	8.66428304
65.34423828	0.001473176	7.200555918
65.3503418	0.001654994	7.970339795
65.35644531	0.002368019	11.16330095
65.36254883	0.00266938	12.43734095
65.36865234	0.002309957	10.60388888
65.37475586	0.001868218	8.416080012
65.38085938	0.00141565	6.383701279

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
53.56	-0.065111268	0.000331065	0.065322039	14.69745875	0.872963418	1.060981905
53.565	-0.058466216	0.000298512	0.058783105	13.22619854	0.873872362	1.06180137
53.57	-0.048889324	0.000251252	0.0493096	11.09466006	0.874431456	1.06247104
53.575	-0.036511541	0.000189841	0.037031546	8.33209796	0.874768383	1.063002856
53.58	-0.019433735	0.000104586	0.020044089	4.509919962	0.874863836	1.063406538
53.585	0.002673705	-6.60805E-06	-0.002016359	-0.453680672	0.874865643	1.063670584
53.59	0.025839524	-0.00012404	-0.025202788	-5.670627209	0.875034393	1.063861592
53.595	0.045756829	-0.000225811	-0.045208236	-10.17185304	0.875563554	1.063902444
53.6	0.057038972	-0.000284094	-0.056629078	-12.7415426	0.876385833	1.063902444
53.605	0.056805136	-0.000283542	-0.056479732	-12.70793961	0.877201384	1.063902444
53.61	0.051565883	-0.000257838	-0.051294649	-11.54129595	0.877873433	1.063902444
53.615	0.050057329	-0.000250339	-0.049783643	-11.20131972	0.878506736	1.063902444
53.62	0.05548336	-0.000277176	-0.055199563	-12.41990163	0.879284775	1.063932945
53.625	0.065219256	-0.000326714	-0.064964169	-14.61693813	0.880359822	1.064069925
53.63	0.072024627	-0.000361963	-0.071847626	-16.16571575	0.881670928	1.064420768
53.635	0.07238265	-0.000364214	-0.072269319	-16.26059668	0.882995102	1.065010739
53.64	0.069852995	-0.000351481	-0.069698801	-15.68223023	0.884228337	1.065667743
53.645	0.070073413	-0.000352677	-0.069941066	-15.73673977	0.885469368	1.066213998
53.65	0.074545004	-0.000375563	-0.074500893	-16.76270101	0.88687384	1.066541143
53.655	0.078676724	-0.000397044	-0.078688862	-17.70499398	0.888438314	1.066676044
53.66	0.079130641	-0.000399704	-0.079200751	-17.82016904	0.890020893	1.06685275
53.665	0.077614737	-0.000392172	-0.077679791	-17.47795287	0.891543417	1.067030457
53.67	0.077243301	-0.000390417	-0.077325802	-17.39830547	0.893051404	1.067552332
53.675	0.079537905	-0.000402357	-0.079724373	-17.93798395	0.894650315	1.068100865
53.68	0.081365246	-0.000412025	-0.081607643	-18.3617197	0.896323538	1.068922565
53.685	0.079945803	-0.00040503	-0.080195137	-18.04390574	0.89793889	1.069846192
53.69	0.078950988	-0.000400114	-0.079202666	-17.82059974	0.899514291	1.070607861
53.695	0.079644383	-0.000403887	-0.079964774	-17.99207418	0.901117485	1.071777761
53.7	0.079395768	-0.000402867	-0.079758679	-17.94570282	0.902710687	1.072754437
53.705	0.078967866	-0.000400918	-0.079364975	-17.85711944	0.904286761	1.07374174
53.71	0.077854635	-0.000395495	-0.07827055	-17.61087367	0.905818712	1.075035156
53.715	0.07431979	-0.000377609	-0.074663987	-16.7993971	0.90721471	1.076606632
53.72	0.071605469	-0.000363829	-0.07188818	-16.1748406	0.908510601	1.078199418
53.725	0.070472175	-0.000358184	-0.070751599	-15.91910976	0.909765796	1.080077655
53.73	0.067973602	-0.000345547	-0.068208562	-15.34692647	0.910933564	1.081864902
53.735	0.064993792	-0.000330366	-0.065156212	-14.66014759	0.912001191	1.083447345
53.74	0.063388617	-0.000322195	-0.063514161	-14.29068617	0.913016734	1.084874579
53.745	0.06315771	-0.000321071	-0.063288444	-14.23990001	0.914024893	1.086883304
53.75	0.063035914	-0.000320541	-0.063181913	-14.21593044	0.915029166	1.088917241
53.755	0.06212983	-0.000315975	-0.062264776	-14.00957465	0.916004776	1.090701801
53.76	0.062515609	-0.000317997	-0.062673699	-14.10158223	0.916992539	1.09275662
53.765	0.063472669	-0.000323012	-0.063686301	-14.32941781	0.918010778	1.095469691
53.77	0.062437342	-0.000317803	-0.062634281	-14.09271313	0.918996069	1.097877405
53.775	0.062870477	-0.00032004	-0.063086255	-14.19440733	0.919995078	1.099969818
53.78	0.065070333	-0.000331438	-0.065386908	-14.71205435	0.921065222	1.101744278
53.785	0.063964758	-0.000325953	-0.064279094	-14.46279619	0.92209931	1.103242666
53.79	0.061835959	-0.000315086	-0.062086185	-13.96939163	0.923065712	1.104470875
53.795	0.062086961	-0.000316418	-0.062355519	-14.0299917	0.924039976	1.105463205
53.8	0.061553831	-0.000313813	-0.061830647	-13.91189551	0.924997581	1.106229546
53.805	0.059403762	-0.000302861	-0.059631805	-13.41715616	0.925889455	1.106802543
53.81	0.057956973	-0.000295477	-0.058150156	-13.08378509	0.926738416	1.107199052
53.815	0.057236713	-0.000291856	-0.057423703	-12.92033311	0.927566406	1.108049767
53.82	0.055436016	-0.000282723	-0.055592286	-12.50826428	0.928343118	1.109356049
53.825	0.051907785	-0.0002647	-0.051980244	-11.69555492	0.929024108	1.110456952
53.83	0.049243838	-0.000251038	-0.049244414	-11.07999318	0.929636994	1.111446951
53.835	0.048009037	-0.000244747	-0.047985276	-10.79668716	0.930219529	1.112337317
53.84	0.044832793	-0.000228556	-0.044746347	-10.06792806	0.930727533	1.113125373
53.845	0.040377582	-0.000206277	-0.040293692	-9.066080733	0.93113959	1.113808307
53.85	0.037447628	-0.000191596	-0.037362052	-8.406461593	0.931494015	1.114383326
53.855	0.034166503	-0.000175197	-0.034089598	-7.670159661	0.931789052	1.114848278
53.86	0.029939598	-0.000153972	-0.029857795	-6.718003787	0.932015604	1.115201305
53.865	0.026272458	-0.000135511	-0.026180421	-5.890594835	0.932190057	1.115440679
53.87	0.022929643	-0.000118666	-0.022827617	-5.13621387	0.93232294	1.115565134
53.875	0.019998192	-0.000103838	-0.01987836	-4.472630971	0.932424018	1.1156347
53.88	0.018231571	-9.48232E-05	-0.018086324	-4.069422803	0.932508027	1.116705937
53.885	0.018062514	-9.38227E-05	-0.017889419	-4.025119307	0.932590485	1.117697273
53.89	0.019477413	-0.000100787	-0.019295903	-4.341578276	0.932686367	1.118606399
53.895	0.021930966	-0.000113009	-0.021762313	-4.896520313	0.932807927	1.119431716
53.9	0.024677427	-0.000126774	-0.024537741	-5.520991739	0.93296184	1.120172183
53.905	0.025836358	-0.000132622	-0.025716147	-5.786133111	0.93313055	1.120827039
53.91	0.025591189	-0.000131375	-0.02546404	-5.729408972	0.933296072	1.121395329
53.915	0.026857816	-0.000137664	-0.026731731	-6.014639391	0.933478385	1.121876003
53.92	0.028786058	-0.000147299	-0.028671795	-6.451153982	0.933687816	1.122268582
53.925	0.03076133	-0.000157138	-0.030651768	-6.896647713	0.933926974	1.12257304
53.93	0.036399003	-0.000185104	-0.03627385	-8.161616324	0.934261828	1.12278977
53.935	0.04481317	-0.000227103	-0.044701622	-10.05786495	0.934769388	1.122920375
53.94	0.052449702	-0.00026549	-0.05238892	-11.78750691	0.935464671	1.122967464
53.945	0.056966805	-0.000288508	-0.05699189	-12.82317536	0.936284871	1.122967464
53.95	0.054547101	-0.000276979	-0.054663768	-12.29934779	0.937036873	1.122967464
53.955	0.048314682	-0.000246318	-0.048481693	-10.90838088	0.937626849	1.122967464
53.96	0.045727429	-0.000233647	-0.045930347	-10.33432807	0.93815533	1.122967464
53.965	0.042405686	-0.00021748	-0.042677472	-9.602431304	0.93860982	1.122967464
53.97	0.03112196	-0.00016157	-0.031450331	-7.076324457	0.938854619	1.122967464
53.975	0.017929082	-9.5553E-05	-0.01823396	-4.102641023	0.938935863	1.123009601
53.98	0.014691903	-7.88785E-05	-0.014919026	-3.356780844	0.938990418	1.123640076
53.985	0.02213033	-0.000115618	-0.022330799	-5.024429741	0.939114198	1.124259083
53.99	0.025978994	-0.000135048	-0.026243749	-5.904843475	0.939284775	1.12486819
53.995	0.019251365	-0.000101956	-0.019566773	-4.40252392	0.939378445	1.125468084
54	0.014081753	-7.62212E-05	-0.014390564	-3.237876811	0.939428563	1.126056836
54.005	0.014438353	-7.80229E-05	-0.014754509	-3.319764528	0.93948125	1.126632707
54.01	0.010468361	-5.82657E-05	-0.010826075	-2.4358669	0.939508948	1.127195192
54.015	0.004577693	-2.84871E-05	-0.004920545	-1.107122563	0.939514244	1.127742902
54.02	0.005061738	-3.07735E-05	-0.005394391	-1.213737898	0.939520719	1.128461724
54.025	0.008382344	-4.76058E-05	-0.008791128	-1.978003781	0.939538478	1.12960584
54.03	0.006665734	-3.92192E-05	-0.007097345	-1.596902669	0.939549708	1.131465857
54.035	-0.002649328	7.40821E-06	0.002188087	0.492319649	0.939551482	1.133337724
54.04	-0.012128143	5.55753E-05	0.011710228	2.634801283	0.939588658	1.135164223
54.045	-0.012740344	5.90355E-05	0.012372593	2.783833528	0.939629682	1.13693681
54.05	-0.008016105	3.57053E-05	0.007665432	1.724722251	0.939645922	1.13898555
54.055	-0.008776285	3.93436E-05	0.008401501	1.890337645	0.939665389	1.141079288
54.06	-0.015397107	7.2406E-05	0.015033022	3.382430003	0.939725307	1.143107168
54.065	-0.017462242	8.31902E-05	0.017158854	3.860742187	0.939802375	1.145061786
54.07	-0.011486292	5.37371E-05	0.011215674	2.523526619	0.939835721	1.146940544
54.075	-0.008700175	3.9727E-05	0.008392617	1.888338771	0.939854851	1.149447845

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
65.38696289	0.001053449	4.686415733
65.39306641	0.001105706	4.692055554
65.39916992	0.00087749	3.578416775
65.40527344	0.00054744	2.175353873
65.41137695	0.00102789	4.009425231
65.41748047	0.001372597	5.301564496
65.42358398	0.001343582	5.064289948
65.4296875	0.001077413	3.914281864
65.43579102	0.000733853	2.591498276
65.44189453	0.00057927	1.989243747
65.44799805	0.000769653	2.596245436
65.45410156	0.000970186	3.282622151
65.46020508	0.000919028	3.101411734
65.46630859	0.000872006	2.899880884
65.47241211	0.000723758	2.380487254
65.47851563	0.000598132	1.947908771
65.48461914	0.0004396	1.417643743
65.49072266	0.0001737	0.559376868
65.49682617	0.000711905	2.315505426
65.50292969	0.001055986	3.457855975
65.5090332	0.001098398	3.548379296
65.51513672	0.001342282	4.25702275
65.52124023	0.002010419	6.380849098
65.52734375	0.002226408	7.169945136
65.53344727	0.001662225	5.406868202
65.53955078	0.000988196	3.222740797
65.5456543	0.000754301	2.465069213
65.55175781	0.000284487	0.927250114
65.55786133	0.000857146	2.77906731
65.56396484	0.001083287	3.550924575
65.57006836	0.000780069	2.603082123
65.57617188	0.000897026	3.009798933
65.58227539	0.001015619	3.425208925
65.58837891	0.000841084	2.85357551
65.59448242	0.000727253	2.455691069
65.60058594	0.000748556	2.502743911
65.60668945	0.000950779	3.154029486
65.61279297	0.001224253	4.063715166
65.61889648	0.001342413	4.477760956
65.625	0.001092432	3.639015716
65.63110352	0.000432309	1.434506926
65.63720703	0.000529414	1.748755297
65.64331055	0.00026642	0.875730113
65.64941406	0.000688565	2.273853666
65.65551758	0.001146743	3.843702897
65.66162109	0.000962338	3.262155366
65.66772461	0.000417051	1.406484223
65.67382813	0.000511865	1.705025538
65.67993164	0.000741354	2.454404813
65.68603516	0.000551567	1.817906123
65.69213867	7.5578E-05	0.249399602
65.69824219	0.000566432	1.885386781
65.7043457	0.000904129	3.004241417
65.71044922	0.000968604	3.189571613
65.71655273	0.001131624	3.680367888
65.72265625	0.001235433	3.92544056
65.72875977	0.000923526	2.886991273
65.73486328	0.000491704	1.530084573
65.7409668	0.000502933	1.551609783
65.74707031	0.000908247	2.774488272
65.75317383	0.001069942	3.213865613
65.75927734	0.000951969	2.773934469
65.76538086	0.001081312	3.072902847
65.77148438	0.000983025	2.751577328
65.77758789	0.000832214	2.306859716
65.78369141	0.001147808	3.174056425
65.78979492	0.001653692	4.513056605
65.79589844	0.001698725	4.520964043
65.80200195	0.001340808	3.522694571
65.80810547	0.000980755	2.559571108
65.81420898	0.00083379	2.152263142
65.8203125	0.001125583	2.896340028
65.82641602	0.001573098	4.073888981
65.83251953	0.001483502	3.865547227
65.83862305	0.000948164	2.45189616
65.84472656	0.001016951	2.591459502
65.85083008	0.001305573	3.34114241
65.85693359	0.001372301	3.558317134
65.86303711	0.001257798	3.262883189
65.86914063	0.001128514	2.928374397
65.87524414	0.000761578	1.971803124
65.88134766	0.000375725	0.966303132
65.88745117	0.001023617	2.653826189
65.89355469	0.001232041	3.233924818
65.8996582	0.000869912	2.295260384
65.90576172	0.000545818	1.462037882
65.91186523	0.00054955	1.493197168
65.91796875	0.000558366	1.515815782
65.92407227	0.000337688	0.923741683
65.93017578	8.76512E-05	0.244572274
65.9362793	3.01021E-05	0.085024206
65.94238281	0.000127422	0.365461113
65.94848633	0.000389108	1.14082734
65.95458984	0.00070008	2.051711035
65.96069336	0.000841568	2.43136926
65.96679688	0.000556199	1.603262667
65.97290039	5.03486E-05	0.145987632
65.97900391	0.000471824	1.394099449
65.98510742	0.000437428	1.317782714
65.99121094	0.000437515	1.307141032
65.99731445	0.000864301	2.547120527
66.00341797	0.001066896	3.122438306
66.00952148	0.000681605	1.968161805
66.015625	0.000385031	1.114305311

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
54.08	-0.015600233	7.38501E-05	0.015277304	3.437393436	0.93991636	1.152089155
54.085	-0.018982583	9.10876E-05	0.018718545	4.21167262	0.940007433	1.154639813
54.09	-0.011653329	5.49157E-05	0.011420978	2.569720077	0.940041755	1.157281713
54.095	-0.008595433	3.94639E-05	0.008308803	1.869480691	0.940060428	1.160234103
54.1	-0.016421633	7.81302E-05	0.01610891	3.624504798	0.940128584	1.163169255
54.105	-0.020712221	9.98017E-05	0.020436706	4.598258864	0.940237009	1.165933015
54.11	-0.016535473	7.91698E-05	0.016272088	3.6612198	0.940306114	1.168514212
54.115	-0.015814369	7.54489E-05	0.015522797	3.492629334	0.940369323	1.170920203
54.12	-0.020637727	9.93075E-05	0.020337054	4.57583723	0.94047697	1.173195669
54.125	-0.023900923	0.000115575	0.023545221	5.297674824	0.940621349	1.175498473
54.13	-0.026690565	0.000129482	0.026284198	5.91394461	0.940801399	1.177608112
54.135	-0.02938054	0.000142968	0.028938836	6.511238179	0.941019569	1.179551553
54.14	-0.02863916	0.000139411	0.028220474	6.349606573	0.941226867	1.181342008
54.145	-0.030137438	0.000146806	0.029694191	6.681192891	0.941456423	1.182994127
54.15	-0.036478927	0.000179164	0.036056814	8.112783108	0.941792749	1.184733601
54.155	-0.039004454	0.000192345	0.038646245	8.695405157	0.942177256	1.18628279
54.16	-0.036446235	0.000179517	0.03605622	8.112649396	0.942512979	1.187635556
54.165	-0.036842973	0.000181578	0.03647287	8.206395697	0.942856051	1.188800292
54.17	-0.04021572	0.000198914	0.039936312	8.98567009	0.943264811	1.189799389
54.175	-0.040942733	0.000202902	0.040715793	9.161053518	0.943688482	1.190836722
54.18	-0.038579819	0.000191102	0.038333146	8.624957905	0.944064663	1.191785931
54.185	-0.036581627	0.000181063	0.036307752	8.169244278	0.944402885	1.192564402
54.19	-0.036685535	0.000181755	0.036447676	8.200727091	0.944743031	1.193183346
54.195	-0.035004642	0.000173471	0.034776989	7.824822545	0.945052721	1.193661006
54.2	-0.029461278	0.000146134	0.029270917	6.585956321	0.945272092	1.194037987
54.205	-0.025834456	0.00012818	0.025659318	5.773346505	0.945440776	1.194339436
54.21	-0.02276178	0.000113086	0.02262567	5.090775668	0.945571721	1.194584072
54.215	-0.014523222	7.21801E-05	0.014416512	3.243715119	0.94562503	1.194784789
54.22	-0.006105902	3.00608E-05	0.005981338	1.345801002	0.945634453	1.194953721
54.225	-0.001456864	6.6487E-06	0.001300048	0.292510861	0.94563499	1.195095896
54.23	0.002370744	-1.26798E-05	-0.002560829	-0.576186539	0.94563641	1.195215661
54.235	0.003404243	-1.81174E-05	-0.003645248	-0.820180736	0.945639339	1.195324608
54.24	-0.000395934	5.83434E-07	0.000129694	0.029181229	0.945639379	1.195425088
54.245	-0.004733329	2.20623E-05	0.004459556	1.003400059	0.945645041	1.195516055
54.25	-0.00674634	3.20622E-05	0.006473486	1.456534417	0.945656544	1.195596242
54.255	-0.008916527	4.28004E-05	0.008634829	1.942836424	0.945676638	1.195664927
54.26	-0.013239202	6.43369E-05	0.012965726	2.917288407	0.945720938	1.195721356
54.265	-0.015586503	7.61921E-05	0.015347601	3.453210258	0.945782339	1.195764326
54.27	-0.014005509	6.84532E-05	0.013784716	3.101561149	0.945831915	1.195793186
54.275	-0.014107622	6.8991E-05	0.013893601	3.126060233	0.945882217	1.195808235
54.28	-0.015047165	7.37874E-05	0.014862141	3.343981802	0.945939442	1.195810609
54.285	-0.01286337	6.30223E-05	0.012688523	2.854917756	0.945981262	1.195810609
54.29	-0.012828751	6.28492E-05	0.012654178	2.847190038	0.946022857	1.195810609
54.295	-0.014633699	7.19612E-05	0.014493835	3.261112957	0.94607698	1.195810609
54.3	-0.012288203	6.04746E-05	0.012174455	2.739252407	0.946115144	1.195810609
54.305	-0.009579345	4.70769E-05	0.009472331	2.131274412	0.946138337	1.195810609
54.31	-0.007475609	3.67455E-05	0.007390224	1.662800466	0.946152461	1.195810609
54.315	-0.001633871	7.83564E-06	0.001570653	0.353397034	0.946153136	1.195810609
54.32	0.004165117	-2.1081E-05	-0.004237893	-0.953525959	0.94615752	1.195810609
54.325	0.007791718	-3.92338E-05	-0.007859387	-1.768362094	0.946172864	1.195810609
54.33	0.01102089	-5.54445E-05	-0.011090893	-2.495450815	0.946203562	1.195810609
54.335	0.0114248	-5.75996E-05	-0.011517171	-2.591363453	0.946236552	1.195810609
54.34	0.010945495	-5.52354E-05	-0.011039667	-2.483925083	0.946266831	1.195810609
54.345	0.013076841	-6.58933E-05	-0.01317254	-2.963821575	0.946310051	1.195810609
54.35	0.013367519	-6.74755E-05	-0.013482224	-3.033500481	0.946355213	1.195810609
54.355	0.011072268	-5.60658E-05	-0.011178715	-2.515210909	0.946386198	1.195810609
54.36	0.011557022	-5.84251E-05	-0.011655507	-2.622489116	0.946419955	1.195810609
54.365	0.013264544	-6.69821E-05	-0.013383044	-3.011184953	0.946464425	1.195810609
54.37	0.011989949	-6.06831E-05	-0.012110874	-2.724946625	0.946500758	1.195810609
54.375	0.011361612	-5.7467E-05	-0.011461726	-2.578888316	0.946533384	1.195810609
54.38	0.014912946	-7.51308E-05	-0.015012044	-3.377709939	0.946589592	1.195810609
54.385	0.017678737	-8.90474E-05	-0.01778191	-4.000929731	0.946668584	1.195810609
54.39	0.016932785	-8.54162E-05	-0.01704846	-3.835903446	0.946741049	1.195810609
54.395	0.016732077	-8.44221E-05	-0.016847772	-3.7907486	0.946811807	1.195810609
54.4	0.017256251	-8.7058E-05	-0.017380179	-3.910540285	0.946887068	1.195810609
54.405	0.018322684	-9.23712E-05	-0.018443198	-4.149719494	0.946971919	1.195810609
54.41	0.021839656	-0.000109991	-0.021947216	-4.93812371	0.947092469	1.195810609
54.415	0.021861103	-0.000110316	-0.021997642	-4.949469395	0.947213256	1.195810609
54.42	0.017112645	-8.68216E-05	-0.017257268	-3.882885341	0.947287269	1.195810609
54.425	0.017717707	-8.96872E-05	-0.01783739	-4.013412776	0.947366609	1.195810609
54.43	0.021932597	-0.000110635	-0.022063791	-4.964352959	0.947488187	1.195810609
54.435	0.021705779	-0.000109645	-0.021863079	-4.919192683	0.947607264	1.195810609
54.44	0.021718902	-0.000109732	-0.021880608	-4.923136905	0.947726484	1.195810609
54.445	0.023091888	-0.000116634	-0.023267438	-5.235173631	0.947861255	1.195810609
54.45	0.021201317	-0.000107352	-0.021393102	-4.813447974	0.947974861	1.195810609
54.455	0.02115206	-0.000107061	-0.021334883	-4.800348763	0.94808794	1.195810609
54.46	0.024194292	-0.000122192	-0.024371905	-5.483678604	0.948235885	1.195810609
54.465	0.024215742	-0.000122429	-0.024411825	-5.492660582	0.948384093	1.195810609
54.47	0.02382765	-0.000120538	-0.024030061	-5.406763774	0.948527589	1.195810609
54.475	0.025565122	-0.000129218	-0.025767724	-5.797737805	0.948692774	1.195810609
54.48	0.025577584	-0.000129402	-0.025799392	-5.804863282	0.948858121	1.195810609
54.485	0.025469661	-0.000128918	-0.025701726	-5.782888331	0.949022075	1.195810609
54.49	0.027528218	-0.000139208	-0.02775142	-6.244069518	0.949213603	1.195810609
54.495	0.028243876	-0.000142936	-0.028491484	-6.410583943	0.949415218	1.195810609
54.5	0.027028739	-0.000137065	-0.027305768	-6.143797901	0.949599859	1.195810609
54.505	0.026344067	-0.000133785	-0.026643672	-5.994826143	0.949775264	1.195810609
54.51	0.025888115	-0.000131661	-0.026214826	-5.898335787	0.94994465	1.195810609
54.515	0.025205009	-0.000128418	-0.025560431	-5.751096915	0.950105214	1.195810609
54.52	0.024443849	-0.000124811	-0.024832655	-5.587347336	0.950256228	1.195810609
54.525	0.022143482	-0.000113594	-0.02257052	-5.078367036	0.950380155	1.195810609
54.53	0.019050519	-9.83806E-05	-0.01950505	-4.388636196	0.95047188	1.195810609
54.535	0.017863897	-9.25931E-05	-0.018339604	-4.126410924	0.950552535	1.195810609
54.54	0.016409734	-8.55675E-05	-0.016925349	-3.808203549	0.950620593	1.195810609
54.545	0.012076826	-6.42196E-05	-0.012631406	-2.842066418	0.950657455	1.195810609
54.55	0.007575763	-4.18874E-05	-0.008144785	-1.832576617	0.95067196	1.195810609
54.555	0.003619784	-2.22358E-05	-0.004201023	-0.945230235	0.950675272	1.195810609
54.56	-0.000986694	7.43109E-07	0.000405513	0.091240324	0.950675518	1.195810609
54.565	-0.003424813	1.29967E-05	0.002859825	0.643460668	0.950678483	1.195810609
54.57	-0.002918377	1.05079E-05	0.002357097	0.530346782	0.950680635	1.195810609
54.575	-0.002652317	9.13479E-06	0.00207979	0.467952706	0.950682413	1.195810609
54.58	-0.003166221	1.16548E-05	0.00258881	0.582482218	0.950684947	1.195810609
54.585	-0.002953395	1.05554E-05	0.002366712	0.532510205	0.950687151	1.195810609
54.59	-0.002100142	6.20576E-06	0.001488336	0.334875539	0.950688266	1.195810609
54.595	-0.002907421	1.00828E-05	0.002271442	0.511074505	0.950690403	1.195810609

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
66.02172852	0.000540486	1.58371495
66.02783203	0.000702648	2.047617015
66.03393555	0.00071613	2.069983058
66.04003906	0.001054461	3.008188534
66.04614258	0.001220552	3.388399821
66.05224609	0.000844575	2.306778191
66.05834961	0.000350195	0.953177788
66.06445313	0.000226808	0.617364278
66.07055664	0.00059828	1.62586681
66.07666016	0.001019352	2.703893238
66.08276367	0.001046518	2.693601419
66.08886719	0.00090837	2.311268429
66.0949707	0.001113048	2.796108459
66.10107422	0.001321273	3.274837804
66.10717773	0.001176941	2.913073087
66.11328125	0.000879353	2.157389173
66.11938477	0.000631123	1.526898039
66.12548828	0.000685829	1.653781429
66.1315918	0.001041264	2.493244459
66.13769531	0.0016839	3.983133597
66.14379883	0.001938597	4.595160801
66.14990234	0.001448187	3.463182105
66.15600586	0.001133398	2.696078934
66.16210938	0.000860395	2.016045826
66.16821289	0.000966588	2.224850081
66.17431641	0.001296277	2.921000135
66.18041992	0.00118944	2.656884922
66.18652344	0.001139045	2.559367691
66.19262695	0.000961481	2.147912808
66.19873047	0.000876806	1.92408538
66.20483398	0.000997038	2.163207445
66.2109375	0.00137347	2.970725324
66.21704102	0.001684486	3.661495757
66.22314453	0.001503426	3.294277644
66.22924805	0.00120676	2.654269291
66.23535156	0.001070363	2.36577728
66.24145508	0.000865963	1.921726804
66.24755859	0.000444563	0.9852601
66.25366211	0.000144552	0.320065606
66.25976563	0.000264417	0.588591634
66.26586914	0.000339273	0.766378455
66.27197266	0.00027547	0.630583658
66.27807617	0.000206216	0.471298848
66.28417969	0.000912276	2.073743548
66.2902832	0.001361212	3.096117278
66.29638672	0.00138431	3.161137955
66.30249023	0.001110668	2.570789869
66.30859375	0.000730774	1.728512066
66.31469727	0.000414184	0.992601211
66.32080078	0.000136881	0.327035408
66.3269043	0.000183979	0.434632073
66.33300781	0.000165215	0.3871836
66.33911133	0.000272344	0.63865605
66.34521484	0.000507616	1.195896351
66.35131836	0.000301188	0.710286178
66.35742188	0.000338826	0.795009146
66.36352539	0.000650972	1.515413289
66.36962891	0.000657306	1.518299293
66.37573242	0.001184239	2.721055487
66.38183594	0.001152165	2.655924259
66.38793945	0.00068416	1.594041515
66.39404297	0.000815758	1.905984656
66.40014648	0.001366307	3.166586113
66.40625	0.001734641	3.993423198
66.41235352	0.002123158	4.853972856
66.41845703	0.002366813	5.36432423
66.42456055	0.002034517	4.630939503
66.43066406	0.001402801	3.226983798
66.43676758	0.001000831	2.281820139
66.44287109	0.001036609	2.310479196
66.44897461	0.001189333	2.612475912
66.45507813	0.00115795	2.52466658
66.46118164	0.001143978	2.483223307
66.46728516	0.001297319	2.821581665
66.47338867	0.001188159	2.581515818
66.47949219	0.000816173	1.754321585
66.4855957	0.000420041	0.889411029
66.49169922	0.000572673	1.190457458
66.49780273	0.000856199	1.755432914
66.50390625	0.001105371	2.257550571
66.51000977	0.001503636	3.055936658
66.51611328	0.001416601	2.8781502
66.5222168	0.000774424	1.578089794
66.52832031	0.000211978	0.42415259
66.53442383	0.000172077	0.33762686
66.54052734	0.000356357	0.703129336
66.54663086	0.000690941	1.374619245
66.55273438	0.000976118	1.953265538
66.55883789	0.000847805	1.710869985
66.56494141	0.000561484	1.122587266
66.57104492	0.000505392	1.005073621
66.57714844	0.000484394	0.985462233
66.58325195	0.00055386	1.141957504
66.58935547	0.000787258	1.616526608
66.59545898	0.000992908	2.056574156
66.6015625	0.001273053	2.666522571
66.60766602	0.001505422	3.166239524
66.61376953	0.001357679	2.867576328
66.61987305	0.001016899	2.137199585
66.62597656	0.000833376	1.753295559
66.63208008	0.000969128	2.078998828
66.63818359	0.001317223	2.828207021
66.64428711	0.001498846	3.15255342
66.65039063	0.001503179	3.141567396

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
54.6	-0.005536103	2.31217E-05	0.004886677	1.099502364	0.950698149	1.195810609
54.605	-0.0058704	2.47739E-05	0.005214642	1.173294448	0.950706859	1.195810609
54.61	-0.005115455	2.08677E-05	0.004425751	0.995793988	0.950713472	1.195810609
54.615	-0.007962843	3.49275E-05	0.00724877	1.630973287	0.950729498	1.195810609
54.62	-0.010275042	4.64537E-05	0.009553623	2.149565077	0.950756181	1.195810609
54.625	-0.009471708	4.23558E-05	0.008725917	1.963331436	0.950778856	1.195810609
54.63	-0.011728397	5.34211E-05	0.010946256	2.462907564	0.950813621	1.195810609
54.635	-0.016645391	7.79676E-05	0.015848965	3.566017036	0.950883648	1.195810609
54.64	-0.019377819	9.1641E-05	0.018577557	4.179950432	0.950978552	1.195810609
54.645	-0.0221083	0.000105238	0.021289151	4.790058943	0.951102087	1.195810609
54.65	-0.027019182	0.000129835	0.026190272	5.89281112	0.951286597	1.195810609
54.655	-0.032306957	0.000156434	0.031484413	7.083992906	0.951550393	1.195810609
54.66	-0.036846123	0.000179353	0.03604079	8.109177801	0.951893523	1.195810609
54.665	-0.04034498	0.000197077	0.03956146	8.901328417	0.952304914	1.195810609
54.67	-0.043284818	0.000211994	0.042503983	9.563396212	0.952778444	1.195810609
54.675	-0.045962012	0.000225609	0.045175273	10.16443643	0.953312361	1.195810609
54.68	-0.04754767	0.000233756	0.046773076	10.52394215	0.953883754	1.195810609
54.685	-0.048234082	0.000237361	0.047479811	10.68295742	0.954471763	1.195810609
54.69	-0.049191731	0.000242304	0.048448954	10.90101465	0.955083352	1.195810609
54.695	-0.050536798	0.000249219	0.049804148	11.2059333	0.955728845	1.195810609
54.7	-0.050946216	0.000251467	0.050244712	11.30506026	0.956384839	1.195810609
54.705	-0.049770699	0.000245713	0.04908263	11.04359185	0.95701091	1.195810609
54.71	-0.048836352	0.000241114	0.048154082	10.83466848	0.957613694	1.195810609
54.715	-0.048280374	0.00023844	0.04761437	10.7132332	0.958202833	1.195810609
54.72	-0.045945106	0.000226792	0.04526464	10.18454398	0.958736357	1.195810609
54.725	-0.04456186	0.000219813	0.043857675	9.867976965	0.95923824	1.195810609
54.73	-0.046535375	0.00022975	0.045864205	10.31944612	0.959785562	1.195810609
54.735	-0.047843444	0.000236429	0.047212127	10.62272852	0.960364085	1.195810609
54.74	-0.048307584	0.000238814	0.047693359	10.73100584	0.960953887	1.195810609
54.745	-0.050744073	0.000251127	0.050176168	11.28963771	0.961604686	1.195810609
54.75	-0.052929462	0.000262261	0.052359441	11.78087417	0.962312747	1.195810609
54.755	-0.053789398	0.000266729	0.053234375	11.97773441	0.963044003	1.195810609
54.76	-0.054535615	0.000270629	0.053998068	12.14956528	0.963795689	1.195810609
54.765	-0.05393834	0.000267778	0.053422124	12.01997795	0.964531	1.195810609
54.77	-0.052841279	0.000262347	0.052325657	11.77327288	0.965236704	1.195810609
54.775	-0.052606618	0.000261231	0.052100259	11.72255834	0.965936154	1.195810609
54.78	-0.052632432	0.000261396	0.052133631	11.7300669	0.96663629	1.195810609
54.785	-0.055048337	0.000273549	0.054569793	12.27820344	0.967402177	1.195810609
54.79	-0.059771756	0.000297777	0.059310977	13.34496985	0.968305135	1.195810609
54.795	-0.063941994	0.000319279	0.063514937	14.29086091	0.969338487	1.195810609
54.8	-0.069273454	0.000346793	0.068889449	15.50012597	0.970551344	1.195810609
54.805	-0.075012494	0.000376615	0.07470826	16.80935856	0.971973487	1.195810609
54.81	-0.075631709	0.00038035	0.075419187	16.96931708	0.973419205	1.195810609
54.815	-0.070256164	0.000354201	0.070142919	15.7821567	0.974666718	1.195810609
54.82	-0.061731653	0.000312196	0.061685138	13.87915608	0.975629863	1.195810609
54.825	-0.054404462	0.000275867	0.054386134	12.2368801	0.976377937	1.195810609
54.83	-0.051308303	0.000260593	0.051321351	11.54730394	0.977043289	1.195810609
54.835	-0.046945886	0.000239151	0.047023236	10.58022814	0.977600309	1.195810609
54.84	-0.036561785	0.000187505	0.036688689	8.254954939	0.977938165	1.195810609
54.845	-0.025302215	0.000131056	0.025421705	5.719883566	0.97809997	1.195810609
54.85	-0.020092641	0.000104697	0.020170679	4.538402671	0.978202005	1.195863841
54.855	-0.021967505	0.00011401	0.022051252	4.961531648	0.978323971	1.196330661
54.86	-0.023218846	0.00012049	0.023358997	5.255774339	0.978460227	1.196703543
54.865	-0.016506482	8.72024E-05	0.016688776	3.754974609	0.97852909	1.196982094
54.87	-0.009699821	5.28604E-05	0.009861787	2.218902113	0.97855287	1.19722977
54.875	-0.011074409	5.96778E-05	0.011240661	2.529148823	0.978583866	1.197786693
54.88	-0.011586832	6.2451E-05	0.011799939	2.654986185	0.978617798	1.198386112
54.885	-0.005134369	3.02252E-05	0.005367604	1.207710824	0.978624461	1.198950979
54.89	-0.002802816	1.83073E-05	0.003003986	0.675896869	0.978626446	1.199483028
54.895	-0.007498358	4.16094E-05	0.007707035	1.734082962	0.978640657	1.200576822
54.9	-0.006265408	3.57886E-05	0.006530535	1.469370435	0.978650578	1.201787652
54.905	0.000535272	1.8412E-06	-0.000261795	-0.058903836	0.978650651	1.202946823
54.91	0.000285904	2.97844E-06	-1.2449E-05	-0.002801031	0.978650671	1.20404892
54.915	-0.002564013	1.72624E-05	0.002870104	0.645773436	0.978652333	1.206089996
54.92	0.002201925	-6.20864E-06	-0.001857079	-0.41784283	0.978653558	1.209120591
54.925	0.006269977	-2.6821E-05	-0.005939484	-1.336383886	0.978663494	1.212466394
54.93	0.00413687	-1.60602E-05	-0.003766587	-0.847482108	0.97866782	1.215705325
54.935	0.004432551	-1.73709E-05	-0.004031816	-0.907158583	0.978672785	1.218838518
54.94	0.008257744	-3.65936E-05	-0.00787375	-1.771593731	0.97869002	1.221864324
54.945	0.010057306	-4.56563E-05	-0.009666828	-2.175036396	0.978715584	1.225361036
54.95	0.011681665	-5.3778E-05	-0.011273136	-2.536455601	0.978750074	1.228968137
54.955	0.014387786	-6.73903E-05	-0.013964162	-3.141936459	0.978802393	1.232437098
54.96	0.016421332	-7.7608E-05	-0.015983105	-3.596198652	0.978870548	1.235778073
54.965	0.019669738	-9.39345E-05	-0.019207328	-4.321648898	0.978968333	1.239014946
54.97	0.023515525	-0.000113432	-0.023054911	-5.187354969	0.979108093	1.242143232
54.975	0.025221228	-0.000122098	-0.024764102	-5.571923028	0.979268865	1.245156614
54.98	0.027630253	-0.000134244	-0.027158622	-6.110689937	0.979461815	1.248606934
54.985	0.032099877	-0.000156932	-0.031628181	-7.116340645	0.97972224	1.252165857
54.99	0.034736562	-0.000170391	-0.034277821	-7.712509703	0.980027205	1.255573523
54.995	0.036579805	-0.000179735	-0.036116429	-8.126196493	0.980365393	1.258823992
55	0.041416589	-0.000204312	-0.040949134	-9.213555105	0.980798929	1.261912255
55.005	0.046211875	-0.000228835	-0.045766525	-10.29746813	0.981338667	1.264829254
55.01	0.048348076	-0.000239824	-0.047923714	-10.7828357	0.981929458	1.267565986
55.015	0.051560196	-0.000256222	-0.05114105	-11.50673616	0.982601359	1.270117104
55.02	0.056210542	-0.000280059	-0.055814115	-12.55817582	0.983399926	1.272476076
55.025	0.059023305	-0.00029458	-0.058658841	-13.1982393	0.984280413	1.274634549
55.03	0.061477415	-0.000307232	-0.061136015	-13.75560346	0.985235641	1.276599118
55.035	0.064743327	-0.000324059	-0.064428687	-14.49645455	0.986295056	1.278394469
55.04	0.066617943	-0.000333811	-0.066336085	-14.92561922	0.987416709	1.280015699
55.045	0.068639705	-0.000344265	-0.068380003	-15.38550056	0.988607475	1.281459422
55.05	0.072182197	-0.000362529	-0.071948797	-16.18847926	0.989924325	1.282722102
55.055	0.074139777	-0.000372776	-0.073949889	-16.63872492	0.991313569	1.28379873
55.06	0.074864036	-0.000376678	-0.074711745	-16.81014273	0.992730088	1.284686192
55.065	0.07681368	-0.000386828	-0.076692837	-17.25588835	0.994221346	1.285393388
55.07	0.078236667	-0.000394349	-0.078160455	-17.58610241	0.995768369	1.286257191
55.075	0.078487562	-0.000395873	-0.078457698	-17.65298208	0.997325329	1.287155179
55.08	0.079038742	-0.000398915	-0.079051152	-17.78650931	0.998904234	1.287905493
55.085	0.078982934	-0.000398878	-0.079038213	-17.78359784	1.00048091	1.288536824
55.09	0.07831877	-0.000395705	-0.078397493	-17.63943597	1.002031181	1.289059115
55.095	0.078320211	-0.000395917	-0.0784403	-17.64906741	1.003581509	1.289501447
55.1	0.07806951	-0.000394861	-0.078226931	-17.60105953	1.005121928	1.289870425
55.105	0.077334399	-0.000391314	-0.077510835	-17.43993787	1.006633474	1.290166255
55.11	0.077050191	-0.000390066	-0.07725889	-17.38325019	1.00813393	1.290395568
55.115	0.076284215	-0.000386388	-0.076516482	-17.21620837	1.009604702	1.290585649

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
66.65649414	0.001551128	3.253248562
66.66259766	0.001375704	2.899103963
66.66870117	0.000939676	2.006248561
66.67480469	0.000733298	1.576131817
66.6809082	0.000948221	2.020544497
66.68701172	0.001242229	2.622818641
66.69311523	0.001403594	2.956706506
66.69921875	0.001412151	2.972175532
66.70532227	0.001084474	2.27209386
66.71142578	0.000696882	1.451688626
66.7175293	0.000696031	1.450319943
66.72363281	0.000710895	1.48656923
66.72973633	0.000660925	1.368258193
66.73583984	0.000639727	1.295344386
66.74194336	0.000769243	1.546733408
66.74804688	0.000892161	1.815349674
66.75415039	0.00087391	1.792567297
66.76025391	0.000971114	1.992842394
66.76635742	0.001248464	2.535380774
66.77246094	0.001390536	2.756854308
66.77856445	0.001422903	2.786652225
66.78466797	0.001539151	3.039956047
66.79077148	0.001554968	3.085057467
66.796875	0.001243525	2.455215974
66.80297852	0.00107899	2.118513899
66.80908203	0.001305885	2.550159742
66.81518555	0.001633769	3.170623672
66.82128906	0.001642338	3.135997248
66.82739258	0.001256624	2.356119741
66.83349609	0.000611904	1.150398927
66.83959961	0.000189937	0.360483172
66.84570313	0.000265937	0.501185496
66.85180664	0.000321127	0.598090331
66.85791016	0.000194353	0.359643009
66.86401367	0.000615855	1.1413581
66.87011719	0.001018518	1.912901267
66.8762207	0.001087838	2.067258454
66.88232422	0.000990363	1.884179449
66.88842773	0.001147192	2.171221108
66.89453125	0.000985607	1.855598727
66.90063477	0.000502993	0.951926112
66.90673828	0.000179276	0.342344426
66.9128418	6.0976E-05	0.116915994
66.91894531	0.000294901	0.569592202
66.92504883	0.000688747	1.327678853
66.93115234	0.000896033	1.704527273
66.93725586	0.000691928	1.313958969
66.94335938	0.000857557	1.62710029
66.94946289	0.00121767	2.304506003
66.95556641	0.001071578	2.062352351
66.96166992	0.000669708	1.308525182
66.96777344	0.000507597	0.985528093
66.97387695	0.00071355	1.372835257
66.97998047	0.001182678	2.264998572
66.98608398	0.001578372	3.040065418
66.9921875	0.001579703	3.107946783
66.99829102	0.001203702	2.407990442
67.00439453	0.000763565	1.52411936
67.01049805	0.000659333	1.300553706
67.01660156	0.000658445	1.283446193
67.02270508	0.000631227	1.222738309
67.02880859	0.001002847	1.948770797
67.03491211	0.001153445	2.2660998
67.04101563	0.000889566	1.757031458
67.04711914	0.000650169	1.278106125
67.05322266	0.000636822	1.246277162
67.05932617	0.000933647	1.814970937
67.06542969	0.001394401	2.686105885
67.0715332	0.001461563	2.821742378
67.07763672	0.001194719	2.322957572
67.08374023	0.000971463	1.888439475
67.08984375	0.001072402	2.07526925
67.09594727	0.001205251	2.304430416
67.10205078	0.001082556	2.034326273
67.1081543	0.000909103	1.694945633
67.11425781	0.000733164	1.373936763
67.12036133	0.000689505	1.304802144
67.12646484	0.000623047	1.174440295
67.13256836	0.000525215	0.971881743
67.13867188	0.000559024	1.024519785
67.14477539	0.000650646	1.194342408
67.15087891	0.000661224	1.21538563
67.15698242	0.000636775	1.171405859
67.16308594	0.000393283	0.718803642
67.16918945	0.000287257	0.519527815
67.17529297	0.000348089	0.627105414
67.18139648	0.000770541	1.380204525
67.1875	0.001039528	1.849700878
67.19360352	0.00067366	1.201370756
67.19970703	0.00017282	0.309865095
67.20581055	7.41063E-05	0.133644792
67.21191406	0.000321582	0.579926364
67.21801758	0.000670583	1.193396962
67.22412109	0.000692486	1.223783669
67.23022461	0.000214591	0.384088502
67.23632813	0.000326125	0.594121232
67.24243164	0.000400107	0.734098158
67.24853516	0.000628153	1.141112265
67.25463867	0.001169284	2.086828918
67.26074219	0.001222605	2.176773825
67.2668457	0.000723171	1.303775016
67.27294922	0.000256552	0.465782993
67.27905273	0.000345924	0.630311027
67.28515625	0.000450324	0.827123487

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
55.12	0.074506861	-0.000377526	-0.074728704	-16.81395843	1.011007737	1.290739593
55.125	0.073086607	-0.000370454	-0.073302626	-16.49309094	1.012357792	1.290857927
55.13	0.072035026	-0.000365292	-0.072262333	-16.25902495	1.013669277	1.290941123
55.135	0.069569311	-0.000352932	-0.069772196	-15.69874415	1.014892516	1.29098961
55.14	0.066293875	-0.000336378	-0.066440051	-14.9490115	1.016003283	1.29100418
55.145	0.064007271	-0.000324845	-0.064120462	-14.42710403	1.017038746	1.291952413
55.15	0.061672099	-0.000313082	-0.061756043	-13.89510976	1.018000033	1.292897618
55.155	0.059069946	-0.000299924	-0.059113101	-13.30044763	1.018881913	1.293751268
55.16	0.057575931	-0.000292416	-0.05760575	-12.96129371	1.019719746	1.294510777
55.165	0.056472856	-0.000286945	-0.056507786	-12.71425181	1.020525784	1.295174088
55.17	0.055000979	-0.000279622	-0.055038586	-12.38368192	1.021290353	1.295739543
55.175	0.052725773	-0.00026824	-0.05275617	-11.87013834	1.021992975	1.296205653
55.18	0.048718782	-0.000248269	-0.048754532	-10.96976962	1.022592861	1.296570928
55.185	0.043839242	-0.000224081	-0.043912966	-9.880417368	1.023078599	1.296833683
55.19	0.038057126	-0.000195345	-0.03816843	-8.587896638	1.023444656	1.296992213
55.195	0.030507635	-0.000157662	-0.030646958	-6.895565594	1.023679886	1.298119513
55.2	0.022673007	-0.000118398	-0.02282383	-5.13536175	1.023809811	1.299192542
55.205	0.014634518	-7.79956E-05	-0.014788036	-3.32730799	1.023863941	1.300172814
55.21	0.005978392	-3.43166E-05	-0.006116504	-1.376213295	1.023872974	1.301055909
55.215	-0.001327883	2.74175E-06	0.001227925	0.276283108	1.023873419	1.301837556
55.22	-0.006281564	2.80247E-05	0.006232052	1.402211731	1.023883392	1.302514129
55.225	-0.008239506	3.82004E-05	0.008244569	1.855027961	1.023900551	1.303082999
55.23	-0.007188933	3.3101E-05	0.007214624	1.623290367	1.023913612	1.303542729
55.235	-0.006073405	2.75567E-05	0.006095326	1.371448334	1.023922935	1.303892982
55.24	-0.006222554	2.83683E-05	0.006259301	1.408342672	1.023932721	1.304280797
55.245	-0.007095601	3.28371E-05	0.007161819	1.611409273	1.023945446	1.305272114
55.25	-0.008698873	4.10266E-05	0.008803376	1.980759547	1.023964571	1.306126315
55.255	-0.008960268	4.2481E-05	0.009087162	2.044611398	1.023984863	1.30701141
55.26	-0.007329987	3.4332E-05	0.007441606	1.674361405	1.023998442	1.308561017
55.265	-0.005663192	2.59452E-05	0.0057491	1.293547562	1.024006548	1.31075653
55.27	-0.003536228	1.51758E-05	0.003577157	0.804860262	1.024009709	1.313102902
55.275	-0.003306747	1.39079E-05	0.003322358	0.747530465	1.024012472	1.315294072
55.28	-0.005993856	2.74778E-05	0.006061777	1.36389974	1.024021552	1.317328456
55.285	-0.005151369	2.33124E-05	0.005220176	1.174539618	1.024028259	1.319202851
55.29	-0.00192053	6.9002E-06	0.001909153	0.429559403	1.024029191	1.320916801
55.295	-0.003041612	1.24102E-05	0.003022008	0.679951697	1.02403153	1.323237236
55.3	-0.004821199	2.13698E-05	0.004830534	1.08687006	1.024037404	1.32561425
55.305	-0.004919209	2.17938E-05	0.004916098	1.106121953	1.02404352	1.328616243
55.31	-0.007114476	3.27907E-05	0.007134278	1.605212504	1.024056313	1.331790518
55.315	-0.009270887	4.36699E-05	0.009325965	2.09834204	1.024078036	1.334854741
55.32	-0.010449904	4.95892E-05	0.010496016	2.361603499	1.024105635	1.337804695
55.325	-0.01266615	6.07637E-05	0.012704056	2.858412516	1.024146183	1.340637013
55.33	-0.013518101	6.50784E-05	0.013556348	3.050178227	1.024192369	1.343347828
55.335	-0.014084373	6.78591E-05	0.014105546	3.173747826	1.024242505	1.345934546
55.34	-0.017895325	8.70706E-05	0.0178982	4.027095043	1.024323443	1.348394635
55.345	-0.021984343	0.000107855	0.021997899	4.949527267	1.024445596	1.350722557
55.35	-0.023459044	0.000115427	0.023490756	5.285419994	1.024584686	1.352912482
55.355	-0.023545421	0.000115907	0.023585283	5.306688729	1.024724803	1.354961384
55.36	-0.024412795	0.000120286	0.024448356	5.500880151	1.024875432	1.356867983
55.365	-0.026998309	0.00013341	0.02703405	6.082661343	1.025059658	1.358632528
55.37	-0.028126876	0.000139231	0.028180491	6.340610375	1.025259606	1.36028342
55.375	-0.026908404	0.000133085	0.026939281	6.061338216	1.025442607	1.361827219
55.38	-0.027539541	0.000136243	0.027577	6.204825026	1.025634292	1.363263941
55.385	-0.028869578	0.000143017	0.028925867	6.508320145	1.02584494	1.364592534
55.39	-0.02802287	0.000138742	0.028062527	6.31406862	1.026043413	1.365811552
55.395	-0.028007196	0.000138601	0.028034105	6.307673539	1.026241664	1.366960298
55.4	-0.029086011	0.000144043	0.029127947	6.553788138	1.026455482	1.36882056
55.405	-0.028891134	0.000143025	0.028921668	6.507375311	1.026666444	1.370536622
55.41	-0.0293691	0.00014535	0.029385168	6.611662847	1.026884445	1.372107867
55.415	-0.031576356	0.000156459	0.031571835	7.103662814	1.027136444	1.373533067
55.42	-0.033624528	0.000166809	0.033607995	7.561798799	1.027422196	1.374813274
55.425	-0.035025556	0.000173868	0.034996361	7.874181256	1.027732256	1.375977822
55.43	-0.036940779	0.000183501	0.03689029	8.300315281	1.028077152	1.377031637
55.435	-0.040424558	0.0002011	0.040348606	9.078436254	1.028490167	1.377972524
55.44	-0.044149666	0.000220083	0.044076125	9.9171281	1.028982809	1.378797126
55.445	-0.046505678	0.000232115	0.046437311	10.44839502	1.029529432	1.379501974
55.45	-0.048913217	0.00024438	0.048842957	10.98966524	1.030134115	1.380104873
55.455	-0.052266967	0.000261483	0.052195777	11.74404993	1.030824563	1.380625539
55.46	-0.055697426	0.00027902	0.055631197	12.51701926	1.031608617	1.381061866
55.465	-0.058742244	0.000294638	0.058688754	13.20496969	1.032480738	1.381428815
55.47	-0.060443892	0.000303441	0.060411377	13.59255986	1.033404119	1.381750606
55.475	-0.061697585	0.000309921	0.061679164	13.87781187	1.034366201	1.382026621
55.48	-0.064290167	0.000323237	0.064282919	14.46365669	1.035410838	1.382256366
55.485	-0.065923486	0.000331748	0.065946626	14.8379908	1.036509227	1.382439105
55.49	-0.065560101	0.000330067	0.065607121	14.7616022	1.03759554	1.382574378
55.495	-0.065813104	0.000331481	0.065892711	14.82585995	1.038690254	1.382662241
55.5	-0.066328542	0.000334264	0.066438383	14.94863613	1.039802183	1.382702692
55.505	-0.065906778	0.000332286	0.066038764	14.85872192	1.040900015	1.382705117
55.51	-0.064934675	0.000327507	0.065073611	14.64156246	1.041965701	1.382705117
55.515	-0.062655725	0.000316057	0.06276287	14.12164581	1.042957897	1.382705117
55.52	-0.060490691	0.000305117	0.060556746	13.62526774	1.043882708	1.382705117
55.525	-0.059549494	0.000300429	0.059611762	13.41264655	1.044778964	1.382705117
55.53	-0.056890117	0.000287014	0.056909198	12.80456958	1.045596957	1.382705117
55.535	-0.053688417	0.000270736	0.053632751	12.06736906	1.04632547	1.382705117
55.54	-0.052811462	0.000266267	0.052733667	11.86507516	1.047030378	1.382705117
55.545	-0.052422496	0.000264322	0.052342417	11.77704386	1.04772494	1.382705117
55.55	-0.052094145	0.000262678	0.05201189	11.70267514	1.048410829	1.383146259
55.555	-0.052233679	0.000263431	0.052163906	11.73687895	1.049100397	1.383764973
55.56	-0.052368719	0.00026415	0.052309209	11.76957209	1.049793535	1.38428776
55.565	-0.054010176	0.000272547	0.054004742	12.15106696	1.050530806	1.384713948
55.57	-0.055410781	0.000279813	0.055470976	12.4809695	1.051306811	1.385043445
55.575	-0.054574153	0.000275671	0.054634473	12.29275644	1.05205956	1.385276301
55.58	-0.05449051	0.000275309	0.054561402	12.27631549	1.052810002	1.385412286
55.585	-0.054425102	0.000275094	0.054517917	12.26653138	1.053558645	1.385451492
55.59	-0.052453481	0.000265125	0.052505656	11.81377264	1.054254029	1.385451492
55.595	-0.051973635	0.000262653	0.052007507	11.70168901	1.054936748	1.386120022
55.6	-0.053808858	0.000271993	0.053893356	12.12600518	1.055668533	1.387108587
55.605	-0.0568497	0.000287512	0.05702427	12.83046065	1.056485364	1.388008086
55.61	-0.061116637	0.000308817	0.061317541	13.7964468	1.057429413	1.388818006
55.615	-0.06284943	0.000317667	0.063099247	14.19733067	1.058427754	1.389538253
55.62	-0.061232138	0.000309836	0.061517854	13.84151707	1.059375375	1.390168239
55.625	-0.059988456	0.000303778	0.060295066	13.56638991	1.060284893	1.390706682
55.63	-0.059809892	0.00030301	0.060140158	13.53153555	1.061189004	1.391152496
55.635	-0.060253639	0.000305362	0.060615184	13.63841635	1.062106581	1.391505097

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
67.29125977	0.000287784	0.530820211
67.29736328	9.86308E-05	0.181707487
67.3034668	0.000400088	0.732640276
67.30957031	0.000460844	0.839923584
67.31567383	0.000361765	0.668879882
67.32177734	0.000345599	0.653959166
67.32788086	0.000413215	0.784416616
67.33398438	0.000353567	0.662696119
67.34008789	0.000495487	0.917328805
67.34619141	0.000624451	1.156252467
67.35229492	0.000572835	1.078880793
67.35839844	0.000626081	1.192768926
67.36450195	0.000673417	1.27536119
67.37060547	0.000502987	0.944672852
67.37670898	0.000442482	0.823441835
67.3828125	0.000556863	1.031241768
67.38891602	0.000714198	1.32797657
67.39501953	0.000930302	1.719765544
67.40112305	0.000913243	1.672723872
67.40722656	0.000979587	1.805346025
67.41333008	0.00110306	2.032908465
67.41943359	0.001002163	1.819591585
67.42553711	0.000851214	1.533560928
67.43164063	0.000910686	1.640454298
67.43774414	0.001030284	1.867705163
67.44384766	0.00110714	2.034393248
67.44995117	0.00098951	1.818167201
67.45605469	0.000684189	1.239666462
67.4621582	0.00043276	0.777057564
67.46826172	0.000475163	0.849872
67.47436523	0.0009661	1.733128653
67.48046875	0.001233366	2.222947451
67.48657227	0.001008519	1.801942672
67.49267578	0.000622113	1.098592717
67.4987793	0.000252158	0.441931039
67.50488281	5.34743E-05	0.092731563
67.51098633	8.76489E-05	0.151857504
67.51708984	0.000250195	0.438368514
67.52319336	0.000410868	0.724969729
67.52929688	0.000184721	0.327207218
67.53540039	0.000202755	0.359069344
67.54150391	0.00012499	0.219590735
67.54760742	0.000593104	1.040905702
67.55371094	0.000970833	1.714528348
67.55981445	0.00076125	1.352192026
67.56591797	0.00058064	1.042787607
67.57202148	0.000429405	0.772391115
67.578125	0.000169315	0.298342443
67.58422852	0.000508243	0.882798279
67.59033203	0.000529427	0.925492832
67.59643555	0.000251106	0.442821188
67.60253906	0.00036229	0.640355
67.60864258	0.000441017	0.77652988
67.61474609	0.000697828	1.217689227
67.62084961	0.000666676	1.161028009
67.62695313	0.000366087	0.641932814
67.63305664	0.000584118	1.026035285
67.63916016	0.000504148	0.88523042
67.64526367	0.000485665	0.862921966
67.65136719	0.000620288	1.117770484
67.6574707	0.000740157	1.328177925
67.66357422	0.000866822	1.531692724
67.66967773	0.000745454	1.309502336
67.67578125	0.000483716	0.856921647
67.68188477	4.6983E-05	0.084272326
67.68798828	0.000330612	0.595901949
67.6940918	0.000334265	0.599245129
67.70019531	0.000575461	1.022076359
67.70629883	0.000953252	1.682013179
67.71240234	0.000994309	1.755887567
67.71850586	0.000828013	1.475536915
67.72460938	0.001011022	1.820304855
67.73071289	0.0011404	2.055364293
67.73681641	0.000861222	1.542512612
67.74291992	0.000516491	0.924408212
67.74902344	0.000635486	1.140154216
67.75512695	0.000837143	1.496916313
67.76123047	0.000967664	1.73195882
67.76733398	0.001055163	1.908867242
67.7734375	0.000916117	1.660615346
67.77954102	0.000518518	0.927150941
67.78564453	0.000549256	0.968193735
67.79174805	0.000805435	1.406105162
67.79785156	0.000715743	1.245162867
67.80395508	0.000337324	0.592221897
67.81005859	0.00010185	0.179192342
67.81616211	0.00023722	0.408822501
67.82226563	0.000389381	0.660756912
67.82836914	0.000567727	0.962739352
67.83447266	0.000631466	1.069326615
67.84057617	0.000621621	1.054829836
67.84667969	0.000619828	1.052139622
67.8527832	0.000577082	0.970713599
67.85888672	0.00047032	0.788359708
67.86499023	0.000340847	0.57156774
67.87109375	0.000421203	0.705255841
67.87719727	0.000662665	1.115454631
67.88330078	0.000567251	0.963220364
67.8894043	0.000245684	0.422190055
67.89550781	0.000355623	0.618516733
67.90161133	0.000409109	0.706346847
67.90771484	0.000151655	0.258052257
67.91381836	0.000541081	0.924509924
67.91992188	0.000220057	0.383081379

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
55.64	-0.060386923	0.000306258	0.060796092	13.6791206	1.063028222	1.391764284
55.645	-0.057166079	0.00029057	0.057630843	12.96693959	1.06385417	1.391929873
55.65	-0.050778156	0.000259042	0.051280688	11.53815474	1.064505843	1.392000939
55.655	-0.045304082	0.000231855	0.045818387	10.30913701	1.065024584	1.392000939
55.66	-0.04222038	0.000216571	0.042751115	9.619000776	1.065475111	1.392000939
55.665	-0.037869227	0.000195033	0.038432514	8.647315735	1.065837561	1.392000939
55.67	-0.030345418	0.000157537	0.030925399	6.958214859	1.066070296	1.392000939
55.675	-0.023533444	0.000123404	0.024103219	5.423224237	1.06621027	1.392000939
55.68	-0.018087421	9.60504E-05	0.018643822	4.194860049	1.066292956	1.39265443
55.685	-0.01190278	6.48828E-05	0.012431577	2.797104755	1.066328763	1.394667865
55.69	-0.008988499	4.99845E-05	0.009465144	2.129657472	1.066349183	1.396568539
55.695	-0.010674944	5.82824E-05	0.011140881	2.506698241	1.066377984	1.398352841
55.7	-0.011490855	6.23592E-05	0.011963783	2.691851205	1.066411356	1.400019733
55.705	-0.010090244	5.53169E-05	0.010541532	2.371844599	1.066437088	1.401568145
55.71	-0.007505624	4.23051E-05	0.007936871	1.785796068	1.066451326	1.40299595
55.715	-0.004275907	2.59767E-05	0.004689061	1.055038684	1.066455947	1.404300414
55.72	-0.003370866	2.12624E-05	0.003751808	0.844156826	1.066458819	1.405478794
55.725	-0.00408737	2.47746E-05	0.004461228	1.003776246	1.066463041	1.406529744
55.73	-0.002900777	1.87727E-05	0.003256893	0.732800875	1.066465168	1.40745435
55.735	-0.001129789	9.76262E-06	0.001466305	0.329918581	1.066465491	1.409276812
55.74	-0.001036613	9.14947E-06	0.0013472	0.303120082	1.066465762	1.411836932
55.745	-0.002173625	1.47568E-05	0.002479616	0.557913679	1.066466956	1.414269875
55.75	-0.003042799	1.90753E-05	0.003351418	0.754069012	1.066469296	1.416574878
55.755	-0.002503707	1.63169E-05	0.002794228	0.628701195	1.066470881	1.418751061
55.76	-0.002432933	1.58572E-05	0.002701446	0.607825347	1.066472377	1.420796664
55.765	-0.004004215	2.3676E-05	0.004279884	0.962973948	1.066476429	1.422710421
55.77	-0.004971146	2.85144E-05	0.005256004	1.182600957	1.066482675	1.42466983
55.775	-0.005427129	3.07761E-05	0.005712181	1.285240756	1.066490119	1.426516772
55.78	-0.006266217	3.49851E-05	0.006560937	1.47621076	1.066500043	1.428228071
55.785	-0.006196324	3.46596E-05	0.006494953	1.46136444	1.066509747	1.429803582
55.79	-0.005356717	3.04621E-05	0.005647194	1.270618552	1.066516999	1.431242493
55.795	-0.003677608	2.2045E-05	0.003948102	0.888322955	1.066520418	1.432543226
55.8	-0.001305069	1.00948E-05	0.001537487	0.345934608	1.066520848	1.433733251
55.805	1.48656E-05	3.40669E-06	0.000203603	0.045810677	1.066520848	1.434821211
55.81	0.001795697	-5.57379E-06	-0.001579909	-0.355479529	1.066521663	1.436013522
55.815	0.003939843	-1.64508E-05	-0.003739141	-0.841306633	1.066525586	1.438007231
55.82	0.003585034	-1.47853E-05	-0.003400915	-0.765205861	1.066528834	1.439856669
55.825	0.003941548	-1.66003E-05	-0.003767556	-0.84770006	1.066532761	1.44160041
55.83	0.006240856	-2.82549E-05	-0.006081275	-1.368286787	1.066542605	1.443250227
55.835	0.00522828	-2.33548E-05	-0.005089922	-1.145232377	1.066549514	1.444803969
55.84	0.0021295	-7.85646E-06	-0.001962212	-0.441497692	1.06655066	1.44626153
55.845	0.000933287	-1.85859E-06	-0.000752662	-0.169348992	1.06655088	1.447624254
55.85	-0.000172696	3.64157E-06	0.000356114	0.080125594	1.066550887	1.44890512
55.855	-0.002510859	1.53311E-05	0.002711371	0.610058507	1.066552481	1.451050874
55.86	-0.006283217	3.41292E-05	0.006495523	1.461492784	1.066562459	1.453074817
55.865	-0.01188599	6.20614E-05	0.012111143	2.725007095	1.066598165	1.454980206
55.87	-0.016037367	8.29416E-05	0.016303559	3.668300694	1.066663169	1.45677189
55.875	-0.016621899	8.60731E-05	0.016931806	3.809656266	1.066732999	1.458453334
55.88	-0.016606643	8.61476E-05	0.016946857	3.813042858	1.0668027	1.46002551
55.885	-0.017596379	9.12377E-05	0.017968028	4.042806392	1.066880957	1.461521215
55.89	-0.017672256	9.18215E-05	0.018083983	4.06889626	1.06695989	1.462950755
55.895	-0.016404844	8.5699E-05	0.016847532	3.790694703	1.067027907	1.464507983
55.9	-0.015127651	7.94988E-05	0.015596009	3.509102123	1.067085746	1.466715055
55.905	-0.013648321	7.22905E-05	0.014141673	3.181876431	1.067132826	1.468829398
55.91	-0.011753737	6.29884E-05	0.01226592	2.759831904	1.067167742	1.470848382
55.915	-0.010544576	5.70699E-05	0.011073038	2.491433549	1.067195844	1.472769163
55.92	-0.009984426	5.43965E-05	0.010534355	2.370229959	1.067221039	1.474589562
55.925	-0.009266894	5.09607E-05	0.009842152	2.21448415	1.067242743	1.476308086
55.93	-0.008091536	4.52455E-05	0.008691076	1.955492192	1.067259291	1.477923203
55.935	-0.006837249	3.91175E-05	0.00745726	1.677883573	1.067271106	1.479433017
55.94	-0.005965282	3.4903E-05	0.006608969	1.487018127	1.0672801	1.480835647
55.945	-0.003977707	2.51492E-05	0.00464649	1.045460272	1.067284099	1.482129431
55.95	-0.001408873	1.24293E-05	0.002088827	0.469986044	1.067284601	1.483311803
55.955	-0.001169997	1.12954E-05	0.001861715	0.4188858	1.067284947	1.484379975
55.96	-0.00041968	7.69613E-06	0.001137542	0.255947043	1.067284991	1.485365522
55.965	0.002171781	-5.13712E-06	-0.001440502	-0.32411302	1.067286183	1.486278334
55.97	0.001640434	-2.46067E-06	-0.000898587	-0.202182041	1.067286863	1.487116548
55.975	0.000863044	1.5852E-06	-8.16968E-05	-0.018381791	1.067287052	1.487880042
55.98	0.003902578	-1.33959E-05	-0.003098681	-0.697203332	1.067290901	1.488568807
55.985	0.005553643	-2.15589E-05	-0.004736915	-1.065805764	1.067298696	1.489180783
55.99	0.006214983	-2.47152E-05	-0.00537019	-1.20829274	1.067308459	1.489714489
55.995	0.009118481	-3.90509E-05	-0.008222345	-1.850027625	1.067329473	1.490168998
56	0.010755928	-4.71326E-05	-0.009824458	-2.21050299	1.067358713	1.490542342
56.005	0.012350223	-5.49287E-05	-0.011369442	-2.558124549	1.067397263	1.490849286
56.01	0.015806475	-7.20394E-05	-0.01475853	-3.3206693	1.067460409	1.491112855
56.015	0.017622199	-8.10286E-05	-0.016538047	-3.721060528	1.067538896	1.491331602
56.02	0.01932107	-8.93783E-05	-0.018190352	-4.092829268	1.067633245	1.491505288
56.025	0.02145018	-9.98971E-05	-0.020271064	-4.560989427	1.067749534	1.492061345
56.03	0.021636707	-0.000100679	-0.020425786	-4.595801761	1.067867854	1.492789333
56.035	0.025328789	-0.000118987	-0.024044939	-5.410111244	1.068029999	1.493442131
56.04	0.034890718	-0.00016724	-0.033570683	-7.553403676	1.068337677	1.494017105
56.045	0.044771423	-0.000217422	-0.043457424	-9.777920301	1.068844291	1.494539236
56.05	0.052869104	-0.000258768	-0.051588312	-11.60737028	1.069550739	1.495018365
56.055	0.057085187	-0.000280514	-0.055859535	-12.5683954	1.070374351	1.495451884
56.06	0.055922299	-0.000274777	-0.054700733	-12.30766495	1.071164749	1.495838432
56.065	0.056268086	-0.000276486	-0.055046322	-12.38542239	1.071964952	1.496178047
56.07	0.062511512	-0.000308167	-0.061285572	-13.78925369	1.072952586	1.496470406
56.075	0.069542826	-0.00034425	-0.06835673	-15.38026418	1.074174894	1.496713698
56.08	0.072248744	-0.000358392	-0.071125652	-16.00327176	1.075494172	1.496905879
56.085	0.070807528	-0.000351265	-0.069686171	-15.67938837	1.076761342	1.497046115
56.09	0.070269155	-0.000348589	-0.069146072	-15.55786617	1.078009315	1.497134729
56.095	0.073358813	-0.000364474	-0.072315799	-16.2710547	1.079369446	1.497171862
56.1	0.07549239	-0.000375616	-0.074495725	-16.7615382	1.080809843	1.497171862
56.105	0.074265219	-0.000369564	-0.073273437	-16.48652329	1.082203792	1.497171862
56.11	0.073468835	-0.000365609	-0.072474822	-16.30683501	1.083568005	1.497171862
56.115	0.074823813	-0.000372663	-0.0738996	-16.62741005	1.084983002	1.497171862
56.12	0.075681464	-0.000377276	-0.074820331	-16.83457447	1.086430624	1.497171862
56.125	0.073293026	-0.000365316	-0.07240546	-16.29122859	1.087788315	1.497171862
56.13	0.069667434	-0.000347437	-0.068799209	-15.47982197	1.089015007	1.497171862
56.135	0.069598113	-0.000347139	-0.068739966	-15.46649226	1.09023926	1.497171862
56.14	0.06989431	-0.000348774	-0.069070223	-15.54080021	1.091473954	1.497171862
56.145	0.067319007	-0.000336146	-0.066523887	-14.96787449	1.092619339	1.497171862
56.15	0.066254276	-0.000330915	-0.065470183	-14.73079118	1.093728779	1.497171862
56.155	0.066423706	-0.00033187	-0.065663066	-14.77418994	1.0948439	1.497171862

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
67.92602539	0.000401255	0.713162948
67.93212891	0.00051715	0.92588601
67.93823242	0.000612909	1.081762195
67.94433594	0.001105454	1.923847079
67.95043945	0.001336458	2.334042442
67.95654297	0.000918643	1.629429849
67.96264648	0.000385288	0.693256787
67.96875	0.000450886	0.813142964
67.97485352	0.000359317	0.647409499
67.98095703	0.000153397	0.278349632
67.98706055	0.000198546	0.359776302
67.99316406	8.42101E-05	0.150421552
67.99926758	0.000674711	1.202507526
68.00537109	0.001270195	2.290798416
68.01147461	0.000958959	1.736381276
68.01757813	0.000809808	1.454622444
68.02368164	0.000980575	1.74083007
68.02978516	0.000425514	0.745212079
68.03588867	0.000301299	0.524875499
68.04199219	0.000198321	0.349812687
68.0480957	0.000717517	1.277809599
68.05419922	0.001151906	2.031509396
68.06030273	0.001152063	2.007926613
68.06640625	0.000832705	1.442407052
68.07250977	0.000626669	1.083119062
68.07861328	0.000357644	0.622951402
68.0847168	0.000311674	0.546601625
68.09082031	0.000618502	1.086132216
68.09692383	0.001075313	1.900615745
68.10302734	0.001347136	2.375646197
68.10913086	0.000861352	1.499708816
68.11523438	0.000446731	0.779283849
68.12133789	0.000469431	0.830567442
68.12744141	0.000355929	0.636482276
68.13354492	0.000313336	0.561493874
68.13964844	0.000255462	0.453105105
68.14575195	0.000189233	0.330289678
68.15185547	0.000254982	0.439536891
68.15795898	0.00040506	0.696854549
68.1640625	0.00052053	0.905915205
68.17016602	0.000567684	0.997093972
68.17626953	0.000513888	0.898774285
68.18237305	0.000379635	0.657900227
68.18847656	0.000330523	0.567524391
68.19458008	0.000436587	0.749297674
68.20068359	0.000538591	0.93273681
68.20678711	0.000502229	0.871512944
68.21289063	0.000661654	1.149726274
68.21899414	0.000745738	1.305135826
68.22509766	0.000436159	0.757976769
68.23120117	0.000450796	0.774488754
68.23730469	0.000717414	1.23530216
68.2434082	0.000846615	1.458444019
68.24951172	0.000904688	1.565006688
68.25561523	0.000818119	1.436355832
68.26171875	0.000765096	1.341190512
68.26782227	0.000719982	1.248574768
68.27392578	0.000421043	0.733600479
68.2800293	0.0005276	0.930475257
68.28613281	0.000854551	1.534724861
68.29223633	0.000664393	1.213933051
68.29833984	0.000284473	0.518068417
68.30444336	0.000622639	1.124462264
68.31054688	0.000529058	0.958740868
68.31665039	0.000317728	0.58028026
68.32275391	0.000433196	0.798190791
68.32885742	0.000695574	1.290579829
68.33496094	0.000758155	1.408969721
68.34106445	0.000515348	0.953271506
68.34716797	0.000543481	0.996155598
68.35327148	0.00061419	1.118621329
68.359375	0.000380325	0.68881633
68.36547852	0.000528917	0.957517984
68.37158203	0.000564495	1.035276204
68.37768555	0.000467451	0.859044064
68.38378906	0.000679053	1.22327329
68.38989258	0.000540695	0.960118637
68.39599609	0.000821819	1.455426653
68.40209961	0.001346164	2.394938556
68.40820313	0.001255354	2.267667561
68.41430664	0.000689449	1.253127316
68.42041016	0.000271175	0.485296131
68.42651367	0.000225018	0.396569096
68.43261719	0.000486028	0.855233116
68.4387207	0.000496513	0.87633023
68.44482422	0.000437127	0.771534916
68.45092773	0.000885233	1.562848507
68.45703125	0.000960181	1.703193652
68.46313477	0.000666588	1.183598392
68.46923828	0.000475398	0.838396478
68.4753418	0.000569432	1.00186997
68.48144531	0.000975546	1.723939196
68.48754883	0.001190492	2.121417789
68.49365234	0.000972586	1.760667941
68.49975586	0.000635626	1.1583484
68.50585938	0.00049808	0.894002584
68.51196289	0.000231001	0.408167349
68.51806641	0.000181025	0.319797125
68.52416992	0.000347944	0.619951183
68.53027344	0.00040737	0.73008491
68.53637695	0.000637968	1.139859085
68.54248047	0.000869973	1.548031078
68.54858398	0.000704533	1.250347324
68.5546875	0.000302238	0.534332945

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
56.16	0.0647741	-0.000323808	-0.064039226	-14.40882575	1.095904322	1.497171862
56.165	0.063990227	-0.000319957	-0.063264042	-14.23440936	1.096939233	1.497171862
56.17	0.065430765	-0.000327156	-0.064718018	-14.56155402	1.098021265	1.497171862
56.175	0.066924735	-0.00033469	-0.06623868	-14.90370297	1.099153272	1.497171862
56.18	0.067059976	-0.000335499	-0.066401742	-14.94039195	1.100289859	1.497171862
56.185	0.06765726	-0.000338535	-0.067014354	-15.07822972	1.101446783	1.497171862
56.19	0.071318254	-0.000356804	-0.070697695	-15.90698134	1.102732299	1.497171862
56.195	0.073981494	-0.000370285	-0.073412966	-16.51791731	1.104115617	1.497171862
56.2	0.072942184	-0.000365363	-0.072418826	-16.29423576	1.105460342	1.497171862
56.205	0.073645017	-0.000368993	-0.073152087	-16.45921961	1.106831106	1.497171862
56.21	0.075630203	-0.000379091	-0.075175237	-16.91442833	1.108276767	1.497171862
56.215	0.074625408	-0.000374382	-0.074224216	-16.70044867	1.10968427	1.497939261
56.22	0.073686972	-0.00036993	-0.073325294	-16.49819108	1.111056596	1.49908174
56.225	0.073365528	-0.000368589	-0.073054759	-16.4373208	1.112416975	1.500200057
56.23	0.07071691	-0.000355702	-0.070454713	-15.85231047	1.113680904	1.501292958
56.235	0.068292748	-0.000343841	-0.068063468	-15.31428035	1.114859663	1.502358697
56.24	0.067529508	-0.000340251	-0.067340069	-15.15151552	1.116012222	1.50339559
56.245	0.065312113	-0.000329498	-0.065174419	-14.66424422	1.117090332	1.504402337
56.25	0.061607887	-0.000311306	-0.061513298	-13.84049211	1.118049619	1.505377331
56.255	0.059350167	-0.000300253	-0.059290669	-13.34040051	1.118939885	1.506601255
56.26	0.057296725	-0.000290283	-0.057287053	-12.88958699	1.119769613	1.50897951
56.265	0.052582371	-0.000267006	-0.052613287	-11.83798956	1.120468418	1.511281459
56.27	0.048435405	-0.000246433	-0.048486925	-10.90955806	1.121061346	1.513502485
56.275	0.046192389	-0.000235402	-0.046276309	-10.41216943	1.121600629	1.515638287
56.28	0.041211041	-0.000210705	-0.041331109	-9.299499506	1.122029872	1.517685383
56.285	0.036226836	-0.000185826	-0.03635555	-8.179998815	1.122361565	1.51963923
56.29	0.034610393	-0.000177828	-0.034757287	-7.820389569	1.122664319	1.521634771
56.295	0.030239465	-0.000156141	-0.030426344	-6.845927298	1.122895432	1.523685697
56.3	0.023544443	-0.000122642	-0.023745037	-5.342633216	1.123035536	1.525579561
56.305	0.019204373	-0.000100891	-0.019412305	-4.367768521	1.123128749	1.5273093
56.31	0.013202724	-7.08116E-05	-0.013427627	-3.021216067	1.123172805	1.529602328
56.315	0.005464066	-3.18163E-05	-0.005680634	-1.278142576	1.123180351	1.532664362
56.32	7.62358E-05	-4.53559E-06	-0.000268691	-0.060455478	1.123180352	1.535488663
56.325	-0.004933229	2.08682E-05	0.004765257	1.072182738	1.123186503	1.538112929
56.33	-0.008783504	4.05188E-05	0.008655459	1.94747825	1.123206002	1.540545555
56.335	-0.009174943	4.2671E-05	0.009079489	2.042884963	1.123227278	1.542781742
56.34	-0.009660935	4.51807E-05	0.009577888	2.155024739	1.123250867	1.544819468
56.345	-0.012367869	5.88797E-05	0.012287438	2.764673522	1.123289527	1.546656996
56.35	-0.016835698	8.15567E-05	0.016769366	3.77310739	1.123361165	1.548328135
56.355	-0.021567327	0.000105701	0.02153677	4.845773246	1.123478727	1.549856095
56.36	-0.023472076	0.000115577	0.023485357	5.28420533	1.123617972	1.551237322
56.365	-0.024457617	0.00012071	0.024497753	5.511994326	1.123769155	1.552469801
56.37	-0.027098524	0.000134235	0.027164654	6.112047057	1.123954751	1.55355217
56.375	-0.028741986	0.000142751	0.028843118	6.489701659	1.124163541	1.555487889
56.38	-0.030061238	0.000149574	0.030187442	6.792174526	1.124391937	1.557804399
56.385	-0.032604758	0.000162634	0.032759627	7.37091608	1.124660619	1.559986146
56.39	-0.033197158	0.000165855	0.033392266	7.513259848	1.124939152	1.562030575
56.395	-0.032759808	0.000163758	0.032968612	7.417937644	1.125210395	1.563936156
56.4	-0.035020623	0.000175291	0.035251012	7.931477588	1.125520368	1.565701903
56.405	-0.038391632	0.000192543	0.038644977	8.695119809	1.125892888	1.567325635
56.41	-0.040032217	0.00020108	0.040323633	9.072817447	1.126297925	1.568804665
56.415	-0.040378628	0.000203017	0.040704415	9.158493349	1.126710003	1.570137272
56.42	-0.041760172	0.000210156	0.042107574	9.474204174	1.127150761	1.571322533
56.425	-0.044346329	0.000223455	0.044720414	10.06209312	1.127647801	1.572950409
56.43	-0.045509236	0.000229604	0.045928037	10.33380839	1.128171251	1.575030056
56.435	-0.04540357	0.000229301	0.045866893	10.32005083	1.128692273	1.576953348
56.44	-0.04502631	0.000227626	0.045528556	10.24392505	1.129204672	1.578750844
56.445	-0.042962352	0.000217393	0.04346264	9.779093999	1.129671173	1.580422069
56.45	-0.040932292	0.000207249	0.041416032	9.318607105	1.130094628	1.581967451
56.455	-0.040528735	0.000205358	0.041034708	9.232809209	1.130509775	1.583387477
56.46	-0.038974339	0.00019768	0.039486608	8.884486829	1.130893689	1.584682033
56.465	-0.036877355	0.000187222	0.037379501	8.410387751	1.131237402	1.585851537
56.47	-0.034426426	0.000175008	0.034920037	7.857008301	1.131536945	1.586896859
56.475	-0.028711496	0.000146756	0.029237525	6.578443058	1.131745292	1.587819429
56.48	-0.023522954	0.00012093 5	0.024051709	5.41163457	1.131885141	1.588622289
56.485	-0.020918865	0.000107996	0.021455475	4.827481872	1.131995741	1.589308346
56.49	-0.016542673	8.62538E-05	0.017096993	3.846823351	1.132064906	1.589879442
56.495	-0.011080372	5.89688E-05	0.01163389	2.617625184	1.132095936	1.590495611
56.5	-0.006315112	3.50967E-05	0.006860024	1.543505443	1.132106015	1.591727105
56.505	-0.000988875	8.35919E-06	0.001519517	0.341891416	1.132106262	1.592874134
56.51	0.003931061	-1.64346E-05	-0.003426856	-0.771042709	1.132110168	1.593968817
56.515	0.0083034	-3.8539E-05	-0.007831987	-1.762197117	1.132127594	1.595468166
56.52	0.012067879	-5.76565E-05	-0.01163836	-2.618631085	1.132164401	1.597353077
56.525	0.014037242	-6.7765E-05	-0.013649691	-3.07118049	1.132214203	1.599525323
56.53	0.016178344	-7.87123E-05	-0.015826898	-3.561052125	1.132280355	1.601609202
56.535	0.018166061	-8.89511E-05	-0.01786226	-4.019008561	1.132363761	1.603606896
56.54	0.017448049	-8.56068E-05	-0.017186742	-3.867016989	1.132440704	1.60552008
56.545	0.016223291	-7.96434E-05	-0.015982669	-3.596100559	1.132507224	1.607347808
56.55	0.015452962	-7.59576E-05	-0.015238746	-3.428717934	1.132567577	1.609088331
56.555	0.013757988	-6.76145E-05	-0.013555518	-3.049991477	1.132615417	1.610769943
56.56	0.012331872	-6.05976E-05	-0.012140542	-2.731622057	1.132653852	1.612401866
56.565	0.010302023	-5.05609E-05	-0.010117729	-2.276489128	1.132680676	1.613982315
56.57	0.007223827	-3.51966E-05	-0.007023484	-1.580283875	1.132693865	1.615508998
56.575	0.005729314	-2.77466E-05	-0.005524106	-1.242923741	1.132702161	1.616979032
56.58	0.004321224	-2.07798E-05	-0.004122542	-0.927571979	1.132706881	1.618390575
56.585	0.001389826	-6.12522E-06	-0.001176128	-0.264628696	1.132707369	1.619741882
56.59	-0.000273336	2.21095E-06	0.000498895	0.112251425	1.132707388	1.621030305
56.595	-0.001484958	8.2245E-06	0.001706764	0.384021871	1.132707945	1.62225401
56.6	-0.004819971	2.49167E-05	0.005057551	1.137949083	1.132713817	1.623411411
56.605	-0.00758647	3.88454E-05	0.007851401	1.766565287	1.132728363	1.624499548
56.61	-0.008489915	4.33878E-05	0.008762094	1.971471062	1.13274658	1.625515873
56.615	-0.011102186	5.646E-05	0.011381784	2.560901308	1.132777733	1.626476741
56.62	-0.015096354	7.6443E-05	0.015383155	3.461209826	1.132835333	1.627403501
56.625	-0.017067985	8.63586E-05	0.01736719	3.907617815	1.13290896	1.628293778
56.63	-0.019530546	9.86378E-05	0.019822875	4.460146981	1.133005366	1.629161148
56.635	-0.025504615	0.000128561	0.025801238	5.805278535	1.133169771	1.63008159
56.64	-0.032130704	0.00016194	0.032460137	7.303530747	1.133430696	1.630938478
56.645	-0.037078357	0.000187017	0.037456356	8.427680083	1.133778166	1.63172573
56.65	-0.040342662	0.00020369	0.040774919	9.174356663	1.13418951	1.632438622
56.655	-0.042115077	0.000212861	0.042599355	9.584854852	1.134637791	1.63307405
56.66	-0.044087254	0.000223005	0.044616521	10.0387173	1.135129041	1.633776066
56.665	-0.046280303	0.000234301	0.046850343	10.54132725	1.135670379	1.634616639
56.67	-0.047454418	0.000240508	0.048068956	10.81551511	1.136239532	1.635388375
56.675	-0.048095153	0.000244047	0.048763596	10.97180909	1.136824158	1.636094336

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
68.56079102	0.000145493	0.258613267
68.56689453	0.000364596	0.653964924
68.57299805	0.000580168	1.041320013
68.57910156	0.000249055	0.449279459
68.58520508	0.00043129	0.780395646
68.59130859	0.000779505	1.39051545
68.59741211	0.000568956	1.005062857
68.60351563	0.000190406	0.338074217
68.60961914	0.000399783	0.716767752
68.61572266	0.000336711	0.612753091
68.62182617	0.000252985	0.46249702
68.62792969	0.000728928	1.314393419
68.6340332	0.000858885	1.540286744
68.64013672	0.000784851	1.417303616
68.64624023	0.000757824	1.380881392
68.65234375	0.000694342	1.283592179
68.65844727	0.000473857	0.88126606
68.66455078	0.000236757	0.436085847
68.6706543	0.000227304	0.415919705
68.67675781	0.000458104	0.836239447
68.68286133	0.000635636	1.155610037
68.68896484	0.000484074	0.878794924
68.69506836	0.00017387	0.315979921
68.70117188	0.000196615	0.358619496
68.70727539	0.000240847	0.438612747
68.71337891	0.000391241	0.70207144
68.71948242	0.000528829	0.939470795
68.72558594	0.000455124	0.815446329
68.73168945	0.000344956	0.627057444
68.73779297	0.00035615	0.65148008
68.74389648	0.0004172	0.758881353
68.75	0.00040489	0.725696051
68.75610352	0.000388299	0.689090303
68.76220703	0.000346653	0.619845977
68.76831055	0.00031201	0.565793303
68.77441406	0.000468793	0.854123927
68.78051758	0.000521205	0.951486863
68.78662109	0.000410342	0.748860286
68.79272461	0.000161741	0.291957708
68.79882813	0.000157623	0.282766523
68.80493164	0.000100885	0.182748178
68.81103516	0.000125699	0.230384431
68.81713867	0.000296244	0.545641827
68.82324219	0.000460427	0.846014229
68.8293457	0.000478877	0.87092843
68.83544922	0.000422442	0.758557306
68.84155273	0.000252256	0.450367088
68.84765625	0.000477609	0.861773647
68.85375977	0.000840598	1.551039555
68.85986328	0.000754624	1.407855455
68.8659668	0.000638293	1.185845427
68.87207031	0.000551432	1.019872556
68.87817383	0.000468517	0.861812856
68.88427734	0.000417765	0.768440311
68.89038086	0.000405483	0.758334112
68.89648438	0.00051655	0.977199595
68.90258789	0.000346092	0.650982831
68.90869141	6.92931E-05	0.129716766
68.91479492	0.000219919	0.409890619
68.92089844	0.000527241	0.980000812
68.92700195	0.000668801	1.257112443
68.93310547	0.000699758	1.329654126
68.93920898	0.000828197	1.579205515
68.9453125	0.000916629	1.758823966
68.95141602	0.000702464	1.345726573
68.95751953	0.000330611	0.628423394
68.96362305	0.000195148	0.372527506
68.96972656	0.000314401	0.606960624
68.97583008	0.000557902	1.087796256
68.98193359	0.000676545	1.327438819
68.98803711	0.000540807	1.052674268
68.99414063	0.000355123	0.680367085
69.00024414	0.000373198	0.711403793
69.00634766	0.000521952	1.000365154
69.01245117	0.000624926	1.20064247
69.01855469	0.000603536	1.1536151
69.0246582	0.000626368	1.189323433
69.03076172	0.000799901	1.508269332
69.03686523	0.00114768	2.147304972
69.04296875	0.001307732	2.439928694
69.04907227	0.000983984	1.837387989
69.05517578	0.000665139	1.24760809
69.0612793	0.000545892	1.039166565
69.06738281	0.000235831	0.451779345
69.07348633	4.28856E-05	0.080656301
69.07958984	0.000165929	0.307504076
69.08569336	0.000239438	0.445406203
69.09179688	0.0002094	0.392198261
69.09790039	0.000191291	0.36120192
69.10400391	0.000164056	0.310041856
69.11010742	0.000147856	0.275124289
69.11621094	0.000313583	0.576104757
69.12231445	0.000330343	0.605253388
69.12841797	0.000163655	0.300532295
69.13452148	0.000137249	0.255004379
69.140625	0.000247126	0.463420828
69.14672852	0.000384458	0.71845837
69.15283203	0.000415507	0.774841829
69.15893555	0.000231193	0.431410575
69.16503906	0.000150226	0.279358495
69.17114258	0.000330759	0.616283659
69.17724609	0.000352972	0.664500731
69.18334961	0.00027252	0.518042481
69.18945313	0.000274814	0.524247004

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
56.68	-0.046876326	0.000238265	0.047595819	10.70905933	1.137379529	1.636755987
56.685	-0.044563049	0.000226884	0.045298791	10.19222789	1.137881439	1.637377028
56.69	-0.046050035	0.000234552	0.046847226	10.54062595	1.138417403	1.637958213
56.695	-0.047741336	0.000243451	0.048643189	10.94471763	1.13899346	1.63849899
56.7	-0.043166411	0.000221112	0.044134388	9.930237303	1.139464402	1.638998892
56.705	-0.037479293	0.000193139	0.038497888	8.662024819	1.139819427	1.639459733
56.71	-0.033888179	0.000175565	0.034961293	7.866290832	1.140109677	1.639883966
56.715	-0.027622258	0.000144675	0.028753483	6.469533674	1.140302516	1.640273519
56.72	-0.020004768	0.000106861	0.02116759	4.762707706	1.140403661	1.640631215
56.725	-0.014490912	7.94176E-05	0.015671156	3.52601008	1.140456733	1.640960404
56.73	-0.009854319	5.63454E-05	0.011055841	2.487564296	1.140481276	1.641263718
56.735	-0.005185472	3.31103E-05	0.006413037	1.442933258	1.140488072	1.64154334
56.74	0.000946833	2.54093E-06	0.000312353	0.070279503	1.140488298	1.641801504
56.745	0.009977458	-4.27016E-05	-0.008701095	-1.957746302	1.140513459	1.642041138
56.75	0.018927167	-8.78014E-05	-0.01766807	-3.975315755	1.140604	1.642266285
56.755	0.023931008	-0.000113169	-0.022704135	-5.108430475	1.140748743	1.642480899
56.76	0.026380406	-0.000125571	-0.02516399	-5.661897842	1.140924632	1.642835795
56.765	0.031672142	-0.000152256	-0.030452782	-6.851876022	1.141178163	1.643259109
56.77	0.039314955	-0.000191006	-0.038122293	-8.577515819	1.141568816	1.643605237
56.775	0.042876521	-0.000209262	-0.041731119	-9.389501815	1.142033455	1.643875277
56.78	0.044721245	-0.000218686	-0.043593061	-9.808438692	1.142538934	1.644079577
56.785	0.051076001	-0.000250976	-0.04996722	-11.24262461	1.143198275	1.644276263
56.79	0.056427194	-0.000278431	-0.055380189	-12.46054254	1.14400301	1.644477373
56.795	0.056497287	-0.000279061	-0.05549706	-12.48683848	1.144809745	1.644685131
56.8	0.058218247	-0.000287916	-0.057248907	-12.88100411	1.145666377	1.644899911
56.805	0.062838666	-0.000311614	-0.061914651	-13.93079653	1.146664375	1.645122536
56.81	0.064209698	-0.000318913	-0.063350754	-14.25391961	1.147706398	1.645354778
56.815	0.063283807	-0.000314432	-0.062445603	-14.0502607	1.148718586	1.645597282
56.82	0.065095997	-0.000323794	-0.064310899	-14.46995228	1.149789573	1.645849834
56.825	0.068708668	-0.000342412	-0.067971505	-15.29358872	1.150982734	1.646113173
56.83	0.070048639	-0.00034957	-0.069378222	-15.61009998	1.152222887	1.646388709
56.835	0.069621756	-0.000347708	-0.069001947	-15.52543808	1.153447971	1.646677038
56.84	0.0701264	-0.000350574	-0.069575441	-15.65447418	1.154690879	1.647161846
56.845	0.06920435	-0.000346267	-0.068704554	-15.45852463	1.155901318	1.647736923
56.85	0.065003176	-0.000325503	-0.064514556	-14.51577512	1.156969254	1.648283047
56.855	0.063083658	-0.000316151	-0.062629451	-14.09162636	1.157975049	1.648794526
56.86	0.063993765	-0.000320955	-0.063599801	-14.30995519	1.159010075	1.649267741
56.865	0.060235862	-0.000302694	-0.059918521	-13.48166718	1.15992711	1.649912521
56.87	0.053847083	-0.000271136	-0.053569396	-12.05311399	1.160659936	1.65046905
56.875	0.052021218	-0.000262174	-0.051768329	-11.64787414	1.161343905	1.650950873
56.88	0.051284802	-0.000258783	-0.051087241	-11.49462914	1.162008648	1.651382897
56.885	0.04625009	-0.00023399	-0.046109991	-10.37474803	1.162549279	1.651767699
56.89	0.040987769	-0.000207876	-0.040874305	-9.196718564	1.162973883	1.652143748
56.895	0.03904072	-0.000198289	-0.038953766	-8.764597411	1.163359106	1.652518513
56.9	0.03632363	-0.000184954	-0.036284066	-8.16391486	1.163692574	1.6528908
56.905	0.031419249	-0.000160604	-0.031413606	-7.068061434	1.163942072	1.653259208
56.91	0.02806265	-0.000143913	-0.028078338	-6.317626006	1.164141109	1.653621605
56.915	0.025741414	-0.00013245	-0.025789244	-5.802580003	1.16430858	1.653976341
56.92	0.021978295	-0.000113766	-0.022060756	-4.963670114	1.164430666	1.65432215
56.925	0.018117818	-9.45094E-05	-0.018221318	-4.099796592	1.164513629	1.654657312
56.93	0.015273778	-8.03347E-05	-0.015397268	-3.464385332	1.164572591	1.654980041
56.935	0.012898566	-6.85314E-05	-0.013047054	-2.935587045	1.16461464	1.655288945
56.94	0.010054582	-5.44001E-05	-0.010234915	-2.302855933	1.164640191	1.655582839
56.945	0.00627271	-3.55389E-05	-0.006484253	-1.458956965	1.164650135	1.655860339
56.95	0.00328291	-2.0607E-05	-0.003517163	-0.791361724	1.164652859	1.656119754
56.955	0.000873875	-8.62034E-06	-0.001136709	-0.255759443	1.164653052	1.656359664
56.96	-0.002812576	9.77663E-06	0.002514387	0.565737003	1.164655052	1.656578822
56.965	-0.005741794	2.44249E-05	0.005419452	1.219376777	1.164663384	1.656775619
56.97	-0.007892345	3.51239E-05	0.007540129	1.696528934	1.164679127	1.656948691
56.975	-0.011760963	5.45175E-05	0.011381758	2.560895486	1.164714086	1.657108442
56.98	-0.014677849	6.92386E-05	0.014295736	3.216540609	1.164768537	1.657259585
56.985	-0.016085198	7.628E-05	0.015688911	3.530004896	1.164833929	1.657401674
56.99	-0.019590768	9.39042E-05	0.019174144	4.314182338	1.164930931	1.657534418
56.995	-0.023216517	0.000112242	0.022797692	5.129480751	1.16506716	1.657657311
57	-0.025400372	0.000123262	0.024973984	5.619146414	1.165230223	1.657769825
57.005	-0.029264945	0.000142783	0.028826707	6.486009012	1.16544668	1.657871562
57.01	-0.033466817	0.000164129	0.033036181	7.43314069	1.165729757	1.657961959
57.015	-0.035688357	0.000175446	0.03526622	7.934899603	1.166051663	1.658040417
57.02	-0.038291242	0.00018865	0.037867071	8.520090864	1.166422237	1.658106558
57.025	-0.041757806	0.000206278	0.041337063	9.300839144	1.166862945	1.658159982
57.03	-0.044076397	0.000218128	0.04366825	9.825356174	1.167353953	1.658200205
57.035	-0.045462069	0.000225215	0.045062108	10.13897425	1.167876318	1.658226881
57.04	-0.047500054	0.000235578	0.047099216	10.59732362	1.168446567	1.658239784
57.045	-0.050427545	0.000250479	0.050025699	11.25578218	1.169089272	1.658240983
57.05	-0.052832191	0.000262764	0.052435611	11.79801236	1.169794733	1.658240983
57.055	-0.054964319	0.000273645	0.05456908	12.278043	1.170558283	1.658240983
57.06	-0.058073717	0.0002895	0.05767626	12.97715843	1.171410667	1.658240983
57.065	-0.060258988	0.000300728	0.059875429	13.47197161	1.172328407	1.658240983
57.07	-0.06112098	0.000305201	0.060751238	13.66902859	1.17327259	1.658240983
57.075	-0.063561503	0.000317644	0.063186886	14.21704944	1.174293681	1.658240983
57.08	-0.066496858	0.000332673	0.066127196	14.87861912	1.17541126	1.658240983
57.085	-0.067719909	0.000339036	0.067370764	15.15842181	1.176570327	1.658240983
57.09	-0.068863615	0.000344962	0.068528472	15.41890615	1.177688875	1.658240983
57.095	-0.069948947	0.000350619	0.069633363	15.66750666	1.179005501	1.658240983
57.1	-0.069619339	0.000349095	0.069325471	15.59823099	1.1802305	1.658240983
57.105	-0.068997943	0.000346037	0.068707866	15.45926974	1.181433729	1.658240983
57.11	-0.06872231	0.000344709	0.068439719	15.39893686	1.182627363	1.658240983
57.115	-0.068377774	0.000343015	0.068097655	15.32197233	1.18380906	1.658240983
57.12	-0.068138591	0.000341822	0.067856919	15.26780675	1.184982503	1.658240983
57.125	-0.068651218	0.000344395	0.068376654	15.38474714	1.18617367	1.658240983
57.13	-0.071337597	0.00035798	0.071070771	15.99092352	1.187459883	1.658240983
57.135	-0.07531829	0.000378422	0.075060164	16.88853693	1.188893644	1.65831153
57.14	-0.078834443	0.000396541	0.078592524	17.68331781	1.190464397	1.658633059
57.145	-0.082481068	0.000415372	0.082260538	18.50862112	1.192183827	1.658893967
57.15	-0.084989412	0.000428453	0.084805759	19.08129573	1.194009427	1.659093969
57.155	-0.084902962	0.000428222	0.084751179	19.06901537	1.195831314	1.659232859
57.16	-0.084847136	0.000428068	0.084720064	19.06201431	1.197650807	1.659310215
57.165	-0.086074909	0.000434497	0.085980878	19.3456975	1.199523338	1.659326023
57.17	-0.087591926	0.00044244	0.087524428	19.6929963	1.201462455	1.659371328
57.175	-0.089596097	0.000452915	0.089558475	20.15065696	1.203491325	1.659678001
57.18	-0.091125038	0.000461018	0.091131084	20.50449387	1.20559003	1.659934781
57.185	-0.091186725	0.000461634	0.091246515	20.53046591	1.207691577	1.660140861
57.19	-0.090063961	0.000456186	0.090146267	20.28291	1.209741691	1.660295359
57.195	-0.086948497	0.000440504	0.086981605	19.57086109	1.211652424	1.660397308

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
69.19555664	0.000581684	1.101134241
69.20166016	0.00090079	1.682742012
69.20776367	0.000931495	1.74487586
69.21386719	0.000664351	1.269203568
69.2199707	0.00053303	1.030250641
69.22607422	0.00066892	1.288013816
69.23217773	0.001059342	2.030755251
69.23828125	0.001263619	2.426628197
69.24438477	0.001029636	1.989320658
69.25048828	0.000547779	1.064810626
69.2565918	0.000295875	0.57631442
69.26269531	0.000442837	0.863586677
69.26879883	0.00067403	1.317856092
69.27490234	0.000526785	1.028318616
69.28100586	0.00046664	0.904330912
69.28710938	0.000687683	1.325423105
69.29321289	0.000669087	1.296289988
69.29931641	0.00061053	1.205595988
69.30541992	0.000706006	1.422690731
69.31152344	0.000822283	1.658942053
69.31762695	0.000898938	1.791992207
69.32373047	0.001073993	2.132390971
69.32983398	0.00097488	1.945795575
69.3359375	0.00040278	0.81019559
69.34204102	0.000177414	0.359806591
69.34814453	0.00011635	0.236487401
69.35424805	0.000212129	0.427444028
69.36035156	5.79833E-05	0.11503396
69.36645508	0.000673373	1.326462578
69.37255859	0.000961098	1.910391792
69.37866211	0.000771829	1.545604903
69.38476563	0.00041509	0.829374816
69.39086914	0.000107425	0.215140827
69.39697266	0.000239452	0.480748044
69.40307617	0.000532997	1.059043155
69.40917969	0.000882506	1.737171338
69.4152832	0.000901702	1.787599995
69.42138672	0.000640539	1.289896537
69.42749023	0.000388614	0.78852
69.43359375	0.000504063	1.015175995
69.43969727	0.000573876	1.138123739
69.44580078	0.000417359	0.821220497
69.4519043	0.000273807	0.543192524
69.45800781	0.00027162	0.546810634
69.46411133	0.000281806	0.571655176
69.47021484	0.000302139	0.612217372
69.47631836	0.000350492	0.707126546
69.48242188	0.000454269	0.917026658
69.48852539	0.000347289	0.706411726
69.49462891	0.000236088	0.483970659
69.50073242	0.000344281	0.711514766
69.50683594	0.00028761	0.601055631
69.51293945	0.000586922	1.23504857
69.51904297	0.000686106	1.444493325
69.52514648	0.000379154	0.796375577
69.53125	0.000148583	0.311454943
69.53735352	0.000453974	0.958712448
69.54345703	0.000315858	0.676999504
69.54956055	0.000237118	0.510722936
69.55566406	0.000506839	1.082263721
69.56176758	0.00055714	1.173474461
69.56787109	0.000441876	0.922901825
69.57397461	0.000301747	0.633499998
69.58007813	0.00029312	0.621925103
69.58618164	0.00045044	0.96188891
69.59228516	0.000598164	1.275293269
69.59838867	0.000579076	1.218000549
69.60449219	0.000531798	1.110378248
69.6105957	0.000600339	1.267630513
69.61669922	0.000672198	1.437944539
69.62280273	0.000721182	1.561705229
69.62890625	0.000728855	1.600058716
69.63500977	0.000613933	1.349211136
69.64111328	0.000732344	1.595170293
69.6472168	0.000949223	2.04798223
69.65332031	0.000966982	2.074319672
69.65942383	0.000985069	2.128303148
69.66552734	0.001027034	2.245584539
69.67163086	0.000976472	2.134731176
69.67773438	0.000949213	2.044498353
69.68383789	0.000973867	2.058474864
69.68994141	0.000904569	1.90325022
69.69604492	0.001032681	2.197060351
69.70214844	0.001355387	2.90025429
69.70825195	0.001380002	2.942199318
69.71435547	0.00122345	2.598795225
69.72045898	0.001062409	2.24036186
69.7265625	0.000965595	2.016823575
69.73266602	0.001111665	2.318008915
69.73876953	0.001328184	2.774479658
69.74487305	0.001261723	2.630101901
69.75097656	0.001124915	2.346357252
69.75708008	0.001060042	2.212321517
69.76318359	0.000924336	1.910382349
69.76928711	0.000784347	1.607003492
69.77539063	0.000569917	1.176046352
69.78149414	0.00046537	0.978224729
69.78759766	0.000712361	1.519051544
69.79370117	0.000790317	1.681088
69.79980469	0.000606531	1.275929255
69.8059082	0.000710058	1.492414215
69.81201172	0.000986999	2.092885905
69.81811523	0.000937583	2.009701277
69.82421875	0.000618361	1.341826007

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
57.2	-0.08381112	0.00042461	0.083777675	18.84997694	1.213427755	1.660445566
57.205	-0.083224246	0.000421799	0.083211346	18.72255274	1.215178309	1.660449281
57.21	-0.081578203	0.000413672	0.081574538	18.35427107	1.216860302	1.660449281
57.215	-0.077034965	0.000391375	0.077087587	17.34470698	1.218360166	1.660449281
57.22	-0.071886611	0.000365985	0.071984944	16.19661243	1.219666252	1.660449281
57.225	-0.065053855	0.000332117	0.065189069	14.66754056	1.220735854	1.660449281
57.23	-0.057990366	0.000296893	0.058133305	13.07999366	1.221585792	1.660449281
57.235	-0.054335902	0.000278583	0.054470286	12.25581433	1.222331983	1.660449281
57.24	-0.053355534	0.00027367	0.053488085	12.03481913	1.22305149	1.660449281
57.245	-0.053835089	0.00027612	0.053982867	12.14614499	1.223783988	1.660449281
57.25	-0.053468704	0.000274437	0.053642958	12.06966546	1.22450655	1.660449281
57.255	-0.050015563	0.000257287	0.050214048	11.29816087	1.225138797	1.660449281
57.26	-0.048077287	0.000247559	0.048271288	10.86103973	1.225722989	1.660449281
57.265	-0.050277359	0.000258558	0.050492071	11.36071594	1.226361871	1.660449281
57.27	-0.052082574	0.000267697	0.052336049	11.775611	1.227047455	1.660449281
57.275	-0.052944574	0.000272098	0.053223793	11.97535344	1.227755921	1.660449281
57.28	-0.055265712	0.000283797	0.055581865	12.50591952	1.228527868	1.661000438
57.285	-0.057916498	0.000297202	0.058282134	13.11348005	1.229375643	1.662078936
57.29	-0.060869392	0.000312136	0.061287683	13.78972875	1.23031207	1.663523068
57.295	-0.064926094	0.000332569	0.065395912	14.7140801	1.231377474	1.664877174
57.3	-0.06700922	0.000343315	0.067554777	15.19982485	1.232512341	1.666142565
57.305	-0.065986765	0.000338596	0.066601757	14.98539522	1.23361284	1.667319582
57.31	-0.065767789	0.000337836	0.066448276	14.95086215	1.234706047	1.668407128
57.315	-0.065761595	0.000338277	0.066537384	14.97091131	1.235799048	1.670165448
57.32	-0.060061521	0.000310563	0.060946632	13.71299226	1.236710783	1.67258171
57.325	-0.048711717	0.000254625	0.049690543	11.18037226	1.237310495	1.67488814
57.33	-0.035498095	0.000188727	0.036539943	8.221487249	1.237628978	1.677085718
57.335	-0.020775729	0.000114837	0.021849531	4.916144513	1.237738069	1.679219649
57.34	-0.007105085	4.58007E-05	0.008166461	1.837453739	1.237750828	1.68128662
57.345	0.002381518	-2.35E-06	-0.00135354	-0.304546582	1.237752261	1.683277407
57.35	0.009330079	-3.77507E-05	-0.008340641	-1.876644129	1.237774262	1.685185104
57.355	0.012050881	-5.18117E-05	-0.011113079	-2.500442728	1.237810966	1.687671562
57.36	0.008351714	-3.34135E-05	-0.007399125	-1.664803027	1.237828595	1.690849478
57.365	0.007319471	-2.80324E-05	-0.00631479	-1.420827716	1.237842136	1.695102276
57.37	0.015929137	-7.09124E-05	-0.014876675	-3.347251952	1.237906266	1.699226024
57.375	0.025366204	-0.000118966	-0.024332267	-5.474759982	1.238068891	1.703209917
57.38	0.028310833	-0.000134137	-0.027313876	-6.145622055	1.238271463	1.70729441
57.385	0.02806154	-0.000132915	-0.027067042	-6.090084414	1.238470484	1.713759984
57.39	0.02887595	-0.000136994	-0.027875146	-6.271907865	1.238681225	1.721224776
57.395	0.031858262	-0.000152067	-0.03083518	-6.937915566	1.238937745	1.729447071
57.4	0.037509116	-0.000180818	-0.036476712	-8.207260298	1.239293335	1.737384274
57.405	0.043104726	-0.000209497	-0.042097645	-9.471970209	1.239762932	1.74504146
57.41	0.043331673	-0.000210847	-0.042341307	-9.526793999	1.240237487	1.75244241
57.415	0.041153136	-0.000199695	-0.040090054	-9.020262211	1.240665525	1.759584024
57.42	0.045277881	-0.000220345	-0.044222124	-9.949977874	1.241183666	1.766467042
57.425	0.051969233	-0.000254675	-0.050939601	-11.46141018	1.241866269	1.773081611
57.43	0.052575172	-0.000258008	-0.051575187	-11.60441701	1.242564884	1.779413611
57.435	0.051335788	-0.000251715	-0.050304467	-11.31850497	1.243230948	1.785459091
57.44	0.053933355	-0.000265006	-0.052959208	-11.9158217	1.243966123	1.791217966
57.445	0.057052011	-0.000281068	-0.05609795	-12.62203884	1.244788778	1.796684162
57.45	0.059191515	-0.000292154	-0.058263082	-13.1091934	1.245674291	1.801849974
57.455	0.060695782	-0.000300031	-0.059800796	-13.45517902	1.246605384	1.806709513
57.46	0.060134058	-0.00029733	-0.0592554	-13.33246491	1.247519322	1.811338285
57.465	0.059990255	-0.000296683	-0.059124663	-13.30304921	1.248428895	1.816893995
57.47	0.061557931	-0.000304827	-0.06073693	-13.66580933	1.249386627	1.822103505
57.475	0.061466737	-0.00030454	-0.060668731	-13.65046438	1.250341523	1.826963463
57.48	0.060528397	-0.000299839	-0.059719379	-13.43686038	1.251267488	1.831519584
57.485	0.061582091	-0.00030529	-0.060820356	-13.68458013	1.252225971	1.835787662
57.49	0.063424424	-0.000314826	-0.062688081	-14.10481826	1.253242662	1.839765091
57.495	0.065071431	-0.000323388	-0.064358302	-14.48061787	1.254312842	1.843447511
57.5	0.066573599	-0.000331225	-0.065886384	-14.82443642	1.255433002	1.846830825
57.505	0.06765031	-0.000336873	-0.066987522	-15.07219236	1.256589688	1.849911491
57.51	0.069725829	-0.000347602	-0.069078494	-15.54266109	1.257818437	1.852686535
57.515	0.07324412	-0.000365759	-0.072615231	-16.3384269	1.259174318	1.855156208
57.52	0.075810243	-0.00037912	-0.07521622	-16.92364945	1.26062687	1.857373384
57.525	0.076711066	-0.000383939	-0.076154073	-17.13466653	1.262114147	1.859369571
57.53	0.078616722	-0.000393828	-0.078077897	-17.56752693	1.263676236	1.861142781
57.535	0.082914205	-0.000416118	-0.08241187	-18.54267074	1.265413772	1.862721978
57.54	0.086727292	-0.000436036	-0.086281509	-19.41333947	1.267314796	1.864117939
57.545	0.088285094	-0.000444337	-0.087893439	-19.77602381	1.269284725	1.865326116
57.55	0.090810231	-0.00045755	-0.09045797	-20.35304328	1.271368954	1.866371269
57.555	0.095262658	-0.000480791	-0.094964061	-21.36691372	1.273662574	1.867272832
57.56	0.098574151	-0.00049825	-0.098344019	-22.12740437	1.276118425	1.868049759
57.565	0.100907463	-0.000510649	-0.100741628	-22.66686622	1.278691915	1.868749377
57.57	0.103602726	-0.000524931	-0.103500758	-23.28767045	1.281404718	1.869361676
57.575	0.105361495	-0.000534416	-0.10533145	-23.69957619	1.284210408	1.869860861
57.58	0.106331266	-0.000539817	-0.106373362	-23.93400653	1.287067985	1.871057964
57.585	0.10726064	-0.000545018	-0.107376296	-24.15966653	1.289975733	1.87222563
57.59	0.107080779	-0.000544509	-0.107267304	-24.13514344	1.292873737	1.87326682
57.595	0.106038514	-0.000539523	-0.106260349	-23.90857849	1.2957156	1.874146006
57.6	0.105023591	-0.000534667	-0.105280054	-23.68801207	1.298503323	1.874893138
57.605	0.103551788	-0.00052747	-0.103827961	-23.36129125	1.301213459	1.875485888
57.61	0.101564038	-0.00051762	-0.101841678	-22.9143776	1.303820548	1.875913442
57.615	0.099167599	-0.000505687	-0.099436844	-22.37328984	1.306306058	1.876202598
57.62	0.095075579	-0.000485482	-0.095368875	-21.45799691	1.308590678	1.876868474
57.625	0.089315221	-0.000457294	-0.089701415	-20.18281838	1.310606846	1.878546295
57.63	0.082185976	-0.000422266	-0.082670505	-18.60086365	1.312313995	1.880071309
57.635	0.07145884	-0.000369239	-0.072050238	-16.2113036	1.313604584	1.881516157
57.64	0.054391358	-0.000284235	-0.055081078	-12.39324247	1.314352298	1.882879435
57.645	0.031054866	-0.000167033	-0.031790436	-7.152848061	1.314596043	1.884153607
57.65	0.007556737	-4.79727E-05	-0.008249103	-1.856048279	1.314610476	1.885329578
57.655	-0.008249747	3.28472E-05	0.007665727	1.724788507	1.314627677	1.886398486
57.66	-0.014402233	6.47424E-05	0.013932294	3.134766124	1.314680101	1.887353914
57.665	-0.014501744	6.56372E-05	0.014099004	3.17227581	1.314733253	1.888192526
57.67	-0.015048009	6.85659E-05	0.01468297	3.30366833	1.314790484	1.88891302
57.675	-0.020088476	9.43682E-05	0.019745897	4.442826758	1.314892477	1.889514251
57.68	-0.02516432	0.000120529	0.024874003	5.596650603	1.315052524	1.889994195
57.685	-0.026273445	0.000126443	0.026032458	5.857303088	1.315226989	1.890351036
57.69	-0.027913079	0.000134925	0.027693596	6.231059182	1.31542391	1.890584128
57.695	-0.032290426	0.000157443	0.032100936	7.22271062	1.315687436	1.890692978
57.7	-0.035083727	0.000171966	0.034941515	7.861840854	1.315998527	1.890745808
57.705	-0.035508647	0.000174318	0.035401431	7.965321906	1.316317199	1.891948143
57.71	-0.037645103	0.000185321	0.037552051	8.449211468	1.316675372	1.89302945
57.715	-0.042556529	0.000210622	0.042494327	9.561223663	1.317133101	1.893987736

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
69.83032227	0.000477771	1.042421664
69.83642578	0.000608441	1.321772907
69.8425293	0.000765234	1.659122341
69.84863281	0.000729798	1.583947495
69.85473633	0.000578338	1.257398034
69.86083984	0.000352069	0.774232165
69.86694336	0.000121623	0.271605757
69.87304688	0.000276904	0.622610078
69.87915039	0.000278215	0.623935023
69.88525391	0.000221365	0.490461918
69.89135742	0.000219832	0.482458434
69.89746094	0.000289125	0.638709116
69.90356445	0.000121257	0.272078986
69.90966797	0.000360793	0.823880601
69.91577148	0.000584823	1.341940444
69.921875	0.000609514	1.374039905
69.92797852	0.000609758	1.363163302
69.93408203	0.000803581	1.819339035
69.94018555	0.001078797	2.454329676
69.94628906	0.001140802	2.603399755
69.95239258	0.000949789	2.191772017
69.95849609	0.000805723	1.850677884
69.96459961	0.00092082	2.091738813
69.97070313	0.001239827	2.823824535
69.97680664	0.001402558	3.193710236
69.98291016	0.001138569	2.596794933
69.98901367	0.000900752	2.09721296
69.99511719	0.000953977	2.245842808
70.0012207	0.000871898	2.012138584
70.00732422	0.000763593	1.721876753
70.01342773	0.000627093	1.40632209
70.01953125	0.000800576	1.813832162
70.02563477	0.001299581	2.986992822
70.03173828	0.001282009	2.951785981
70.0378418	0.000892401	2.028816262
70.04394531	0.000629569	1.409200575
70.05004883	0.000556218	1.233940226
70.05615234	0.000680557	1.513468327
70.06225586	0.000901198	2.024357434
70.06835938	0.000804037	1.82547049
70.07446289	0.000665921	1.520525949
70.08056641	0.001052689	2.398941321
70.08666992	0.001125434	2.548555373
70.09277344	0.000723772	1.629133281
70.09887695	0.000225907	0.507507909
70.10498047	6.80671E-05	0.153738764
70.11108398	0.000149208	0.340902399
70.1171875	0.000345091	0.795921418
70.12329102	0.000402259	0.920847486
70.12939453	0.000254802	0.573024172
70.13549805	0.000465068	1.045482988
70.14160156	0.000481791	1.101859891
70.14770508	0.000344542	0.800946616
70.15380859	0.000436276	1.029456987
70.15991211	0.000673136	1.594953979
70.16601563	0.000877896	2.05791939
70.17211914	0.0008429	1.977821718
70.17822266	0.00055587	1.336008307
70.18432617	0.000290333	0.713366472
70.19042969	0.000142423	0.351784691
70.1965332	0.000221337	0.54664408
70.20263672	0.000389209	0.961220231
70.20874023	0.000827236	2.029854295
70.21484375	0.001170094	2.856923424
70.22094727	0.0009962	2.455196253
70.22705078	0.000501695	1.254794272
70.2331543	0.000347216	0.872719013
70.23925781	0.000333544	0.832384888
70.24536133	0.000412928	1.01445993
70.25146484	0.000514316	1.245661258
70.25756836	0.000334239	0.809195423
70.26367188	0.000331078	0.810971045
70.26977539	0.000757932	1.882924487
70.27587891	0.000648488	1.622639822
70.28198242	0.0005013	1.239793011
70.28808594	0.000652608	1.586259661
70.29418945	0.000697286	1.703688833
70.30029297	0.0009274 7	2.308154399
70.30639648	0.000969746	2.433870172
70.3125	0.000722055	1.81931923
70.31860352	0.000818637	2.062939552
70.32470703	0.000846602	2.11532248
70.33081055	0.000400716	0.994088388
70.33691406	0.000188804	0.465253805
70.34301758	0.000557127	1.369368818
70.34912109	0.000874718	2.186012805
70.35522461	0.000951748	2.415906172
70.36132813	0.000858269	2.156227554
70.36743164	0.000996363	2.467918554
70.37353516	0.001283098	3.175014573
70.37963867	0.001388184	3.457659403
70.38574219	0.001121193	2.831656031
70.3918457	0.000660682	1.678153212
70.39794922	0.000399121	0.999500922
70.40405273	0.000282035	0.694592309
70.41015625	3.18408E-05	0.077324297
70.41625977	0.000536854	1.292418073
70.42236328	0.00116888	2.834039564
70.4284668	0.001492679	3.643732785
70.43457031	0.001453902	3.539757549
70.44067383	0.00131953	3.223205891
70.44677734	0.001246284	3.048576957
70.45288086	0.00124168	3.006669951
70.45898438	0.001143566	2.753197929

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
57.72	-0.045923908	0.000228175	0.045920236	10.332053	1.317666134	1.894820539
57.725	-0.045587701	0.000226719	0.045621523	10.26484265	1.31819139	1.895548288
57.73	-0.046268709	0.000230354	0.046345278	10.42768758	1.318732456	1.896195418
57.735	-0.049495295	0.000247113	0.049613938	11.16313611	1.319351618	1.896672026
57.74	-0.049724349	0.000248635	0.049892946	11.22591285	1.319976523	1.896991013
57.745	-0.046545046	0.000232601	0.046656773	10.49777403	1.320524072	1.897180194
57.75	-0.044503175	0.000222296	0.0445787	10.03020748	1.321024634	1.897240615
57.755	-0.043269302	0.000216159	0.043341783	9.751901085	1.321497824	1.897240615
57.76	-0.040757098	0.000203475	0.040786859	9.177043171	1.321917663	1.897240615
57.765	-0.037899521	0.000188978	0.037868922	8.520507525	1.322280693	1.897240615
57.77	-0.03544434	0.000176515	0.035362238	7.956503476	1.322598212	1.897240615
57.775	-0.033516066	0.000166741	0.033397625	7.514465616	1.322882123	1.897240615
57.78	-0.031682361	0.000157489	0.031538976	7.096269573	1.323135818	1.897240615
57.785	-0.028020369	0.000139191	0.027865543	6.269747236	1.323334255	1.897543402
57.79	-0.022926393	0.000113863	0.022786359	5.126930756	1.323467101	1.8987511
57.795	-0.018763453	9.3078E-05	0.018623129	4.19020411	1.323556083	1.899902078
57.8	-0.016120118	7.98597E-05	0.015977666	3.594974771	1.323621759	1.900997068
57.805	-0.014692012	7.27383E-05	0.014553107	3.274448983	1.323676315	1.90203638
57.81	-0.012272137	6.07186E-05	0.012149798	2.733704545	1.323714379	1.903020043
57.815	-0.007530936	3.69756E-05	0.007406424	1.666445397	1.323728713	1.903948411
57.82	-0.00463134	2.23181E-05	0.00448077	1.008173291	1.323734134	1.904822395
57.825	-0.005218823	2.51596E-05	0.005054704	1.137308464	1.323741018	1.905642446
57.83	-0.005137612	2.47303E-05	0.004967938	1.117786065	1.323747689	1.906408171
57.835	-0.004448395	2.12169E-05	0.004261044	0.958734836	1.32375269	1.907119257
57.84	-0.005054878	2.41908E-05	0.004861713	1.093885526	1.323759148	1.907775548
57.845	-0.00517296	2.47241E-05	0.004969396	1.118114149	1.323765912	1.908376666
57.85	-0.006621141	3.18446E-05	0.006406948	1.441563359	1.323776992	1.908922279
57.855	-0.011631687	5.66233E-05	0.011403917	2.565881221	1.323811187	1.909411649
57.86	-0.015695489	7.68563E-05	0.015478548	3.482673194	1.323873449	1.909843212
57.865	-0.018186147	8.9248E-05	0.017971718	4.043636512	1.32395704	1.910215596
57.87	-0.022697986	0.000111702	0.022485065	5.059139609	1.324087251	1.910527799
57.875	-0.027280905	0.000134642	0.027090653	6.095396859	1.324275353	1.910778442
57.88	-0.030720772	0.000151912	0.030554243	6.874704738	1.324513882	1.910966128
57.885	-0.034251876	0.000169659	0.034110539	7.674871331	1.324810396	1.911089766
57.89	-0.036607557	0.000181557	0.036492942	8.210911995	1.325149097	1.911148385
57.895	-0.039787156	0.000197516	0.039686284	8.929413931	1.325549191	1.911153095
57.9	-0.044636762	0.000222003	0.044581437	10.03082333	1.326052763	1.911153095
57.905	-0.045845811	0.000228366	0.045852483	10.31680877	1.326583984	1.911153095
57.91	-0.045081634	0.000224716	0.0451153	10.15094253	1.327097643	1.911153095
57.915	-0.047803122	0.000238492	0.047874698	10.77180713	1.327675191	1.911233824
57.92	-0.050030234	0.000249939	0.050159261	11.28583381	1.328307809	1.911868476
57.925	-0.048892432	0.000244531	0.049067075	11.04009197	1.328911979	1.912440185
57.93	-0.048047548	0.000240519	0.048257149	10.85785863	1.329495449	1.912949006
57.935	-0.047394047	0.000237488	0.047645437	10.72022334	1.330063155	1.913395088
57.94	-0.0459817	0.00023065	0.046265884	10.40982389	1.330597529	1.913778579
57.945	-0.04484214	0.000225187	0.045164043	10.16190971	1.331105746	1.914099816
57.95	-0.042029433	0.000211381	0.042381378	9.535809962	1.331552206	1.914359203
57.955	-0.037909356	0.000191119	0.038301797	8.617904316	1.331915425	1.914557618
57.96	-0.035377291	0.000178726	0.035808656	8.056947534	1.332231744	1.914696278
57.965	-0.031839285	0.000161414	0.03232907	7.274040836	1.332487958	1.914776135
57.97	-0.023832895	0.00012179	0.0243765	5.484712521	1.332631517	1.914798519
57.975	-0.013526481	7.04271E-05	0.014091435	3.170572875	1.33267776	1.914798519
57.98	-0.004109802	2.3269E-05	0.00467053	1.050869333	1.332682028	1.914798519
57.985	0.004381225	-1.94149E-05	-0.003838464	-0.863654384	1.33268688	1.914798519
57.99	0.011577554	-5.57674E-05	-0.011072428	-2.491296408	1.332720757	1.914798519
57.995	0.014972771	-7.30616E-05	-0.014509813	-3.264707976	1.332777418	1.914798519
58	0.016750219	-8.20505E-05	-0.016295417	-3.666468788	1.332848329	1.914798519
58.005	0.024078534	-0.000118937	-0.023615596	-5.313508993	1.332994862	1.914798519
58.01	0.035912623	-0.000178892	-0.035488992	-7.985023164	1.333320827	1.914798519
58.015	0.043228731	-0.000216349	-0.042891844	-9.650664974	1.33379313	1.914798519
58.02	0.045164912	-0.000226519	-0.044899937	-10.10248579	1.334308689	1.914798519
58.025	0.048331953	-0.000242805	-0.048113756	-10.82559502	1.334899087	1.914798519
58.03	0.053938371	-0.000271545	-0.053779946	-12.10048793	1.335634398	1.914798519
58.035	0.058356414	-0.000294401	-0.0582814	-13.11331491	1.336495101	1.914798519
58.04	0.059371938	-0.000300017	-0.059386839	-13.36203882	1.33738602	1.914798519
58.045	0.057657733	-0.000291685	-0.057704367	-12.98348263	1.338226237	1.914798519
58.05	0.056682912	-0.000286979	-0.056754468	-12.76975522	1.339038282	1.914798519
58.055	0.058249844	-0.000295173	-0.058409177	-13.1420648	1.339895844	1.914798519
58.06	0.059638482	-0.00030254	-0.059883311	-13.47374504	1.34079478	1.914893284
58.065	0.059790116	-0.000303613	-0.06009447	-13.52125584	1.341698294	1.914941991
58.07	0.060677616	-0.000308416	-0.061039544	-13.7338975	1.342628829	1.91494699
58.075	0.060427493	-0.00030754	-0.060853434	-13.69202265	1.343551709	1.91494699
58.08	0.056116716	-0.000286321	-0.056571601	-12.72861028	1.344347613	1.915070566
58.085	0.052023513	-0.000266202	-0.052516978	-11.81632001	1.345031643	1.915135938
58.09	0.05107537	-0.000261732	-0.051616916	-11.61380602	1.345690967	1.91514402
58.095	0.047160644	-0.000242624	-0.047771614	-10.74861321	1.346253095	1.91514402
58.1	0.040932849	-0.000211826	-0.041582288	-9.356014911	1.346676562	1.91514402
58.105	0.038520105	-0.000199999	-0.039207973	-8.821793981	1.347051579	1.915250222
58.11	0.033485854	-0.000175273	-0.034249195	-7.70606889	1.347334978	1.915352462
58.115	0.022570815	-0.00012096	-0.023377605	-5.259961125	1.347463735	1.915392015
58.12	0.015353003	-8.48725E-05	-0.016169789	-3.638202604	1.34752331	1.915392015
58.125	0.008815624	-5.23221E-05	-0.009678658	-2.177697952	1.347542952	1.915548211
58.13	-0.004819599	1.60323E-05	0.003921612	0.88236276	1.347548823	1.915678615
58.135	-0.018000921	8.25663E-05	0.017120811	3.852182541	1.347630719	1.915732624
58.14	-0.029100343	0.000138764	0.028240533	6.354120035	1.347844748	1.915732624
58.145	-0.042665149	0.000207743	0.041853805	9.417106148	1.348304817	1.915732624
58.15	-0.050978778	0.000250442	0.050261585	11.30885658	1.348961649	1.915732624
58.155	-0.053861767	0.000265427	0.053183442	11.96627441	1.349694874	1.915732624
58.16	-0.059762076	0.000296031	0.059142746	13.30711778	1.35059754	1.915732624
58.165	-0.062297233	0.000309549	0.061772682	13.89885347	1.351578415	1.915732624
58.17	-0.058927712	0.000292496	0.058330443	13.12434958	1.352456052	1.915732624
58.175	-0.062640782	0.00031108	0.062070632	13.96589213	1.353447775	1.915732624
58.18	-0.07075477	0.000353223	0.07026108	15.80874291	1.354713057	1.915732624
58.185	-0.070097762	0.000350421	0.069653507	15.67203908	1.35595495	1.915732624
58.19	-0.064980953	0.000325329	0.064592579	14.53333026	1.357022156	1.915732624
58.195	-0.065723667	0.000329192	0.0653735	14.70903749	1.358113896	1.915884506
58.2	-0.067099663	0.000336424	0.06683337	15.03750815	1.359251829	1.916004001
58.205	-0.062108483	0.000312094	0.061926432	13.93344717	1.360226769	1.916145008
58.21	-0.056228598	0.000283133	0.056099254	12.62233212	1.361025849	1.916421758
58.215	-0.051778416	0.000261296	0.051711527	11.63509366	1.361703449	1.916956232
58.22	-0.042931387	0.000217502	0.0429269	9.658552394	1.362169277	1.917420637
58.225	-0.033513307	0.000170553	0.033530608	7.544386783	1.362453142	1.917729166
58.23	-0.027050326	0.000138314	0.027090363	6.095331635	1.362638077	1.917910181
58.235	-0.017354645	8.98161E-05	0.017420422	3.919595006	1.362714199	1.918277408

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
70.46508789	0.000794418	1.930926045
70.47119141	0.00055708	1.384158133
70.47729492	0.000866575	2.195015931
70.48339844	0.001191118	3.008934053
70.48950195	0.001310632	3.270195966
70.49560547	0.001084026	2.709294562
70.50170898	0.000563457	1.430978594
70.5078125	0.000366606	0.949840062
70.51391602	0.000645399	1.700546823
70.52001953	0.000893719	2.365678375
70.52612305	0.001020585	2.684243776
70.53222656	0.001068399	2.799311788
70.53833008	0.001294425	3.414771412
70.54443359	0.001500825	4.008000074
70.55053711	0.001530888	4.109248369
70.55664063	0.001448098	3.891204977
70.56274414	0.001335835	3.619365664
70.56884766	0.001501043	4.053501196
70.57495117	0.001892006	5.005887799
70.58105469	0.001995254	5.272057822
70.5871582	0.001714764	4.626510844
70.59326172	0.00148706	4.095853076
70.59936523	0.001682753	4.702401211
70.60546875	0.001935689	5.367445514
70.61157227	0.001876609	5.084484449
70.61767578	0.001593399	4.314650827
70.6237793	0.001398025	3.863131306
70.62988281	0.001461888	4.117140029
70.63598633	0.001631396	4.640803215
70.64208984	0.001579142	4.466948791
70.64819336	0.001259412	3.511108177
70.65429688	0.001074949	2.96930136
70.66040039	0.001132653	3.112050248
70.66650391	0.001235626	3.404077682
70.67260742	0.0012459	3.485593385
70.67871094	0.00127103	3.603158731
70.68481445	0.001559063	4.403182559
70.69091797	0.001795114	4.972896883
70.69702148	0.001799149	4.870940327
70.703125	0.00165186	4.426605699
70.70922852	0.001450914	3.929892017
70.71533203	0.001395936	3.855684583
70.72143555	0.001633561	4.554111178
70.72753906	0.001871109	5.176503788
70.73364258	0.001802112	4.930817341
70.73974609	0.001645759	4.508462123
70.74584961	0.001423253	3.956563252
70.75195313	0.000930659	2.638406383
70.75805664	0.000822072	2.346523592
70.76416016	0.000959342	2.715451022
70.77026367	0.001194834	3.362828885
70.77636719	0.002044625	5.712800248
70.7824707	0.002218165	6.126623366
70.78857422	0.001609363	4.48428944
70.79467773	0.00114841	3.269867139
70.80078125	0.00135498	3.879411819
70.80688477	0.001788632	5.076267498
70.81298828	0.002042258	5.709155973
70.8190918	0.001894569	5.229745238
70.82519531	0.001352439	3.756464238
70.83129883	0.001130801	3.206615167
70.83740234	0.00122478	3.536979273
70.84350586	0.001133128	3.27400797
70.84960938	0.001061998	3.011986386
70.85571289	0.001428533	3.991200902
70.86181641	0.001738014	4.877789638
70.86791992	0.001695692	4.845754248
70.87402344	0.001380532	4.015384684
70.88012695	0.000938744	2.741835705
70.88623047	0.000627578	1.822456642
70.89233398	0.000683882	1.973577281
70.8984375	0.000997801	2.862538308
70.90454102	0.000977703	2.820491748
70.91064453	0.000802522	2.365877711
70.91674805	0.000910617	2.736396774
70.92285156	0.001039503	3.157909844
70.92895508	0.001202181	3.668785094
70.93505859	0.0013316	4.02567147
70.94116211	0.001507301	4.537179684
70.94726563	0.001603319	4.909565735
70.95336914	0.001213157	3.781000345
70.95947266	0.000697586	2.189968969
70.96557617	0.000972946	3.044185184
70.97167969	0.001394251	4.26985437
70.9777832	0.00156419	4.692379653
70.98388672	0.001283992	3.848481269
70.98999023	0.000788268	2.390310187
70.99609375	0.000308635	0.947232013
71.00219727	0.000360282	1.102020486
71.00830078	0.001042931	3.131375801
71.0144043	0.001573601	4.679425595
71.02050781	0.001296933	3.869457828
71.02661133	0.000574866	1.722902001
71.03271484	0.000631596	1.906882275
71.03881836	0.000586697	1.802947155
71.04492188	0.000847121	2.650230145
71.05102539	0.001269471	3.948852578
71.05712891	0.001341998	4.088099936
71.06323242	0.001147305	3.473363373
71.06933594	0.001004136	3.070426582
71.07543945	0.000821901	2.549581778
71.08154297	0.000479748	1.495172352
71.08764648	0.000489372	1.495016764
71.09375	0.001049107	3.121146165

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
58.24	-0.00750179	4.02127E-05	0.007551685	1.699129104	1.362728422	1.918660641
58.245	-0.001432233	9.56049E-06	0.001464079	0.32941778	1.362728941	1.918943325
58.25	0.006566501	-3.0858E-05	-0.006550878	-1.473947517	1.362739839	1.919134649
58.255	0.012850087	-6.28648E-05	-0.012888058	-2.899813133	1.362781572	1.919230456
58.26	0.014122753	-6.94834E-05	-0.014197436	-3.194423081	1.362831982	1.91924176
58.265	0.019184051	-9.51565E-05	-0.019273048	-4.336435751	1.362924998	1.91924176
58.27	0.025258114	-0.000126246	-0.025412313	-5.717770509	1.36308624	1.91924176
58.275	0.023663944	-0.000118546	-0.023855055	-5.367387291	1.36322777	1.91924176
58.28	0.021017694	-0.000105277	-0.021177601	-4.76496026	1.363339417	1.91924176
58.285	0.022053081	-0.00011067	-0.02226685	-5.0100412	1.363462335	1.91924176
58.29	0.020898912	-0.000105084	-0.02113878	-4.756225523	1.363572723	1.91924176
58.295	0.016740966	-8.44304E-05	-0.016976028	-3.81960622	1.363643556	1.91924176
58.3	0.013123945	-6.65881E-05	-0.013384039	-3.01140876	1.363687088	1.91924176
58.305	0.008915117	-4.58012E-05	-0.009203784	-2.070851457	1.363707176	1.91924176
58.31	0.002851485	-1.56817E-05	-0.003154957	-0.709865393	1.363709231	1.91924176
58.315	-0.002941647	1.32142E-05	0.002639344	0.593852294	1.363711418	1.91924176
58.32	-0.008879261	4.29018E-05	0.008583776	1.931349677	1.363731344	1.91924176
58.325	-0.014959867	7.34402E-05	0.014689723	3.305187645	1.363787907	1.91924176
58.33	-0.01826029	9.01377E-05	0.018024568	4.055527759	1.363872181	1.91924176
58.335	-0.020994558	0.000103934	0.020778109	4.675074559	1.363983582	1.91924176
58.34	-0.024926533	0.0001238	0.024739734	5.566440125	1.364140618	1.91924176
58.345	-0.02652696	0.000132018	0.026377752	5.934994178	1.364318467	1.91924176
58.35	-0.027711799	0.000138081	0.027585544	6.206747474	1.364512558	1.91924176
58.355	-0.030052868	0.000149983	0.02995595	6.74008882	1.364740827	1.91924176
58.36	-0.029866447	0.00014924	0.029801889	6.705424928	1.364966273	1.91924176
58.365	-0.02954142	0.000147726	0.029496312	6.636670116	1.365186839	1.91924176
58.37	-0.029646897	0.000148427	0.029637893	6.668525835	1.365408983	1.91924176
58.375	-0.026142065	0.00013112	0.026144862	5.882593979	1.365581708	1.91924176
58.38	-0.0235068	0.000118052	0.023510209	5.289797118	1.365721366	1.91924176
58.385	-0.023184617	0.000116493	0.023196082	5.219118439	1.365857221	1.91924176
58.39	-0.021026852	0.000105835	0.021048916	4.736006082	1.365968965	1.91924176
58.395	-0.020574665	0.000103569	0.020593246	4.633480294	1.366075954	1.91924176
58.4	-0.020739855	0.000104467	0.020774658	4.674298043	1.366184669	1.91924176
58.405	-0.018050574	9.11906E-05	0.018101032	4.072732272	1.366267018	1.91924176
58.41	-0.017490386	8.84119E-05	0.017542595	3.947083983	1.366344335	1.91924176
58.415	-0.016698627	8.46166E-05	0.016778471	3.77515601	1.36641481	1.91924176
58.42	-0.012192994	6.22942E-05	0.012291221	2.765524682	1.366452385	1.91924176
58.425	-0.008949561	4.6195E-05	0.00905824	2.038103907	1.366472628	1.91924176
58.43	-0.003577388	1.95513E-05	0.00371364	0.83556911	1.366475862	1.91924176
58.435	0.005893224	-2.77834E-05	-0.005764066	-1.296914801	1.36648464	1.91924176
58.44	0.011427334	-5.56739E-05	-0.011338433	-2.551147417	1.366517644	1.91924176
58.445	0.014571823	-7.15192E-05	-0.014502125	-3.262978084	1.366571311	1.91924176
58.45	0.019913519	-9.83884E-05	-0.019861613	-4.468862975	1.366671535	1.91924176
58.455	0.025213716	-0.000125124	-0.02518802	-5.667304415	1.36683221	1.91924176
58.46	0.031493998	-0.000157114	-0.031500012	-7.087502609	1.367082897	1.91924176
58.465	0.037980913	-0.000190346	-0.03804552	-8.560241951	1.367447489	1.91924176
58.47	0.041144275	-0.000206768	-0.041276781	-9.287275693	1.367875342	1.91924176
58.475	0.042852549	-0.000215749	-0.043043025	-9.684680696	1.368339461	1.91924176
58.48	0.043382423	-0.000218741	-0.043631282	-9.817038518	1.368815128	1.91924176
58.485	0.042565969	-0.000214791	-0.042833527	-9.637543604	1.36927306	1.91924176
58.49	0.045072439	-0.000227632	-0.045378969	-10.21026799	1.36978651	1.91924176
58.495	0.051361036	-0.000259873	-0.05171161	-11.63511229	1.37045323	1.91924176
58.5	0.05770843	-0.000292673	-0.058145701	-13.08278281	1.371294924	1.91924176
58.505	0.059787624	-0.000303961	-0.060357947	-13.58053806	1.372198363	1.91924176
58.51	0.051104616	-0.000261611	-0.051816338	-11.65867598	1.372858442	1.91924176
58.515	0.0352799	-0.000183176	-0.03605198	-8.111695529	1.373173022	1.91924176
58.52	0.027417568	-0.000143906	-0.028183143	-6.341207204	1.373363013	1.91924176
58.525	0.026787244	-0.000141045	-0.02761045	-6.212351232	1.373544369	1.919356986
58.53	0.014217834	-7.87414E-05	-0.015158671	-3.410700912	1.37359546	1.919410632
58.535	-0.010339653	4.45595E-05	0.009380022	2.110505017	1.37362248	1.919410632
58.54	-0.026270326	0.000125402	0.025397642	5.714469539	1.373796904	1.919410632
58.545	-0.033564178	0.000162617	0.032752899	7.369402387	1.374081631	1.919410632
58.55	-0.044152918	0.000216594	0.043401172	9.76526363	1.374574345	1.919410632
58.555	-0.049484635	0.000244222	0.048842369	10.98953297	1.375193239	1.919410632
58.56	-0.046429724	0.000229015	0.045772338	10.29877599	1.375738078	1.919410632
58.565	-0.050484277	0.0002493	0.049841864	11.21441935	1.37638223	1.919410632
58.57	-0.060271809	0.000299385	0.05968857	13.42992818	1.37730036	1.919410632
58.575	-0.063437468	0.000316016	0.062953831	14.16461203	1.37831747	1.919410632
58.58	-0.062484175	0.000311506	0.062043096	13.95969655	1.37930424	1.919410632
58.585	-0.063809175	0.000318502	0.063441897	14.27442683	1.380333303	1.919410632
58.59	-0.066972726	0.000334935	0.066665881	14.99982319	1.381466935	1.919543791
58.595	-0.068434794	0.000342805	0.068209246	15.3470804	1.382650603	1.919743856
58.6	-0.066658127	0.000334148	0.06646105	14.95373624	1.383773609	1.920016902
58.605	-0.065847806	0.000330331	0.065690676	14.7804022	1.384869478	1.920358897
58.61	-0.06594337	0.000331216	0.065869335	14.82060043	1.385968529	1.920626846
58.615	-0.06266602	0.000314944	0.062587125	14.08210308	1.386961051	1.920784181
58.62	-0.059721136	0.000300298	0.059635775	13.41804948	1.387862482	1.921136464
58.625	-0.056192747	0.000283081	0.056169648	12.6381709	1.388660543	1.921436912
58.63	-0.047252011	0.000238977	0.047305716	10.64378602	1.389224852	1.921642885
58.635	-0.040426827	0.000205152	0.040521301	9.117292654	1.389637914	1.921750779
58.64	-0.035119889	0.00017899	0.035281821	7.93840983	1.389949646	1.921766858
58.645	-0.023711649	0.000122197	0.023930264	5.384309322	1.390091748	1.922067924
58.65	-0.01476162	7.7338E-05	0.014985163	3.371661622	1.390146822	1.922376745
58.655	-0.010225122	5.46997E-05	0.010477844	2.357514945	1.390173246	1.922580567
58.66	-0.000510565	6.03138E-06	0.000803197	0.18071943	1.390173312	1.922675088
58.665	0.009495327	-4.44479E-05	-0.009209918	-2.072231641	1.3901961	1.922680318
58.67	0.015363195	-7.4124E-05	-0.015086465	-3.394454552	1.390255754	1.922680318
58.675	0.02259478	-0.000110711	-0.022321453	-5.022326844	1.390384784	1.922680318
58.68	0.028744251	-0.000141999	-0.028500015	-6.412503343	1.390593607	1.922680318
58.685	0.031612608	-0.000156643	-0.031388955	-7.062514863	1.390846186	1.922680318
58.69	0.03571883	-0.000177519	-0.035504412	-7.988492707	1.391168641	1.922680318
58.695	0.039993907	-0.000199375	-0.039809456	-8.957127582	1.391572904	1.922680318
58.7	0.041072118	-0.000205044	-0.040925557	-9.20825029	1.391999258	1.922680318
58.705	0.040039841	-0.000199913	-0.039889327	-8.975098477	1.39240445	1.922680318
58.71	0.039744484	-0.000198431	-0.039590014	-8.907753058	1.392803686	1.922680318
58.715	0.041170959	-0.000205711	-0.041056724	-9.237763004	1.393232094	1.922680318
58.72	0.041466732	-0.000207313	-0.041367643	-9.307719599	1.39366668	1.922680318
58.725	0.040079801	-0.000200306	-0.039952673	-8.989351466	1.394072681	1.922680318
58.73	0.04013435	-0.000200557	-0.040003634	-9.000817731	1.394479787	1.922680318
58.735	0.041082218	-0.00020539	-0.040979616	-9.220413689	1.394906351	1.922680318
58.74	0.041538434	-0.000207741	-0.0414541	-9.327172389	1.395342441	1.922680318
58.745	0.04177462	-0.000208968	-0.041697924	-9.382032986	1.395783504	1.922702704
58.75	0.04178939	-0.000209053	-0.041714507	-9.385764025	1.39622488	1.922713954
58.755	0.043301967	-0.000216738	-0.043226732	-9.726014612	1.396698784	1.922713954

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
71.09985352	0.001475429	4.367169638
71.10595703	0.001476403	4.423421531
71.11206055	0.001297697	3.928074956
71.11816406	0.00103074	3.127209261
71.12426758	0.000771081	2.339047496
71.13037109	0.000665497	2.010838452
71.13647461	0.001059323	3.163844643
71.14257813	0.001091802	3.231529382
71.14868164	0.000771773	2.289416013
71.15478516	0.00117279	3.535824395
71.16088867	0.001353887	4.188972046
71.16699219	0.001071002	3.342922886
71.1730957	0.000872443	2.670442952
71.17919922	0.000759625	2.288466652
71.18530273	0.00065264	1.982712981
71.19140625	0.000742293	2.317270444
71.19750977	0.000843173	2.712820991
71.20361328	0.000802392	2.608052995
71.2097168	0.000922183	2.975716122
71.21582031	0.000860065	2.767493173
71.22192383	0.000642225	2.067806194
71.22802734	0.000829913	2.683785602
71.23413086	0.001523106	4.995428377
71.24023438	0.001975436	6.523568605
71.24633789	0.001814234	5.96722927
71.25244141	0.001540904	5.050210803
71.25854492	0.001173727	3.789946713
71.26464844	0.000781783	2.475562974
71.27075195	0.000700925	2.232886293
71.27685547	0.000703062	2.299143981
71.28295898	0.00069765	2.327855538
71.2890625	0.000682075	2.274635982
71.29516602	0.000651916	2.123383533
71.30126953	0.000591534	1.89251557
71.30737305	0.00055233	1.790310529
71.31347656	0.000420917	1.391436471
71.31958008	0.000137945	0.458875953
71.32568359	0.000188863	0.632452018
71.33178711	0.000329782	1.105355488
71.33789063	0.000385311	1.278379703
71.34399414	0.000612644	2.031006167
71.35009766	0.000583289	1.947884478
71.35620117	0.000450413	1.516599784
71.36230469	0.00032981	1.12821147
71.3684082	0.000603771	2.081522478
71.37451172	0.000872288	2.9858914
71.38061523	0.000498267	1.693859837
71.38671875	4.69752E-05	0.15836818
71.39282227	0.0001749	0.591750611
71.39892578	0.000152716	0.534069633
71.4050293	0.000214645	0.765737991
71.41113281	0.000318087	1.105393804
71.41723633	0.000281521	0.950435469
71.42333984	8.6099E-05	0.28859096
71.42944336	0.000396945	1.331257882
71.43554688	0.000553471	1.877273659
71.44165039	0.000421464	1.441381703
71.44775391	0.000352762	1.183983753
71.45385742	0.000393957	1.291899016
71.45996094	0.000250719	0.815089179
71.46606445	7.35909E-05	0.237424654
71.47216797	0.000112732	0.362713395
71.47827148	0.000353466	1.153266844
71.484375	0.000727232	2.418059804
71.49047852	0.000969905	3.231232947
71.49658203	0.000944713	3.094273953
71.50268555	0.000917932	2.993092314
71.50878906	0.000838391	2.776148826
71.51489258	0.000753076	2.527978284
71.52099609	0.000884823	3.019096895
71.52709961	0.001037893	3.595350748
71.53320313	0.00093846	3.218291215
71.53930664	0.000802165	2.705311391
71.54541016	0.00079319	2.676010818
71.55151367	0.000639693	2.183805938
71.55761719	0.000502274	1.741574785
71.5637207	0.000577445	2.014074327
71.56982422	0.000718586	2.496941896
71.57592773	0.000839852	2.931758636
71.58203125	0.000965861	3.377265696
71.58813477	0.000997908	3.460730369
71.59423828	0.00088821	3.112247074
71.6003418	0.000735247	2.645648652
71.60644531	0.000433697	1.581416743
71.61254883	0.0001552	0.567454931
71.61865234	0.000295099	1.071423903
71.62475586	0.000477694	1.703286757
71.63085938	0.000696216	2.482864671
71.63696289	0.000852563	3.103021725
71.64306641	0.000752199	2.763741242
71.64916992	0.000557609	2.042502295
71.65527344	0.000477841	1.728200543
71.66137695	0.000360385	1.279627359
71.66748047	0.000286221	1.016770089
71.67358398	0.000402659	1.451393003
71.6796875	0.000546757	1.982492427
71.68579102	0.000432383	1.573277325
71.69189453	0.000313498	1.138686972
71.69799805	0.000258096	0.925107223
71.70410156	0.000114144	0.406353487
71.71020508	0.000203272	0.726985396
71.71630859	0.000170739	0.616243693
71.72241211	0.00024606	0.897413067
71.72851563	0.000268359	0.981171444

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
58.76	0.044652528	-0.000223688	-0.04459409	-10.03367019	1.397202712	1.922713954
58.765	0.043250011	-0.000216628	-0.043168259	-9.712858284	1.39767548	1.922825746
58.77	0.04397053	-0.000220246	-0.043899118	-9.877301465	1.398164132	1.922987713
58.775	0.046730451	-0.00023434	-0.046688713	-10.50496053	1.398716051	1.923044449
58.78	0.045789563	-0.000229683	-0.045748126	-10.29332844	1.39924597	1.923044449
58.785	0.045501446	-0.000228199	-0.045448713	-10.22596045	1.39976924	1.923044449
58.79	0.048502373	-0.000243496	-0.048488652	-10.90994675	1.400363809	1.923044449
58.795	0.048377894	-0.000243036	-0.048379975	-10.88549432	1.400955329	1.923182319
58.8	0.046317293	-0.000232622	-0.046277699	-10.41248217	1.401497533	1.923286706
58.805	0.047005337	-0.000236116	-0.046983525	-10.57129305	1.402055965	1.923307255
58.81	0.048028866	-0.000241394	-0.048049034	-10.81103267	1.402638981	1.923307255
58.815	0.047651291	-0.000239557	-0.047678113	-10.72757541	1.403212866	1.923307255
58.82	0.047587395	-0.00023927	-0.047620051	-10.71451146	1.403785214	1.923307255
58.825	0.048555786	-0.000244236	-0.048622771	-10.94012345	1.404381093	1.923307255
58.83	0.048711008	-0.000245115	-0.048800005	-10.98000121	1.404980787	1.923307255
58.835	0.047778778	-0.000240394	-0.047846455	-10.76545244	1.405557748	1.923307255
58.84	0.050409616	-0.000253624	-0.050478622	-11.35768995	1.406199996	1.923307255
58.845	0.056463633	-0.00028452	-0.056544731	-12.72256445	1.40700577	1.923307255
58.85	0.061302908	-0.000309386	-0.061420919	-13.81970672	1.407955583	1.923307255
58.855	0.065695484	-0.000332041	-0.065857178	-14.81786513	1.409046388	1.923307255
58.86	0.068572697	-0.00034706	-0.068796187	-15.47914202	1.410234831	1.923307255
58.865	0.067813691	-0.000343443	-0.068065643	-15.31476963	1.411397111	1.923307255
58.87	0.069500063	-0.00035217	-0.069795585	-15.70400668	1.412617916	1.923307255
58.875	0.074370944	-0.000377324	-0.074712884	-16.81039893	1.414015836	1.923307255
58.88	0.076265903	-0.000387346	-0.076670884	-17.25094886	1.415485902	1.923307255
58.885	0.077533903	-0.000394057	-0.077981416	-17.54581856	1.417005257	1.923307255
58.89	0.080805053	-0.000411033	-0.081295204	-18.29142092	1.418655519	1.923307255
58.895	0.083845608	-0.000426867	-0.084384222	-18.98645003	1.420432311	1.923307255
58.9	0.088151351	-0.000449222	-0.088742068	-19.96696537	1.422396276	1.923307255
58.905	0.092332748	-0.000471113	-0.093005985	-20.92634666	1.42455098	1.923307255
58.91	0.092658119	-0.000473251	-0.093413617	-21.01806385	1.426720895	1.923307255
58.915	0.091606344	-0.000468246	-0.092402909	-20.79065452	1.428841829	1.923307255
58.92	0.08982283	-0.000459488	-0.090635102	-20.39289785	1.43088098	1.923307255
58.925	0.086220426	-0.000441326	-0.086972821	-19.56888467	1.432759848	1.923307255
58.93	0.084196458	-0.000431201	-0.084932899	-19.10990234	1.434551541	1.923307255
58.935	0.082984821	-0.000425341	-0.083752826	-18.84438586	1.436292037	1.923326051
58.94	0.078737708	-0.000404348	-0.079528505	-17.89391362	1.437858938	1.92343268
58.945	0.072926878	-0.000375736	-0.073778951	-16.60026399	1.439203099	1.923828331
58.95	0.067862598	-0.000350777	-0.068770462	-15.47335398	1.440367055	1.924170781
58.955	0.063034158	-0.000327009	-0.064006801	-14.40153017	1.441371273	1.924457085
58.96	0.056380837	-0.000294167	-0.057433547	-12.92254811	1.442174686	1.924684626
58.965	0.045248267	-0.000238847	-0.046384772	-10.43657373	1.44269215	1.924850504
58.97	0.029159278	-0.00015835	-0.030356977	-6.830319863	1.442907046	1.924950824
58.975	0.009728686	-6.04304E-05	-0.010935904	-2.460578336	1.442930968	1.924980557
58.98	-0.007371559	2.64509E-05	0.006228951	1.401514026	1.442944702	1.924980557
58.985	-0.014168353	6.14327E-05	0.013122952	2.952664248	1.442995437	1.924980557
58.99	-0.012865488	5.50516E-05	0.011834288	2.662714783	1.443037271	1.924980557
58.995	-0.015392716	6.76423E-05	0.014345669	3.227775475	1.443097155	1.924980557
59	-0.02599528	0.000121522	0.024942392	5.612038097	1.443267946	1.924980557
59.005	-0.03710477	0.000178405	0.036105093	8.123645839	1.443615911	1.924980557
59.01	-0.04242387	0.000205932	0.041498239	9.337103857	1.44407079	1.924980557
59.015	-0.045165714	0.000220187	0.044288677	9.964952247	1.444586367	1.924980557
59.02	-0.049953888	0.000244871	0.049117274	11.05138672	1.445217055	1.924980557
59.025	-0.055343724	0.000272739	0.054563045	12.27668514	1.445991183	1.924980557
59.03	-0.059446134	0.000294078	0.058729092	13.21404566	1.446884331	1.925004689
59.035	-0.062661954	0.000310885	0.062007944	13.9517874	1.447876724	1.925253207
59.04	-0.065118644	0.0003238	0.064526045	14.51836024	1.448948457	1.925415761
59.045	-0.067697224	0.000337346	0.067165935	15.11233531	1.450106748	1.925489213
59.05	-0.069370213	0.000346322	0.068914368	15.5057328	1.451322995	1.925949371
59.055	-0.0681729	0.000340577	0.067754175	15.2446894	1.452497621	1.92656368
59.06	-0.06716472	0.000335711	0.066771876	15.02367206	1.453637761	1.927141301
59.065	-0.066754685	0.000333979	0.0664222	14.94499491	1.454764023	1.927708916
59.07	-0.062176883	0.000311385	0.061866012	13.91985273	1.455741112	1.928270907
59.075	-0.056431581	0.000283078	0.056166555	12.63747492	1.456545972	1.928741008
59.08	-0.052069838	0.000261619	0.051851927	11.66668353	1.457231221	1.929177883
59.085	-0.044354579	0.000223403	0.044180224	9.94055035	1.457728445	1.929583057
59.09	-0.036953118	0.000186503	0.036786838	8.27703845	1.458073572	1.929958786
59.095	-0.032226286	0.000162949	0.03207443	7.216746828	1.458336052	1.930604482
59.1	-0.023904846	0.000121352	0.023764794	5.347078583	1.458480479	1.931606335
59.105	-0.016698738	8.50357E-05	0.016523225	3.717725636	1.458550955	1.932520464
59.11	-0.015405756	7.84145E-05	0.015204216	3.420948706	1.45861094	1.933346054
59.115	-0.011713048	5.98624E-05	0.011510548	2.589873258	1.458645615	1.934297608
59.12	-0.006752309	3.47255E-05	0.006510702	1.464907874	1.458657138	1.93522353
59.125	-0.007797398	3.9751E-05	0.007528445	1.693900187	1.458672505	1.936507174
59.13	-0.009556017	4.85532E-05	0.009305062	2.093638914	1.458695584	1.937555268
59.135	-0.008841561	4.48934E-05	0.008565869	1.927320533	1.458715342	1.938379625
59.14	-0.010723968	5.42295E-05	0.010450154	2.351284723	1.458744408	1.939040592
59.145	-0.014806206	7.44792E-05	0.014531839	3.269663718	1.458799815	1.939543275
59.15	-0.016500089	8.30079E-05	0.016249439	3.656123885	1.458868625	1.939885911
59.155	-0.015240255	7.68464E-05	0.015005134	3.376155211	1.458927328	1.940074333
59.16	-0.01449151	7.31276E-05	0.014254412	3.207242774	1.458980404	1.940612621
59.165	-0.015848886	7.99032E-05	0.015622721	3.515112292	1.459043889	1.941137865
59.17	-0.015027583	7.59813E-05	0.014830574	3.336879066	1.459100966	1.941560612
59.175	-0.010392743	5.30631E-05	0.010207309	2.296644456	1.459128264	1.941879565
59.18	-0.007235468	3.7302E-05	0.007031812	1.582157619	1.459141495	1.942093866
59.185	-0.006519734	3.36809E-05	0.006303048	1.418185885	1.459152239	1.942215821
59.19	-0.004397662	2.30875E-05	0.004197724	0.944487794	1.459157127	1.942250292
59.195	-0.002525204	1.3621E-05	0.002317193	0.521368458	1.459158738	1.942250292
59.2	-0.003737142	1.94334E-05	0.003491018	0.785479069	1.459162268	1.942250292
59.205	-0.005693673	2.89712E-05	0.005416058	1.218612995	1.459170461	1.942250292
59.21	-0.008878034	4.4544E-05	0.00855649	1.925210319	1.459190382	1.942374228
59.215	-0.016712428	8.32563E-05	0.01635049	3.678860228	1.459260974	1.942668198
59.22	-0.025865535	0.00012882	0.025502755	5.738119864	1.459430065	1.942888462
59.225	-0.031907443	0.00015904	0.03156101	7.101227191	1.459687377	1.943037241
59.23	-0.037761371	0.000188323	0.037422976	8.420169651	1.460047765	1.943116356
59.235	-0.044967611	0.000224494	0.044652504	10.04681333	1.46055883	1.943130386
59.24	-0.050103111	0.000250444	0.049831508	11.2120894	1.461193291	1.943130386
59.245	-0.053107118	0.00026569	0.052871539	11.89609636	1.461906114	1.943130386
59.25	-0.056557894	0.000283145	0.056349222	12.67857494	1.462714581	1.943130386
59.255	-0.060731219	0.000304324	0.060565324	13.62719795	1.463646761	1.943130386
59.26	-0.063758295	0.000319837	0.063651006	14.32147644	1.464674184	1.943130386
59.265	-0.063796373	0.000320341	0.063746407	14.34294147	1.465702835	1.943130386
59.27	-0.062774119	0.000315451	0.062759001	14.12077531	1.466698784	1.943130386
59.275	-0.062671597	0.000315214	0.062711118	14.11000162	1.467691483	1.943130386

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
71.73461914	0.000185397	0.676200668
71.74072266	0.000179514	0.652193399
71.74682617	0.000300321	1.074860076
71.75292969	0.00033051	1.175166242
71.7590332	0.000304232	1.101808211
71.76513672	0.000270173	0.989055374
71.77124023	0.000313669	1.137933587
71.77734375	0.00039327	1.414533435
71.78344727	0.000327793	1.167616436
71.78955078	0.000224869	0.799606697
71.7956543	0.000284823	1.023930678
71.80175781	0.000405614	1.457172798
71.80786133	0.0004282	1.527604041
71.81396484	0.00039885	1.417339753
71.82006836	0.000267545	0.935489893
71.82617188	0.000121291	0.419162156
71.83227539	0.000153503	0.534321032
71.83837891	0.000355125	1.247151615
71.84448242	0.000495028	1.75870163
71.85058594	0.000424734	1.524919986
71.85668945	0.000304394	1.08509942
71.86279297	0.000346319	1.233416938
71.86889648	0.000529281	1.917773107
71.875	0.000576368	2.110897501
71.88110352	0.00037179	1.380364405
71.88720703	0.000264541	1.002907467
71.89331055	0.000229785	0.868092886
71.89941406	8.10185E-05	0.301547254
71.90551758	3.52752E-05	0.131216857
71.91162109	0.000143885	0.538183606
71.91772461	0.000306343	1.167793831
71.92382813	0.000399347	1.560063699
71.92993164	0.000434885	1.701566691
71.93603516	0.000422045	1.652702303
71.94213867	0.000328036	1.291705487
71.94824219	0.000197059	0.767230886
71.9543457	0.000111268	0.43531927
71.96044922	0.000228358	0.917564472
71.96655273	0.000229641	0.928375045
71.97265625	0.000222283	0.891191868
71.97875977	0.000364559	1.436134668
71.98486328	0.000344527	1.318500117
71.9909668	0.000208165	0.793485931
71.99707031	0.000177987	0.690955988
72.00317383	0.000262226	1.024653331
72.00927734	0.000366473	1.434001339
72.01538086	0.000423277	1.643646737
72.02148438	0.000406228	1.546435378
72.02758789	0.000315761	1.197114797
72.03369141	0.000249793	0.945412763
72.03979492	0.000318841	1.198325661
72.04589844	0.0003639	1.397071003
72.05200195	0.000379198	1.485708135
72.05810547	0.000313953	1.212264364
72.06420898	0.000304404	1.164405617
72.0703125	0.000370233	1.412273181
72.07641602	0.000322747	1.21774605
72.08251953	0.000158312	0.602448249
72.08862305	7.26504E-05	0.27927179
72.09472656	0.000117693	0.442599564
72.10083008	0.000183079	0.668704181
72.10693359	0.000222587	0.797445191
72.11303711	0.000325664	1.154984249
72.11914063	0.000355998	1.264423966
72.12524414	0.000317052	1.127604574
72.13134766	0.0002908	1.029428454
72.13745117	0.000253617	0.889249189
72.14355469	0.0002399	0.826478239
72.1496582	0.000312089	1.062205812
72.15576172	0.000402865	1.385277367
72.16186523	0.000420684	1.485136785
72.16796875	0.000391282	1.414394357
72.17407227	0.000307297	1.113196603
72.18017578	0.000200977	0.716753507
72.1862793	0.000191993	0.679824711
72.19238281	0.000226954	0.808381999
72.19848633	0.00021632	0.778274548
72.20458984	0.000202059	0.739001837
72.21069336	0.000320545	1.187459702
72.21679688	0.000309783	1.141722137
72.22290039	0.000190916	0.697463414
72.22900391	0.000205003	0.750797796
72.23510742	0.000223611	0.828285703
72.24121094	0.000173065	0.653679689
72.24731445	0.000138991	0.537986819
72.25341797	0.000170431	0.670152785
72.25952148	0.000243422	0.959656295
72.265625	0.000261421	1.029805686
72.27172852	0.000188662	0.743278006
72.27783203	9.78877E-05	0.388427499
72.28393555	0.000101661	0.411090622
72.29003906	6.69235E-05	0.273864846
72.29614258	8.06063E-05	0.329066524
72.30224609	0.000190925	0.77813503
72.30834961	0.000225428	0.917012824
72.31445313	0.000209874	0.853227182
72.32055664	0.00015234	0.626905604
72.32666016	7.90188E-05	0.331273654
72.33276367	8.57429E-05	0.364074858
72.33886719	0.000129171	0.547767523
72.3449707	0.000124488	0.521707596
72.35107422	9.85761E-05	0.409744432
72.35717773	6.13187E-05	0.253796648
72.36328125	8.21495E-05	0.340149305

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
59.28	-0.060086394	0.000302583	0.060162119	13.53647671	1.468603973	1.943130386
59.285	-0.053772539	0.000271553	0.053909212	12.12957269	1.46933477	1.943130386
59.29	-0.046365466	0.000234979	0.046553238	10.4744786	1.469878102	1.943130386
59.295	-0.035819096	0.000182641	0.036051662	8.111624009	1.470202371	1.943130386
59.3	-0.021884208	0.000113001	0.022120297	4.977066722	1.470323413	1.943130386
59.305	-0.010552189	5.59643E-05	0.01074391	2.41737966	1.470351556	1.943130386
59.31	-0.004546407	2.55089E-05	0.004681403	1.053315725	1.47035678	1.943130386
59.315	-0.001389988	9.43477E-06	0.001485828	0.334311375	1.470357268	1.943130386
59.32	0.001973493	-7.59819E-06	-0.001895252	-0.42643162	1.470358253	1.943130386
59.325	0.006445808	-3.02861E-05	-0.006395003	-1.438875647	1.470368754	1.943130386
59.33	0.010683739	-5.18453E-05	-0.010666885	-2.400049022	1.470397602	1.943130386
59.335	0.015224031	-7.49515E-05	-0.01524097	-3.429218151	1.47045618	1.943130386
59.34	0.020127273	-9.9998E-05	-0.020194146	-4.543682886	1.470558567	1.943130386
59.345	0.0218082	-0.000108808	-0.021935282	-4.935438364	1.47067877	1.943130386
59.35	0.021711826	-0.000108506	-0.021874178	-4.921689967	1.470797913	1.943130386
59.355	0.02502603	-0.000125432	-0.025218799	-5.674229882	1.470956206	1.943130386
59.36	0.028758107	-0.000144673	-0.029016429	-6.5286966	1.47116523	1.943130386
59.365	0.026762912	-0.000134992	-0.027061468	-6.088830401	1.471346257	1.943130386
59.37	0.019899678	-0.000101215	-0.020251472	-4.556581125	1.471446341	1.943130386
59.375	0.014065515	-7.2287E-05	-0.014429875	-3.246721786	1.471496343	1.943130386
59.38	0.01152543	-5.97114E-05	-0.011902031	-2.677956958	1.471529916	1.943130386
59.385	0.008382096	-4.42093E-05	-0.008788258	-1.977358101	1.471547674	1.943130386
59.39	0.004056101	-2.27129E-05	-0.004474588	-1.006782278	1.471551832	1.943130386
59.395	0.001426393	-9.67762E-06	-0.001861095	-0.418746429	1.471552346	1.943130386
59.4	-0.003906208	1.67525E-05	0.003432795	0.772378977	1.471556203	1.943130386
59.405	-0.013760883	6.60036E-05	0.013279738	2.987941146	1.471604062	1.943130386
59.41	-0.021552747	0.000105194	0.02109895	4.747263766	1.471721466	1.943130386
59.415	-0.028072343	0.00013804	0.02764178	6.219400494	1.47192064	1.943130386
59.42	-0.035514907	0.000175673	0.035126272	7.903411148	1.472239425	1.943130386
59.425	-0.039560486	0.000196301	0.039223594	8.825308545	1.472634973	1.943130386
59.43	-0.044509105	0.000221381	0.044200383	9.945086165	1.473135668	1.943130386
59.435	-0.053051726	0.000264821	0.052807636	11.8817182	1.473847004	1.943130386
59.44	-0.0552909	0.000276633	0.055145446	12.40772537	1.474619655	1.943130386
59.445	-0.054724501	0.000274014	0.054616528	12.2887187	1.475376557	1.943130386
59.45	-0.061841373	0.000310224	0.061787076	13.90209214	1.476343129	1.943157979
59.455	-0.065570119	0.00032974	0.065641675	14.76937682	1.477429774	1.943173293
59.46	-0.05962786	0.000300744	0.059790828	13.45293632	1.478328391	1.943173293
59.465	-0.059469659	0.000300125	0.059668765	13.42547204	1.479222245	1.943173293
59.47	-0.064130424	0.000323682	0.064420838	14.49468853	1.480261696	1.943190339
59.475	-0.059334205	0.000300498	0.059741869	13.44192056	1.481151484	1.943191364
59.48	-0.052528331	0.000266963	0.052987902	11.92227803	1.481848853	1.943191364
59.485	-0.052259927	0.000265917	0.052778611	11.87518742	1.482539115	1.943191364
59.49	-0.047445879	0.000242478	0.048065159	10.81466075	1.483108063	1.943191364
59.495	-0.036823703	0.000189825	0.037500485	8.437609136	1.483450776	1.943191364
59.5	-0.030270792	0.000157239	0.030976166	6.969637454	1.483682368	1.943191364
59.505	-0.022926067	0.000120754	0.023683318	5.328746523	1.48381521	1.943191364
59.51	-0.01162453	6.42031E-05	0.01240379	2.790852753	1.483849363	1.943191364
59.515	-0.003830914	2.50195E-05	0.004605196	1.036169042	1.483853072	1.943191364
59.52	0.00386357	-1.36385E-05	-0.003075628	-0.692016379	1.483856845	1.943191364
59.525	0.014452388	-6.7101E-05	-0.013676816	-3.077283552	1.483909635	1.943191364
59.53	0.020956612	-0.000100151	-0.020218386	-4.549136894	1.484020634	1.943191364
59.535	0.025981027	-0.000125636	-0.025256468	-5.682705307	1.484191238	1.943191364
59.54	0.033399887	-0.000163344	-0.0326987	-7.357207496	1.484473184	1.943191364
59.545	0.037885088	-0.000186313	-0.037224656	-8.375547591	1.484835938	1.943191364
59.55	0.040819142	-0.000201309	-0.040177387	-9.039912119	1.485257056	1.943191364
59.555	0.045550423	-0.000225455	-0.044928061	-10.10881374	1.485781454	1.943191364
59.56	0.049365019	-0.000244984	-0.048766954	-10.97256476	1.48639736	1.943191364
59.565	0.053986795	-0.000268605	-0.053406303	-12.01641812	1.487133993	1.943191364
59.57	0.060199235	-0.000300455	-0.059654902	-13.42235305	1.488049913	1.94327379
59.575	0.063776081	-0.000318962	-0.063282273	-14.23851136	1.48907791	1.943871329
59.58	0.066033088	-0.000330679	-0.065577423	-14.7549201	1.490179954	1.944389757
59.585	0.068918936	-0.000345613	-0.068501212	-15.41277268	1.491380429	1.944828144
59.59	0.070658676	-0.000354692	-0.070278035	-15.81255776	1.492642277	1.945185568
59.595	0.073525194	-0.000369447	-0.073164017	-16.46190387	1.494008583	1.945461365
59.6	0.079541837	-0.00040043	-0.079218935	-17.82426031	1.495607652	1.945654586
59.605	0.085267999	-0.000430114	-0.085013424	-19.1280203	1.49744524	1.945796701
59.61	0.088347078	-0.000446296	-0.088169468	-19.83813027	1.499417937	1.945981743
59.615	0.090020766	-0.000455251	-0.08991515	-20.23090864	1.501466085	1.946049242
59.62	0.091131507	-0.000461319	-0.091097561	-20.49695119	1.503565087	1.946049242
59.625	0.091168286	-0.000461871	-0.091202904	-20.52065345	1.505665785	1.946049242
59.63	0.091653445	-0.000464668	-0.091750219	-20.64379925	1.5077889	1.946049242
59.635	0.093920394	-0.000476665	-0.09408688	-21.1695479	1.510018339	1.94614007
59.64	0.093192885	-0.000473487	-0.093427377	-21.02115985	1.512213374	1.946468715
59.645	0.08629861	-0.000439777	-0.086629073	-19.49154139	1.514095651	1.946695295
59.65	0.079064032	-0.000404151	-0.079459313	-17.87834554	1.515675567	1.946814868
59.655	0.071443888	-0.000366612	-0.071919421	-16.18186981	1.516965615	1.946833465
59.66	0.057038298	-0.000295089	-0.057593468	-12.95853039	1.517787875	1.946833465
59.665	0.038049641	-0.000200052	-0.038632356	-8.692280161	1.518153787	1.946833465
59.67	0.018777047	-0.00010292	-0.019336444	-4.350699837	1.518242898	1.946833465
59.675	0.00112198	-1.33191E-05	-0.001607406	-0.361666362	1.518243216	1.946833465
59.68	-0.010874221	4.8075E-05	0.010502574	2.363079066	1.518273103	1.946833465
59.685	-0.016831809	7.89371E-05	0.016578747	3.730218093	1.518344707	1.946833465
59.69	-0.017666834	8.37503E-05	0.017518743	3.941717147	1.518423592	1.946833465
59.695	-0.012981687	6.07112E-05	0.012869366	2.895607245	1.518466185	1.946833465
59.7	-0.007969135	3.5999E-05	0.007890074	1.775266725	1.518482235	1.946833465
59.705	-0.004634654	1.95551E-05	0.004580752	1.030669251	1.518487664	1.947053542
59.71	0.000908019	-7.96788E-06	-0.000951528	-0.21409386	1.518487873	1.947234549
59.715	0.005642954	-3.16378E-05	-0.005702905	-1.283153571	1.518495921	1.947326941
59.72	0.009604342	-5.14435E-05	-0.00967419	-2.176692697	1.518519234	1.947340402
59.725	0.016943687	-8.82537E-05	-0.01704478	-3.835075438	1.518591793	1.947340402
59.73	0.020810219	-0.000107955	-0.020984157	-4.721435414	1.518701247	1.947340402
59.735	0.019444104	-0.000101344	-0.019649094	-4.421046229	1.518796801	1.947340402
59.74	0.022347545	-0.000115923	-0.022576566	-5.079727429	1.518923024	1.947340402
59.745	0.026117771	-0.000135087	-0.026403658	-5.940823157	1.519095428	1.947340402
59.75	0.022778899	-0.000118773	-0.023110241	-5.199804267	1.51922657	1.947340402
59.755	0.017656782	-9.33863E-05	-0.01799262	-4.048339457	1.519305365	1.947340402
59.76	0.013970727	-7.50126E-05	-0.014293574	-3.216054231	1.519354695	1.947340402
59.765	0.009339537	-5.17735E-05	-0.009620461	-2.164603717	1.519376741	1.947340402
59.77	0.007250441	-4.09977E-05	-0.007455572	-1.677503762	1.519390027	1.947340402
59.775	0.008269859	-4.56723E-05	-0.008399668	-1.889925328	1.519407312	1.947340402
59.78	0.00928373	-5.02497E-05	-0.009323783	-2.097851151	1.519429096	1.947340402
59.785	0.015536167	-8.07026E-05	-0.015464492	-3.479510735	1.5194901	1.947340402
59.79	0.029073051	-0.000147685	-0.028917587	-6.506457121	1.519703728	1.947340402
59.795	0.042191475	-0.000213399	-0.042007829	-9.451761445	1.520153638	1.947340402

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
72.36938477	0.000126821	0.527025466
72.37548828	0.000139373	0.572508784
72.3815918	0.000119256	0.480090136
72.38769531	9.73286E-05	0.387593354
72.39379883	9.26931E-05	0.365516036
72.39990234	9.99346E-05	0.391745241
72.40600586	0.000118572	0.468803396
72.41210938	0.000105088	0.418091938
72.41821289	0.000102279	0.401322035
72.42431641	5.6074E-05	0.214265209
72.43041992	2.20571E-05	0.082601778
72.43652344	2.06365E-05	0.0771677
72.44262695	0.000123289	0.465590819
72.44873047	0.000218287	0.828559581
72.45483398	0.00024014	0.906923039
72.4609375	0.000245084	0.914540247
72.46704102	0.00027089	0.995485289
72.47314453	0.000311025	1.136402747
72.47924805	0.000334361	1.235695435
72.48535156	0.000312475	1.165548361
72.49145508	0.000259424	0.959628151
72.49755859	0.00020484	0.750797356
72.50366211	0.000176625	0.647945539
72.50976563	0.000181975	0.667308605
72.51586914	0.000186616	0.681330603
72.52197266	0.000163564	0.598369383
72.52807617	0.000138235	0.512742007
72.53417969	0.000152362	0.573206271
72.5402832	0.000182084	0.681656811
72.54638672	0.000197263	0.724103793
72.55249023	0.000208482	0.75442708
72.55859375	0.000211919	0.763590095
72.56469727	0.0001884	0.684776083
72.57080078	0.000147357	0.54397375
72.5769043	0.000113198	0.417227274
72.58300781	9.5844E-05	0.349254746
72.58911133	7.48095E-05	0.273042791
72.59521484	5.26627E-05	0.193798265
72.60131836	4.11902E-05	0.153713361
72.60742188	2.69668E-05	0.103070368
72.61352539	4.44758E-05	0.17356565
72.61962891	8.28799E-05	0.330128792
72.62573242	0.000114022	0.459482112
72.63183594	0.00013975	0.553710946
72.63793945	0.000137092	0.537612509
72.64404297	8.72868E-05	0.35073759
72.65014648	4.2951E-05	0.176269375
72.65625	7.99375E-05	0.32573156
72.66235352	8.81536E-05	0.352567892
72.66845703	7.61637E-05	0.298336339
72.67456055	8.61361E-05	0.333027346
72.68066406	0.000120544	0.46866118
72.68676758	0.000134755	0.530147569
72.69287109	0.000133336	0.52656519
72.69897461	0.000160679	0.630022667
72.70507813	0.000145503	0.56274025
72.71118164	9.82844E-05	0.37846177
72.71728516	0.000111341	0.428592097
72.72338867	0.000190049	0.726733004
72.72949219	0.000229702	0.886492376
72.7355957	0.000193014	0.756956342
72.74169922	0.000140229	0.54400782
72.74780273	0.000109916	0.418587921
72.75390625	0.000128165	0.482895262
72.76000977	0.000184362	0.688514582
72.76611328	0.00021756	0.818473676
72.7722168	0.000208196	0.79334
72.77832031	0.000232805	0.878579603
72.78442383	0.000240607	0.890955715
72.79052734	0.000192172	0.704390936
72.79663086	0.00014779	0.538521683
72.80273438	0.000125293	0.45608538
72.80883789	0.000119285	0.437559083
72.81494141	0.000165879	0.613671875
72.82104492	0.000247756	0.913262652
72.82714844	0.000259402	0.942045503
72.83325195	0.000197418	0.709058488
72.83935547	0.000161122	0.577228894
72.84545898	0.000166901	0.598718045
72.8515625	0.000192392	0.693396084
72.85766602	0.000216429	0.778996644
72.86376953	0.000233662	0.832603888
72.86987305	0.000239374	0.854252957
72.87597656	0.00023059	0.828692055
72.88208008	0.00021019	0.751922887
72.88818359	0.000170363	0.618514064
72.89428711	0.000137156	0.517401602
72.90039063	0.000135083	0.516661114
72.90649414	0.000117235	0.446689829
72.91259766	6.91036E-05	0.265646267
72.91870117	4.79607E-05	0.185648503
72.92480469	6.68121E-05	0.261705845
72.9309082	0.000123074	0.495213656
72.93701172	0.000134049	0.544700992
72.94311523	0.000116395	0.468597749
72.94921875	0.000112301	0.45066922
72.95532227	0.000103881	0.417119375
72.96142578	7.06517E-05	0.285076806
72.9675293	8.34563E-05	0.339920311
72.97363281	0.000121743	0.495703876
72.97973633	0.000107889	0.436969198
72.98583984	6.46433E-05	0.259891328
72.99194336	7.16807E-05	0.283590433
72.99804688	9.90406E-05	0.391176776

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
59.8	0.053954237	-0.000272584	-0.053765216	-12.0971737	1.520889382	1.947340402
59.805	0.065884094	-0.000332947	-0.065725591	-14.78825791	1.521986459	1.947340402
59.81	0.07459738	-0.000377325	-0.074499531	-16.76239444	1.523392905	1.947340402
59.815	0.083384982	-0.000422188	-0.083352843	-18.75438966	1.525150228	1.947340402
59.82	0.094759835	-0.000480555	-0.094844058	-21.339913	1.527419698	1.947340402
59.825	0.101456037	-0.000515919	-0.101722512	-22.88756518	1.530021246	1.947340402
59.83	0.101543164	-0.000517383	-0.101990765	-22.94792211	1.532627263	1.947340402
59.835	0.098632612	-0.000503479	-0.099184208	-22.31644684	1.535086028	1.947340402
59.84	0.09225156	-0.000473009	-0.093042625	-20.93459067	1.537236943	1.947376709
59.845	0.079097048	-0.000408987	-0.080173157	-18.0389603	1.538818179	1.947431237
59.85	0.048203301	-0.000255983	-0.049582827	-11.15613605	1.539405437	1.947477486
59.855	-0.00431942	8.27285E-06	0.002762892	0.62165077	1.539410153	1.947572766
59.86	-0.059052833	0.000288014	0.057568709	12.95295954	1.540291521	1.947600573
59.865	-0.093164477	0.000465137	0.091949576	20.68865457	1.542485218	1.947600573
59.87	-0.097211951	0.000487618	0.096224782	21.65057585	1.544873663	1.947600573
59.875	-0.07997232	0.000402695	0.079126588	17.80348237	1.546490087	1.947600573
59.88	-0.073245339	0.0003689	0.072344533	16.27751987	1.547846013	1.947600573
59.885	-0.092332035	0.000463627	0.091420558	20.56962545	1.550000683	1.947600573
59.89	-0.10671878	0.000537863	0.105996554	23.84922465	1.552879125	1.94762936
59.895	-0.100423893	0.00050724	0.099817584	22.45895648	1.555428009	1.947762188
59.9	-0.094925047	0.000480354	0.094402717	21.24061132	1.5577054	1.948369934
59.905	-0.094834459	0.00048038	0.094408093	21.24182098	1.559978446	1.949258841
59.91	-0.094935219	0.000481514	0.094637723	21.29348774	1.562256325	1.950280208
59.915	-0.095990026	0.0004878	0.095907025	21.57908066	1.564585103	1.95109983
59.92	-0.079924678	0.000409511	0.080173	18.03892509	1.566199602	1.951785829
59.925	-0.03063955	0.000163724	0.031176725	7.01476318	1.566436871	1.952293792
59.93	0.041467078	-0.00020243	-0.040875253	-9.196931855	1.566871464	1.952798156
59.935	0.111619659	-0.000565342	-0.111291992	-25.04069817	1.570020353	1.95310375
59.94	0.155352854	-0.000797168	-0.155559361	-35.00085618	1.576120136	1.953168465
59.945	0.15816576	-0.000816574	-0.158987963	-35.77229172	1.582442811	1.953232043
59.95	0.12065638	-0.000631778	-0.121907657	-27.42922278	1.586122207	1.953232043
59.955	0.082082505	-0.000438003	-0.083372454	-18.75880223	1.58782506	1.953263344
59.96	0.097322095	-0.000513243	-0.098534739	-22.17031624	1.59021892	1.953488568
59.965	0.135411853	-0.000705616	-0.13701709	-30.82884516	1.594853275	1.954071649
59.97	0.10389164	-0.000552234	-0.106183371	-23.89125839	1.597581229	1.955151365
59.975	0.020582904	-0.00013174	-0.02309994	-5.1974865	1.597688305	1.956257384
59.98	-0.026621063	0.000111455	0.024253003	5.456925737	1.597867417	1.957169571
59.985	-0.055198906	0.000259368	0.052845782	11.89030092	1.598637499	1.957816989
59.99	-0.107392311	0.000532059	0.105166005	23.66235109	1.60155239	1.958220631
59.995	-0.132085012	0.000664091	0.130321148	29.32225822	1.605961826	1.958588138
60	-0.100156745	0.00050674	0.098692853	22.20589187	1.608497166	1.958831682
60.005	-0.078578065	0.000397971	0.076975583	17.31950607	1.610057719	1.958917108
60.01	-0.109605879	0.00055169	0.107876791	24.27227793	1.613094012	1.958954045
60.015	-0.141413358	0.000714676	0.139928662	31.48394901	1.618148263	1.959049445
60.02	-0.131370245	0.00066595	0.130104687	29.27355454	1.622510105	1.959308707
60.025	-0.122642252	0.000622695	0.121407323	27.31664765	1.626311615	1.959703609
60.03	-0.133171652	0.000675467	0.132045686	29.71027928	1.6307939	1.96023197
60.035	-0.124465593	0.000633236	0.12352943	27.79412179	1.634709286	1.9608958
60.04	-0.109102228	0.000556795	0.108194283	24.3437137	1.637717739	1.961770097
60.045	-0.107412349	0.000548432	0.106520672	23.96715121	1.640633717	1.962498949
60.05	-0.098001245	0.000501487	0.09713785	21.85601629	1.643061105	1.963172407
60.055	-0.096823982	0.000494796	0.095837627	21.56346619	1.645430523	1.963906017
60.06	-0.125432438	0.000637032	0.124414804	27.99333081	1.649406975	1.964659873
60.065	-0.145245899	0.000738606	0.144444175	32.49993946	1.654738895	1.965645491
60.07	-0.138692345	0.000706763	0.138020545	31.05462265	1.659600514	1.966645362
60.075	-0.130195335	0.000665023	0.129619516	29.16439107	1.663884685	1.967826044
60.08	-0.121128169	0.000620247	0.120628801	27.14148012	1.667592911	1.968789699
60.085	-0.113341061	0.000581396	0.112844218	25.38994913	1.670839673	1.969487827
60.09	-0.119036199	0.000609764	0.118567597	26.67770928	1.674420918	1.970441295
60.095	-0.121199497	0.000621104	0.120850194	27.19129354	1.678133513	1.971126178
60.1	-0.108276473	0.000557322	0.108027916	24.30628111	1.681096598	1.971605224
60.105	-0.093912631	0.000485323	0.09365617	21.0726383	1.683325669	1.972013245
60.11	-0.086526857	0.000447911	0.086206804	19.39653091	1.685217916	1.972289117
60.115	-0.088407812	0.000456876	0.088022669	19.80510062	1.687193326	1.972412088
60.12	-0.099173705	0.00051017	0.098758861	22.22074368	1.689679142	1.972474762
60.125	-0.109235671	0.000560552	0.108878742	24.49771688	1.692694958	1.97276859
60.13	-0.108588729	0.000557808	0.108317309	24.37139448	1.695675158	1.972961087
60.135	-0.104503039	0.000537631	0.104247792	23.45575317	1.698435315	1.973049537
60.14	-0.110275365	0.000566262	0.110023942	24.75538687	1.701508813	1.973054192
60.145	-0.115182346	0.000591264	0.115034974	25.88286911	1.704861923	1.973054192
60.15	-0.109561083	0.000563793	0.109492324	24.63577295	1.707895734	1.973054192
60.155	-0.104435751	0.000538561	0.104410133	23.49227993	1.710652337	1.973054192
60.16	-0.096671472	0.000500352	0.096728048	21.7638107	1.713014298	1.973054192
60.165	-0.084572483	0.00044009	0.084651211	19.04652237	1.71482203	1.973122838
60.17	-0.081672197	0.000425417	0.081733868	18.3901204	1.716507901	1.973289621
60.175	-0.077341634	0.000403957	0.07747073	17.43091436	1.71801973	1.973400701
60.18	-0.063940364	0.000336513	0.06409803	14.42205682	1.719053029	1.973454306
60.185	-0.055933227	0.000295897	0.056063182	12.61421589	1.719843736	1.973912907
60.19	-0.04782467	0.000254859	0.047958415	10.79064342	1.720421805	1.974685726
60.195	-0.038749682	0.000208548	0.038828719	8.736461807	1.720801306	1.975353271
60.2	-0.040641746	0.000217945	0.040725885	9.163324176	1.721218771	1.9759124
60.205	-0.035523533	0.000192435	0.03565624	8.022653994	1.721537111	1.976362454
60.21	-0.021115627	0.000118858	0.021195597	4.769009312	1.7216504	1.976701357
60.215	-0.022934963	0.000127167	0.022914686	5.155804453	1.721783345	1.976925413
60.22	-0.02484924	0.000136866	0.024868279	5.59536267	1.721939409	1.977034667
60.225	-0.010011131	6.17981E-05	0.010009907	2.2522291	1.72196474	1.977046501
60.23	-0.007324155	4.73237E-05	0.007228759	1.626470781	1.721978297	1.977446088
60.235	-0.018779149	0.000104047	0.018656347	4.197678146	1.722067428	1.978198159
60.24	-0.015442207	8.77702E-05	0.015368609	3.457937065	1.722127697	1.97887649
60.245	-0.004695202	3.3931E-05	0.004556042	1.025109349	1.722133269	1.980482116
60.25	-0.005763647	3.87868E-05	0.005565192	1.25216815	1.722141665	1.982819495
60.255	-0.009170782	5.5437E-05	0.008923505	2.00778852	1.722162921	1.985008409
60.26	-0.012497716	7.14722E-05	0.012154427	2.734745996	1.722202398	1.987048781
60.265	-0.028546023	0.000150984	0.028132271	6.32976095	1.72240835	1.988941863
60.27	-0.043060035	0.000223808	0.042709614	9.609663065	1.722876974	1.99069502
60.275	-0.043680751	0.000227059	0.043354762	9.754821466	1.723359207	1.992314883
60.28	-0.053114395	0.000274069	0.052741252	11.86678171	1.724072224	1.994595222
60.285	-0.070912841	0.000363884	0.070610668	15.88740026	1.725343166	1.99712062
60.29	-0.074612529	0.000383108	0.074426267	16.74591003	1.726750184	1.999569825
60.295	-0.076945303	0.000395017	0.076788538	17.27742114	1.728246558	2.001964706
60.3	-0.086759783	0.000444882	0.086666343	19.49992727	1.730149006	2.004305977
60.305	-0.092430136	0.000474001	0.092424965	20.79561717	1.732308257	2.006597535
60.31	-0.10186208	0.00052216	0.101933936	22.93513568	1.734930669	2.008842338
60.315	-0.11174214	0.000573143	0.111979977	25.19549479	1.738086472	2.011044881

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
73.00415039	0.000100062	0.400522734
73.01025391	9.59932E-05	0.383483762
73.01635742	0.00011233	0.448453122
73.02246094	0.000130199	0.52371264
73.02856445	0.000115584	0.456705987
73.03466797	5.99493E-05	0.231122597
73.04077148	4.30843E-05	0.165750519
73.046875	8.91167E-05	0.34585711
73.05297852	0.00013918	0.546826276
73.05908203	0.000121512	0.48363839
73.06518555	8.74036E-05	0.346871465
73.07128906	9.87831E-05	0.384972486
73.07739258	0.000112142	0.431365018
73.08349609	0.000125346	0.48028131
73.08959961	0.000133303	0.508641714
73.09570313	0.000133723	0.511382998
73.10180664	0.000165575	0.634691695
73.10791016	0.000222628	0.836552695
73.11401367	0.000250647	0.915736859
73.12011719	0.000241143	0.869267648
73.1262207	0.000224782	0.807055211
73.13232422	0.000237124	0.852902035
73.13842773	0.000283335	1.02039383
73.14453125	0.000310077	1.105129697
73.15063477	0.000275619	0.962581462
73.15673828	0.000237077	0.812817916
73.1628418	0.000212646	0.726804692
73.16894531	0.000166719	0.573343266
73.17504883	0.000155842	0.536678744
73.18115234	0.000208072	0.719122039
73.18725586	0.000275464	0.951939741
73.19335938	0.000294379	1.003318815
73.19946289	0.000254861	0.865572373
73.20556641	0.000199268	0.687405275
73.21166992	0.000186483	0.652409005
73.21777344	0.000208114	0.732522768
73.22387695	0.000200387	0.703043103
73.22998047	0.000151225	0.525180963
73.23608398	9.82665E-05	0.338941893
73.2421875	9.09014E-05	0.313301798
73.24829102	0.000117295	0.407925583
73.25439453	0.0001355	0.48029712
73.26049805	0.000147463	0.527182973
73.26660156	0.000167995	0.597500248
73.27270508	0.000194674	0.693942387
73.27880859	0.000193861	0.697457865
73.28491211	0.00015142	0.550496655
73.29101563	0.000118089	0.436818273
73.29711914	8.28261E-05	0.310702052
73.30322266	4.10254E-05	0.154583799
73.30932617	5.09766E-05	0.191895837
73.31542969	7.22122E-05	0.269473214
73.3215332	8.82694E-05	0.327813074
73.32763672	0.000129438	0.484683395
73.33374023	0.000175256	0.660852543
73.33984375	0.000165458	0.624003992
73.34594727	0.000115955	0.43532928
73.35205078	8.62506E-05	0.319623567
73.3581543	0.000108154	0.398141441
73.36425781	0.00013229	0.493479404
73.37036133	0.000122409	0.465696198
73.37646484	9.96631E-05	0.384068172
73.38256836	9.87771E-05	0.380894027
73.38867188	0.000114507	0.435242831
73.39477539	0.000131646	0.493270896
73.40087891	0.000129257	0.481232596
73.40698242	0.000121079	0.449484247
73.41308594	0.000149661	0.557208116
73.41918945	0.000175885	0.653064324
73.42529297	0.000175052	0.640743914
73.43139648	0.00017303	0.62553121
73.4375	0.000189186	0.67089256
73.44360352	0.000209062	0.728239251
73.44970703	0.000211159	0.745524324
73.45581055	0.000197377	0.71060669
73.46191406	0.000181332	0.652641486
73.46801758	0.000175101	0.628840603
73.47412109	0.000182409	0.649305942
73.48022461	0.000191326	0.672645145
73.48632813	0.000190233	0.67325233
73.49243164	0.000181921	0.649266858
73.49853516	0.000175458	0.624544619
73.50463867	0.00017429	0.619707895
73.51074219	0.000171969	0.602575774
73.5168457	0.000160673	0.547092383
73.52294922	0.00014754	0.498241338
73.52905273	0.000160436	0.545958756
73.53515625	0.000197263	0.671298155
73.54125977	0.000200376	0.68252306
73.54736328	0.000154308	0.526386848
73.5534668	0.000105297	0.356168215
73.55957031	0.000101044	0.339714644
73.56567383	0.000143326	0.481597316
73.57177734	0.000185763	0.628434595
73.57788086	0.000199648	0.689590454
73.58398438	0.000191181	0.667772281
73.59008789	0.000182686	0.635130523
73.59619141	0.0001649	0.572514105
73.60229492	0.000139498	0.482556883
73.60839844	0.000113041	0.394881774
73.61450195	0.00011497	0.414219312
73.62060547	0.000151195	0.551452897
73.62670898	0.000141325	0.513338408
73.6328125	8.34196E-05	0.303563789

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
60.32	-0.109067175	0.000560705	0.109469186	24.63056678	1.741092992	2.013209189
60.325	-0.108320525	0.000557567	0.108837071	24.48834093	1.744058488	2.015333611
60.33	-0.107026514	0.000552093	0.107732079	24.23971784	1.746953556	2.017416463
60.335	-0.089676465	0.000466625	0.090540132	20.37152972	1.748986067	2.019933387
60.34	-0.076714259	0.000402044	0.077600498	17.46011205	1.750473468	2.023353532
60.345	-0.077859128	0.00040809	0.078821681	17.73487832	1.752005596	2.026668664
60.35	-0.071522768	0.000377289	0.072651499	16.34658726	1.753298494	2.029898282
60.355	-0.047464746	0.00025726	0.048734336	10.96522562	1.753867895	2.033911606
60.36	-0.018574947	0.000111261	0.019810624	4.457390429	1.753955098	2.037783783
60.365	-0.010962854	7.19479E-05	0.012052452	2.711801743	1.753985474	2.04148477
60.37	-0.021667021	0.000125093	0.022766076	5.122366991	1.754104126	2.045004634
60.375	-0.011748698	7.65462E-05	0.012978047	2.920060557	1.754139012	2.048348912
60.38	0.011871198	-4.41362E-05	-0.010691461	-2.405578729	1.75417463	2.051564568
60.385	0.013061418	-5.14756E-05	-0.012027896	-2.706276517	1.754217747	2.05572811
60.39	0.003380751	-3.41369E-06	-0.002345847	-0.527815503	1.754220636	2.059739741
60.395	0.007354728	-2.28247E-05	-0.006263268	-1.409235366	1.754234307	2.063605724
60.4	0.016680254	-6.93382E-05	-0.015604065	-3.510914625	1.754304628	2.067321705
60.405	0.020499893	-8.92343E-05	-0.019479096	-4.382796561	1.754410841	2.070877671
60.41	0.016918386	-7.15832E-05	-0.015916613	-3.581237977	1.754483184	2.075050702
60.415	0.008976598	-3.20343E-05	-0.007949451	-1.788626452	1.754503549	2.079579906
60.42	0.011413644	-4.36264E-05	-0.010292308	-2.315769327	1.754536474	2.083921868
60.425	0.025559261	-0.000114621	-0.024419321	-5.494347153	1.754701584	2.088071801
60.43	0.028914548	-0.000132263	-0.027821371	-6.259808409	1.754912888	2.092012504
60.435	0.019798557	-8.69216E-05	-0.018680894	-4.203201105	1.755011959	2.095738828
60.44	0.026479718	-0.000119348	-0.025222154	-5.674984683	1.755189175	2.099268756
60.445	0.05201941	-0.000250258	-0.050735221	-11.41542464	1.755873097	2.102656953
60.45	0.068543585	-0.000336516	-0.067403079	-15.16569273	1.757060531	2.106612226
60.455	0.064957748	-0.000319366	-0.063941069	-14.38674058	1.758126975	2.110522043
60.46	0.060787506	-0.000298699	-0.059775227	-13.44942613	1.759060884	2.114167909
60.465	0.067329223	-0.000331109	-0.066313086	-14.92044435	1.760206616	2.117553099
60.47	0.074772114	-0.000369666	-0.073794972	-16.60386874	1.761619658	2.120669385
60.475	0.08234526	-0.000409217	-0.081411187	-18.31751713	1.763333431	2.123505725
60.48	0.090639335	-0.000452805	-0.089792344	-20.20327741	1.765409823	2.126050826
60.485	0.090038021	-0.000450242	-0.089218517	-20.07416626	1.767458756	2.128294374
60.49	0.08677775	-0.000434214	-0.085985377	-19.34670988	1.769361992	2.130236154
60.495	0.095199231	-0.000476898	-0.094419442	-21.24437443	1.771652558	2.13187838
60.5	0.104423404	-0.000525507	-0.103742979	-23.34217022	1.77440851	2.133231356
60.505	0.104317543	-0.000525541	-0.103700463	-23.33260421	1.777158877	2.134402669
60.51	0.102880182	-0.000518381	-0.102255192	-23.00741826	1.779833973	2.135776282
60.515	0.104989625	-0.000529692	-0.104538635	-23.5211929	1.782619893	2.137080277
60.52	0.107579638	-0.000543569	-0.107203363	-24.12075676	1.785544962	2.138178517
60.525	0.111369481	-0.000563744	-0.111065917	-24.98983139	1.788679751	2.139065438
60.53	0.116453809	-0.000590912	-0.116263073	-26.1591915	1.792107297	2.14049734
60.535	0.114237064	-0.000580911	-0.114208213	-25.6968479	1.795405596	2.141890234
60.54	0.099487642	-0.000508133	-0.099557225	-22.40037566	1.797907174	2.14305138
60.545	0.092928411	-0.000475293	-0.092965475	-20.91723179	1.800089768	2.143992811
60.55	0.107836711	-0.000549532	-0.107922052	-24.28246171	1.803028833	2.144734125
60.555	0.110167932	-0.000562382	-0.110489833	-24.86021235	1.806096346	2.14531939
60.56	0.085807356	-0.000441874	-0.08626854	-19.41042155	1.807957254	2.145955756
60.565	0.073265269	-0.00037895	-0.073688559	-16.57992572	1.809313918	2.14670201
60.57	0.078527298	-0.000405267	-0.078998547	-17.77467313	1.810872455	2.147237904
60.575	0.070964435	-0.000368415	-0.071586194	-16.10689362	1.812145247	2.147659126
60.58	0.049664254	-0.000261729	-0.050350031	-11.32875693	1.812768643	2.147974076
60.585	0.035344941	-0.000189212	-0.035971821	-8.093659708	1.813084383	2.148178119
60.59	0.037319534	-0.000198719	-0.037902842	-8.528139448	1.813436388	2.148268591
60.595	0.037266021	-0.000198832	-0.037923619	-8.532814328	1.813787384	2.148296931
60.6	0.020986569	-0.000116864	-0.021670547	-4.875873187	1.8138987	2.148308803
60.605	0.015789046	-8.99647E-05	-0.016379208	-3.685321708	1.813961707	2.1483092
60.61	0.026881086	-0.000144985	-0.027468037	-6.180308301	1.814144336	2.1483092
60.615	0.021297032	-0.000117666	-0.02195601	-4.940102322	1.81425897	2.1483092
60.62	0.015267326	-8.74001E-05	-0.015860897	-3.568701855	1.814317882	2.1483092
60.625	0.02825877	-0.000151855	-0.028850082	-6.491268434	1.81451971	2.1483092
60.63	0.024881422	-0.000135745	-0.02559229	-5.758265324	1.814676179	2.1483092
60.635	0.010224293	-6.22094E-05	-0.01089509	-2.451395172	1.814702599	2.1483092
60.64	0.018967831	-0.000105351	-0.019594775	-4.408824282	1.81479353	2.1483092
60.645	0.026463942	-0.000143057	-0.027179902	-6.115478058	1.814970535	2.1483092
60.65	0.013960935	-8.12227E-05	-0.014717897	-3.311526861	1.815019796	2.1483092
60.655	0.010693023	-6.4518E-05	-0.011373928	-2.559133732	1.815048695	2.1483092
60.66	0.020687067	-0.000114062	-0.021359645	-4.805920059	1.815156856	2.1483092
60.665	0.021527662	-0.000118577	-0.022262873	-5.00914632	1.815273987	2.1483092
60.67	0.014275511	-8.2629E-05	-0.015015447	-3.378475554	1.815325493	2.149399485
60.675	0.015720779	-8.95752E-05	-0.016420079	-3.694517708	1.815387956	2.150775822
60.68	0.022332871	-0.000122559	-0.023068612	-5.190437647	1.815514012	2.152068488
60.685	0.016839439	-9.56434E-05	-0.01763797	-3.968543247	1.815585681	2.153277562
60.69	0.00993667	-6.12366E-05	-0.010710071	-2.409765997	1.815610636	2.154400462
60.695	0.01539075	-8.82827E-05	-0.016166919	-3.637556829	1.815670505	2.15543442
60.7	0.013132801	-7.75314E-05	-0.013995227	-3.148926036	1.815714095	2.156379386
60.705	0.000477334	-1.3744E-05	-0.00135967	-0.305925646	1.815714153	2.157233666
60.71	-0.004692373	1.26719E-05	0.003829814	0.861708085	1.815719717	2.1579932
60.715	-0.010517866	4.22028E-05	0.009624877	2.165597371	1.815747677	2.158655406
60.72	-0.023570574	0.000108873	0.022683533	5.103795001	1.815888093	2.159217714
60.725	-0.033442529	0.000159668	0.032610147	7.337283123	1.816170759	2.159676069
60.73	-0.04066428	0.000196966	0.039886787	8.97452707	1.816588688	2.160027108
60.735	-0.045656888	0.000222948	0.044949775	10.11369928	1.81711554	2.160268484
60.74	-0.046322897	0.000226605	0.04566208	10.27396808	1.817657874	2.160398815
60.745	-0.051288746	0.000252189	0.050641859	11.3944183	1.818322719	2.160422256
60.75	-0.059051068	0.000292431	0.058465226	13.15467579	1.819204035	2.160422256
60.755	-0.060701306	0.000301306	0.060189021	13.54252981	1.820135297	2.160422256
60.76	-0.062345569	0.000309948	0.061867048	13.92008578	1.821117694	2.160744153
60.765	-0.068012114	0.000339434	0.06758823	15.20735175	1.822286785	2.161889829
60.77	-0.069665084	0.000348407	0.069327162	15.59861148	1.823513395	2.162915578
60.775	-0.066931448	0.000334603	0.066540713	14.97166042	1.824645629	2.163820138
60.78	-0.068292092	0.000341756	0.067984934	15.2966102	1.825824366	2.164603447
60.785	-0.07308407	0.000366568	0.072847638	16.39071856	1.827174327	2.165264616
60.79	-0.070731304	0.00035548	0.070600744	15.8851674	1.82843877	2.16580219
60.795	-0.062620135	0.000315469	0.062537796	14.07100419	1.829429839	2.16621667
60.8	-0.061162498	0.000308277	0.061092111	13.74572505	1.830375306	2.16651009
60.805	-0.062502486	0.000315202	0.062490046	14.06026043	1.831362655	2.166683132
60.81	-0.058998048	0.000298078	0.059039052	13.28378662	1.832242388	2.16673587
60.815	-0.057092159	0.000288773	0.057168537	12.86292077	1.833066202	2.16673587
60.82	-0.056653972	0.000286868	0.056785827	12.77681106	1.833877418	2.16673587
60.825	-0.053694483	0.000272492	0.053897966	12.12704231	1.834606095	2.16673587
60.83	-0.048571309	0.000247299	0.048842303	10.98951817	1.835202355	2.16673587
60.835	-0.040230307	0.00020591	0.040550506	9.123863842	1.835611411	2.16673587

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
73.63891602	2.42143E-05	0.08744458
73.64501953	2.1765E-05	0.078580038
73.65112305	5.29239E-05	0.19492503
73.65722656	7.86618E-05	0.292194082
73.66333008	8.33887E-05	0.309321189
73.66943359	8.01178E-05	0.296343905
73.67553711	8.45601E-05	0.306711926
73.68164063	7.67113E-05	0.274525754
73.68774414	6.07572E-05	0.219300401
73.69384766	5.45694E-05	0.198256276
73.69995117	5.91498E-05	0.215810025
73.70605469	7.37209E-05	0.269922665
73.7121582	8.27372E-05	0.297444725
73.71826172	6.78557E-05	0.238375916
73.72436523	3.99381E-05	0.139612436
73.73046875	7.25192E-05	0.254791435
73.73657227	0.000114769	0.409201112
73.74267578	0.000128942	0.466210749
73.7487793	0.000121683	0.435514348
73.75488281	0.000118107	0.414465543
73.76098633	0.000127401	0.444024827
73.76708984	0.000124494	0.433823918
73.77319336	0.000104888	0.366526833
73.77929688	8.91758E-05	0.313335723
73.78540039	0.000102619	0.359885158
73.79150391	0.000118021	0.409175614
73.79760742	0.000100103	0.342545414
73.80371094	6.63867E-05	0.224462549
73.80981445	5.23553E-05	0.175714888
73.81591797	2.47152E-05	0.083097448
73.82202148	7.28248E-05	0.246505622
73.828125	9.65651E-05	0.327493365
73.83422852	5.94878E-05	0.199231177
73.84033203	1.57023E-05	0.05149626
73.84643555	2.25206E-05	0.073250954
73.85253906	7.25472E-05	0.237350533
73.85864258	0.000114942	0.378238241
73.86474609	0.000119932	0.39494366
73.87084961	0.000116257	0.379540783
73.87695313	0.000125554	0.403848633
73.88305664	0.000125976	0.401915227
73.88916016	0.000110498	0.353190736
73.89526367	8.47794E-05	0.274119311
73.90136719	6.06517E-05	0.199179424
73.9074707	8.16614E-05	0.26994054
73.91357422	0.000115198	0.379328324
73.91967773	0.000104048	0.340374721
73.92578125	5.4829E-05	0.178980941
73.93188477	2.01506E-05	0.066497027
73.93798828	2.80064E-05	0.094569747
73.9440918	4.1612E-05	0.143363162
73.95019531	3.00687E-05	0.103888723
73.95629883	2.40291E-05	0.082091887
73.96240234	3.31281E-05	0.112024937
73.96850586	3.41434E-05	0.115907843
73.97460938	5.59043E-05	0.193164639
73.98071289	6.69474E-05	0.233909342
73.98681641	5.06689E-05	0.176097756
73.99291992	1.83677E-05	0.063511631
73.99902344	4.26867E-05	0.147320516
74.00512695	7.4631E-05	0.256903034
74.01123047	7.93233E-05	0.275352045
74.01733398	6.41894E-05	0.226402165
74.0234375	5.08148E-05	0.18103669
74.02954102	5.59898E-05	0.200874763
74.03564453	7.2233E-05	0.260222142
74.04174805	6.9839E-05	0.251030995
74.04785156	4.16798E-05	0.15004598
74.05395508	1.98536E-05	0.072296913
74.06005859	4.5507E-05	0.167021585
74.06616211	7.11459E-05	0.259783242
74.07226563	5.1436E-05	0.185909573
74.07836914	2.53996E-05	0.09085392
74.08447266	4.94626E-05	0.174704756
74.09057617	4.63351E-05	0.162422728
74.09667969	3.62298E-05	0.127390024
74.1027832	4.71374E-05	0.166607552
74.10888672	7.78118E-05	0.273596216
74.11499023	0.000105194	0.363783294
74.12109375	9.0108E-05	0.307256193
74.12719727	4.58747E-05	0.156594031
74.13330078	4.65758E-05	0.160811312
74.1394043	7.4246E-05	0.258028901
74.14550781	8.6413E-05	0.299489167
74.15161133	8.26546E-05	0.284388048
74.15771484	8.21526E-05	0.279233646
74.16381836	6.76997E-05	0.226758402
74.16992188	3.98328E-05	0.133070444
74.17602539	2.45486E-05	0.082860038
74.18212891	3.14857E-05	0.106696498
74.18823242	4.89328E-05	0.164959526
74.19433594	6.92583E-05	0.232125238
74.20043945	8.2402E-05	0.272166573
74.20654297	7.66221E-05	0.249205096
74.21264648	6.46396E-05	0.210868125
74.21875	5.58295E-05	0.183796475
74.22485352	4.42737E-05	0.146286835
74.23095703	4.68873E-05	0.154747455
74.23706055	6.10404E-05	0.198221765
74.24316406	5.6959E-05	0.181851571
74.24926758	3.1747E-05	0.101329034
74.25537109	2.04529E-05	0.065408335
74.26147461	4.34436E-05	0.139141907
74.26757813	6.93646E-05	0.223888326

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
60.84	-0.033748661	0.000173623	0.03409389	7.67112519	1.835899276	2.16673587
60.845	-0.02635864	0.000136855	0.026753008	6.019426703	1.836074875	2.16673587
60.85	-0.012506528	6.73355E-05	0.012906607	2.903986525	1.836114407	2.16673587
60.855	-0.006492668	3.67857E-05	0.006835419	1.537969305	1.836125061	2.16673587
60.86	-0.006115042	3.49235E-05	0.0064656	1.454760072	1.836134512	2.16673587
60.865	0.004085082	-1.64496E-05	-0.003724925	-0.83810807	1.83613873	2.16673587
60.87	0.010897756	-5.11847E-05	-0.010602484	-2.38555884	1.836168746	2.16673587
60.875	0.011590723	-5.48243E-05	-0.01132254	-2.547571612	1.8362027	2.16673587
60.88	0.018676891	-9.08516E-05	-0.018444314	-4.149970601	1.836290863	2.16673587
60.885	0.018956044	-9.27542E-05	-0.018783415	-4.226268283	1.836381681	2.16673587
60.89	0.011754095	-5.7157E-05	-0.011607295	-2.611641375	1.836416599	2.16673587
60.895	0.012932876	-6.30024E-05	-0.012788515	-2.877415819	1.836458873	2.16673587
60.9	0.012819487	-6.26817E-05	-0.012723174	-2.862714216	1.836500408	2.16673587
60.905	0.008991267	-4.37994E-05	-0.008918528	-2.006668761	1.83652084	2.16673587
60.91	0.008505231	-4.15295E-05	-0.008461804	-1.903905944	1.836539123	2.16673587
60.915	0.001627951	-7.55427E-06	-0.001632679	-0.367352736	1.836539793	2.16673587
60.92	-0.007857462	3.98385E-05	0.007873195	1.771468941	1.836555397	2.16673587
60.925	-0.010113946	5.12758E-05	0.01016388	2.28687295	1.836581251	2.16673587
60.93	-0.013281986	6.71396E-05	0.013338992	3.00127316	1.836625837	2.16673587
60.935	-0.018150959	9.16977E-05	0.018249478	4.106132446	1.836709104	2.16673587
60.94	-0.017433352	8.8414E-05	0.017581696	3.955881662	1.836785918	2.16673587
60.945	-0.013586344	6.9331E-05	0.013731963	3.089691586	1.836832571	2.16673587
60.95	-0.011693702	5.99563E-05	0.01184251	2.66456486	1.836867132	2.16673587
60.955	-0.008796797	4.57937E-05	0.008990102	2.022772948	1.83688669	2.16673587
60.96	0.002915063	-1.22866E-05	-0.002683905	-0.603878716	1.836888837	2.16673587
60.965	0.01457435	-7.07654E-05	-0.014402644	-3.240594795	1.836942522	2.16673587
60.97	0.014104418	-6.87433E-05	-0.013985828	-3.146811258	1.836992801	2.16673587
60.975	0.015598357	-7.61016E-05	-0.015470305	-3.480818574	1.837054295	2.16673587
60.98	0.023180019	-0.000114434	-0.023100318	-5.197571498	1.837190097	2.16673587
60.985	0.02076709	-0.000102943	-0.020771413	-4.673567983	1.837299097	2.16673587
60.99	0.014732337	-7.30621E-05	-0.014748627	-3.318441035	1.837353952	2.16673587
60.995	0.015011075	-7.44559E-05	-0.015030948	-3.381963261	1.837410903	2.16673587
61	0.01358324	-6.75024E-05	-0.013629217	-3.06657378	1.837457535	2.16673587
61.005	0.010495676	-5.21841E-05	-0.010546818	-2.373034142	1.837485377	2.16673587
61.01	0.010200981	-5.06869E-05	-0.010246311	-2.305419932	1.837511677	2.16673587
61.015	0.010698217	-5.31782E-05	-0.010749394	-2.418613612	1.837540604	2.16673587
61.02	0.010218666	-5.08442E-05	-0.01027803	-2.312556759	1.837566995	2.16673587
61.025	0.008969768	-4.46428E-05	-0.009030305	-2.031818557	1.83758733	2.16673587
61.03	0.010193212	-5.0702E-05	-0.010253765	-2.307097097	1.83761359	2.16673587
61.035	0.010135104	-5.05388E-05	-0.01022046	-2.299603557	1.837639552	2.16673587
61.04	0.004755892	-2.37904E-05	-0.004840225	-1.089050621	1.837645268	2.16673587
61.045	0.004640051	-2.29744E-05	-0.004682895	-1.0536513	1.83765071	2.16673587
61.05	0.009752272	-4.827E-05	-0.009784796	-2.201579008	1.837674747	2.16673587
61.055	0.011165996	-5.53046E-05	-0.011202133	-2.520479987	1.837706259	2.16673587
61.06	0.015395027	-7.62441E-05	-0.015417592	-3.46895811	1.83776616	2.16673587
61.065	0.021147606	-0.000105003	-0.021199152	-4.76980912	1.837879191	2.16673587
61.07	0.022007998	-0.000109452	-0.022092836	-4.970888149	1.838001607	2.16673587
61.075	0.024459169	-0.000121756	-0.024545028	-5.522631305	1.83815281	2.16673587
61.08	0.025562689	-0.000127486	-0.025671019	-5.775979365	1.838317964	2.16673587
61.085	0.02298714	-0.000114764	-0.023103028	-5.198181318	1.838451514	2.16673587
61.09	0.026482397	-0.000132217	-0.026608227	-5.986851186	1.838628766	2.16673587
61.095	0.029937742	-0.000150082	-0.030130013	-6.779252906	1.83885529	2.16673587
61.1	0.025077036	-0.000126148	-0.025300363	-5.692581687	1.839014228	2.16673587
61.105	0.018213506	-9.21819E-05	-0.018459411	-4.153367398	1.83909807	2.16673587
61.11	0.013559997	-6.90195E-05	-0.01380192	-3.105432039	1.839144543	2.16673587
61.115	0.013508577	-6.8737E-05	-0.013748116	-3.093325992	1.839190663	2.16673587
61.12	0.013055071	-6.66741E-05	-0.013331455	-2.999577459	1.839233739	2.16673587
61.125	0.004524524	-2.42714E-05	-0.004820169	-1.084537923	1.839238913	2.16673587
61.13	0.000334308	-3.09554E-06	-0.000576893	-0.129800942	1.839238941	2.16673587
61.135	0.005321154	-2.77268E-05	-0.005546941	-1.248061649	1.839246098	2.16673587
61.14	0.005295217	-2.77463E-05	-0.005549098	-1.248546972	1.839253184	2.16673587
61.145	0.003376535	-1.8211E-05	-0.003624776	-0.815574582	1.839256066	2.16673587
61.15	0.005691428	-2.97166E-05	-0.005947447	-1.338175562	1.839264253	2.16673587
61.155	0.004818734	-2.55207E-05	-0.005100067	-1.147515149	1.839270121	2.16673587
61.16	0.003739845	-2.01815E-05	-0.004022388	-0.905037239	1.839273656	2.16673587
61.165	0.006163099	-3.22833E-05	-0.006465325	-1.454698167	1.839283257	2.16673587
61.17	0.005434522	-2.88838E-05	-0.005778385	-1.30013662	1.839290721	2.16673587
61.175	0.001965777	-1.18185E-05	-0.002335315	-0.525445963	1.839291698	2.16673587
61.18	-0.000506704	3.55828E-07	0.00011428	0.025712929	1.839291763	2.16673587
61.185	-0.003248002	1.38397E-05	0.00281346	0.633028578	1.839294429	2.16673587
61.19	-0.007573597	3.52871E-05	0.007103141	1.598206826	1.839308926	2.16673587
61.195	-0.013440324	6.46399E-05	0.012966958	2.917565585	1.839354582	2.16673587
61.2	-0.017774071	8.64582E-05	0.017320421	3.897094752	1.839434427	2.16673587
61.205	-0.019564575	9.54981E-05	0.019122903	4.302653276	1.839531169	2.16673587
61.21	-0.023224125	0.000113906	0.02279107	5.127990647	1.839667488	2.16673587
61.215	-0.026107398	0.0001286	0.025716794	5.786278646	1.839839755	2.16673587
61.22	-0.023178053	0.000114063	0.022782495	5.126061479	1.839975533	2.16673587
61.225	-0.02147806	0.000105493	0.021054125	4.737178104	1.840092125	2.16673587
61.23	-0.023783667	0.000117141	0.023405528	5.266243818	1.840235091	2.16673587
61.235	-0.021341493	0.000105172	0.020989402	4.722615493	1.840350204	2.16673587
61.24	-0.018151013	8.92626E-05	0.017783318	4.001246653	1.840433472	2.16673587
61.245	-0.021601985	0.000106344	0.02123094	4.7769616	1.840551413	2.16673587
61.25	-0.021281752	0.000104938	0.020945756	4.712795144	1.840665882	2.16673587
61.255	-0.017471436	8.60138E-05	0.017128996	3.854023997	1.840743032	2.16673587
61.26	-0.020790398	0.000102415	0.02043942	4.598869598	1.840852277	2.16673587
61.265	-0.020250477	9.995E-05	0.019940385	4.486586563	1.840955921	2.16673587
61.27	-0.014304527	7.03691E-05	0.013979783	3.145451181	1.841007637	2.16673587
61.275	-0.017923294	8.81341E-05	0.017565234	3.952177659	1.841088829	2.16673587
61.28	-0.020166179	9.94157E-05	0.019839385	4.463861707	1.841191612	2.16673587
61.285	-0.016163903	7.95153E-05	0.01582362	3.560314582	1.841257646	2.16673587
61.29	-0.022012676	0.000108313	0.021632719	4.867361822	1.841380114	2.16673587
61.295	-0.028021532	0.000138344	0.027655965	6.222592031	1.841578568	2.16673587
61.3	-0.027597894	0.000136294	0.027241988	6.129447216	1.841771067	2.16673587
61.305	-0.033900148	0.000167931	0.03353902	7.546279535	1.842061522	2.16673587
61.31	-0.038988855	0.00019381	0.038678541	8.702671677	1.842445722	2.16673587
61.315	-0.039282499	0.000195428	0.038999745	8.774942712	1.84283573	2.16673587
61.32	-0.044906282	0.000223921	0.044651383	10.04656123	1.843345401	2.16673587
61.325	-0.046466952	0.00023217	0.046277838	10.41251355	1.843891114	2.16673587
61.33	-0.043154356	0.000215624	0.04293879	9.661227708	1.844361794	2.16673587
61.335	-0.044736345	0.000223729	0.044575127	10.02940364	1.844867615	2.16673587
61.34	-0.042862717	0.000214511	0.04271441	9.610742272	1.845331954	2.16673587
61.345	-0.040065666	0.000200632	0.039916537	8.981220765	1.845737669	2.16673587
61.35	-0.044234143	0.000221362	0.044100114	9.922525683	1.846232197	2.16673587
61.355	-0.044039098	0.000220661	0.043957024	9.890330421	1.846722374	2.16673587

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
74.27368164	7.28481E-05	0.235265349
74.27978516	5.59355E-05	0.179309802
74.28588867	4.35188E-05	0.139133924
74.29199219	5.36377E-05	0.171879028
74.2980957	6.52367E-05	0.21041348
74.30419922	5.34926E-05	0.175006495
74.31030273	5.35291E-05	0.17736337
74.31640625	8.65555E-05	0.287460799
74.32250977	8.92506E-05	0.29661061
74.32861328	6.34306E-05	0.211477653
74.3347168	4.25466E-05	0.143011628
74.34082031	2.65821E-05	0.090970656
74.34692383	9.78101E-06	0.033746719
74.35302734	3.56972E-05	0.121980881
74.35913086	5.57598E-05	0.189247557
74.36523438	7.66558E-05	0.259454241
74.37133789	8.41573E-05	0.286092917
74.37744141	7.03772E-05	0.242875949
74.38354492	5.07102E-05	0.175039117
74.38964844	1.64687E-05	0.05625065
74.39575195	2.42584E-05	0.082713264
74.40185547	4.1955E-05	0.141947298
74.40795898	3.55158E-05	0.118657063
74.4140625	2.82969E-05	0.094451089
74.42016602	3.12079E-05	0.105066321
74.42626953	3.59851E-05	0.122242273
74.43237305	3.87186E-05	0.130634248
74.43847656	4.84859E-05	0.160362715
74.44458008	5.98201E-05	0.195969719
74.45068359	6.49327E-05	0.212691107
74.45678711	5.70249E-05	0.187736499
74.46289063	4.19648E-05	0.140000444
74.46899414	3.52111E-05	0.117913492
74.47509766	3.24458E-05	0.107667453
74.48120117	3.21924E-05	0.106389891
74.48730469	3.43193E-05	0.113221755
74.4934082	2.28811E-05	0.075573522
74.49951172	4.84718E-06	0.016222686
74.50561523	1.88064E-05	0.063557594
74.51171875	3.36064E-05	0.113430857
74.51782227	5.68028E-05	0.191269833
74.52392578	5.35903E-05	0.177986025
74.5300293	3.56202E-05	0.116243091
74.53613281	3.02476E-05	0.099003644
74.54223633	2.23037E-05	0.073210879
74.54833984	3.16463E-05	0.102325044
74.55444336	5.20903E-05	0.166658461
74.56054688	4.95343E-05	0.157173741
74.56665039	2.07257E-05	0.064931112
74.57275391	9.49462E-06	0.029871706
74.57885742	1.5123E-05	0.048194691
74.58496094	3.78672E-05	0.121052855
74.59106445	6.56189E-05	0.211008657
74.59716797	7.57157E-05	0.243627898
74.60327148	6.42006E-05	0.204681657
74.609375	4.92545E-05	0.157911171
74.61547852	4.93688E-05	0.159903489
74.62158203	5.35902E-05	0.174624847
74.62768555	4.23097E-05	0.140380278
74.63378906	2.27015E-05	0.075771682
74.63989258	1.93135E-05	0.063720219
74.64599609	1.87655E-05	0.062006989
74.65209961	9.03335E-06	0.029883523
74.65820313	1.73294E-05	0.057348258
74.66430664	4.34656E-05	0.146530312
74.67041016	6.61761E-05	0.224979922
74.67651367	7.47768E-05	0.252575499
74.68261719	6.67302E-05	0.225654978
74.6887207	5.61698E-05	0.18958631
74.69482422	5.80017E-05	0.196003437
74.70092773	5.78816E-05	0.198443962
74.70703125	3.96135E-05	0.136666079
74.71313477	1.8038E-05	0.062032488
74.71923828	9.23548E-06	0.031627923
74.7253418	9.86999E-06	0.033584656
74.73144531	1.37324E-05	0.046915615
74.73754883	2.2447E-05	0.07705833
74.74365234	3.92442E-05	0.133263977
74.74975586	4.85442E-05	0.164608897
74.75585938	3.16308E-05	0.107892553
74.76196289	7.48748E-06	0.025101042
74.76806641	3.45687E-05	0.114396604
74.77416992	3.32005E-05	0.111322997
74.78027344	1.81603E-05	0.061341565
74.78637695	1.47456E-05	0.049650217
74.79248047	2.30635E-05	0.077800398
74.79858398	3.70615E-05	0.124939491
74.8046875	3.24811E-05	0.108981655
74.81079102	1.4203E-05	0.047431192
74.81689453	3.19142E-05	0.106411856
74.82299805	6.40909E-05	0.214538798
74.82910156	8.5372E-05	0.285072819
74.83520508	8.37775E-05	0.276597958
74.84130859	6.10673E-05	0.199952289
74.84741211	2.864E-05	0.093092574
74.85351563	1.92807E-05	0.0621168
74.85961914	2.67088E-05	0.085897527
74.86572266	2.8288E-05	0.091473728
74.87182617	2.91858E-05	0.09455544
74.87792969	2.23796E-05	0.072100339
74.8840332	6.61619E-06	0.021091989
74.89013672	2.16745E-05	0.068502236
74.89624023	3.5326E-05	0.11232818
74.90234375	3.49017E-05	0.112334557

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
61.36	-0.040908865	0.000205227	0.040843099	9.189697321	1.847145345	2.16673587
61.365	-0.041717226	0.000209326	0.041670707	9.375909156	1.847585197	2.16673587
61.37	-0.039355299	0.000197794	0.039344846	8.852590296	1.847976653	2.16673587
61.375	-0.036382054	0.000183093	0.036384484	8.186508853	1.848311194	2.16673587
61.38	-0.036126743	0.000181907	0.036145792	8.132803098	1.848641057	2.16673587
61.385	-0.03313094	0.000167195	0.033185811	7.466807509	1.848918481	2.16673587
61.39	-0.029418992	0.000148794	0.029487232	6.634627139	1.849137223	2.16673587
61.395	-0.025974406	0.000131729	0.026060395	5.863588775	1.849307739	2.16673587
61.4	-0.02110974	0.000107515	0.021203047	4.770685687	1.849420366	2.16673587
61.405	-0.016431128	8.41655E-05	0.016524662	3.718048966	1.849488602	2.16673587
61.41	-0.010913765	5.65454E-05	0.010997551	2.474448958	1.849518706	2.16673587
61.415	-0.007427606	3.89523E-05	0.007480756	1.683170013	1.849532649	2.16673587
61.42	-0.007485309	3.91896E-05	0.007529317	1.694096254	1.84954681	2.16673587
61.425	-0.005161051	2.76227E-05	0.005217558	1.173950489	1.849553542	2.16673587
61.43	-0.001187293	7.7758E-06	0.001255822	0.282559908	1.849553899	2.16673587
61.435	0.004981951	-2.30937E-05	-0.004899029	-1.102281424	1.849560172	2.16673587
61.44	0.015338079	-7.52706E-05	-0.015282828	-3.438636192	1.849619631	2.16673587
61.445	0.019025769	-9.42194E-05	-0.019047961	-4.285791202	1.849711118	2.16673587
61.45	0.016748817	-8.28914E-05	-0.016761109	-3.771249525	1.849782018	2.16673587
61.455	0.020852799	-0.000103499	-0.020890658	-4.700397973	1.849891919	2.16673587
61.46	0.024192285	-0.000120614	-0.024287352	-5.464654258	1.85003984	2.16673587
61.465	0.021444953	-0.000106959	-0.021530986	-4.844471808	1.850156072	2.16673587
61.47	0.021945507	-0.000109535	-0.022051586	-4.961606918	1.850277794	2.16673587
61.475	0.023032748	-0.000115229	-0.023200995	-5.220223846	1.850411875	2.16673587
61.48	0.019394898	-9.72663E-05	-0.019576129	-4.404629116	1.850506947	2.16673587
61.485	0.016401516	-8.24982E-05	-0.016599918	-3.734981441	1.850574936	2.16673587
61.49	0.014160313	-7.15112E-05	-0.014387415	-3.237168402	1.850625615	2.16673587
61.495	0.009310471	-4.75198E-05	-0.009560998	-2.151224572	1.850647523	2.16673587
61.5	0.004101686	-2.16301E-05	-0.004359752	-0.980944296	1.850651776	2.16673587
61.505	-0.000769062	2.59835E-06	0.000501399	0.112814739	1.850651925	2.16673587
61.51	-0.008381811	4.05699E-05	0.00810806	1.824313566	1.850669681	2.16673587
61.515	-0.016920459	8.34277E-05	0.016676815	3.752283284	1.850742042	2.16673587
61.52	-0.020784657	0.000103015	0.020587268	4.632135305	1.850851226	2.16673587
61.525	-0.023641759	0.000117409	0.023458648	5.278195773	1.850992492	2.16673587
61.53	-0.031031518	0.00015464	0.030876976	6.94731958	1.85123587	2.16673587
61.535	-0.035316412	0.000176553	0.035237304	7.928393454	1.851551101	2.16673587
61.54	-0.033102727	0.000165691	0.033044507	7.435014051	1.851828052	2.16673587
61.545	-0.033952317	0.000170024	0.03391968	7.631927899	1.852119402	2.16673587
61.55	-0.038209686	0.000191548	0.038218775	8.59922442	1.852488399	2.16673587
61.555	-0.038768244	0.000194673	0.038835559	8.73800077	1.852868263	2.16673587
61.56	-0.037187506	0.000186952	0.037276774	8.387274255	1.853217782	2.16673587
61.565	-0.036307623	0.000182742	0.03642728	8.19613795	1.853550956	2.16673587
61.57	-0.034641041	0.000174616	0.034788184	7.827341501	1.853854246	2.16673587
61.575	-0.031038007	0.000156888	0.031215451	7.023476482	1.854097726	2.16673587
61.58	-0.025826287	0.000131216	0.026048217	5.860848809	1.854266304	2.16673587
61.585	-0.019945416	0.000102139	0.020204639	4.546043773	1.854366849	2.16673587
61.59	-0.012687982	6.61319E-05	0.012980421	2.920594713	1.854407536	2.16673587
61.595	-0.004057288	2.31136E-05	0.004366624	0.982490335	1.854411697	2.16673587
61.6	0.003505356	-1.47268E-05	-0.003195685	-0.719029068	1.854414802	2.16673587
61.605	0.010178921	-4.81658E-05	-0.009867303	-2.220143236	1.854440989	2.16673587
61.61	0.018113981	-8.79954E-05	-0.017800729	-4.00516399	1.854523918	2.16673587
61.615	0.02690271	-0.000132307	-0.026606549	-5.986473549	1.85470684	2.16673587
61.62	0.033624701	-0.000166514	-0.033366766	-7.507522368	1.854992595	2.16673587
61.625	0.03726656	-0.000185172	-0.037039612	-8.333912765	1.855343601	2.16673587
61.63	0.042073189	-0.000209692	-0.041862144	-9.418982499	1.855790991	2.16673587
61.635	0.048501688	-0.000242614	-0.048329863	-10.87421918	1.856385543	2.16673587
61.64	0.050453794	-0.000252845	-0.050337939	-11.32603634	1.857028917	2.16673587
61.645	0.050011719	-0.00025073	-0.04991087	-11.22994573	1.857661066	2.16673587
61.65	0.05274476	-0.000264754	-0.052674492	-11.8517606	1.858364194	2.16673587
61.655	0.053834	-0.000270523	-0.053804265	-12.10595954	1.859096663	2.16673587
61.66	0.051368213	-0.000258097	-0.05129582	-11.54155946	1.85976357	2.16673587
61.665	0.051282567	-0.000257668	-0.051209837	-11.52221325	1.860428254	2.16673587
61.67	0.053461977	-0.000268822	-0.053461193	-12.02876849	1.861150634	2.16673587
61.675	0.055915307	-0.00028143	-0.055944476	-12.58750706	1.861940835	2.16673587
61.68	0.058908022	-0.000296896	-0.058975317	-13.26944634	1.862817886	2.16673587
61.685	0.058422811	-0.000294792	-0.05853345	-13.17002627	1.863680548	2.16673587
61.69	0.051878888	-0.000262633	-0.052048421	-11.7108948	1.86436078	2.16673587
61.695	0.044828868	-0.000227672	-0.045012635	-10.12784278	1.864868696	2.16673587
61.7	0.042883502	-0.000218024	-0.043073337	-9.691500918	1.865333486	2.16673587
61.705	0.041676512	-0.000212267	-0.041916594	-9.431233548	1.86577248	2.16673587
61.71	0.033084394	-0.000169735	-0.033381952	-7.510939103	1.866049124	2.16673587
61.715	0.02257629	-0.000117245	-0.022874081	-5.146668162	1.866177944	2.16673587
61.72	0.017386998	-9.12556E-05	-0.017681133	-3.978254929	1.866254349	2.16673587
61.725	0.008351496	-4.60889E-05	-0.008671125	-1.951003034	1.866271977	2.16673587
61.73	-0.006047425	2.64701E-05	0.005764923	1.29710777	1.86628122	2.16673587
61.735	-0.012635183	6.01298E-05	0.012446175	2.800389341	1.86632157	2.16673587
61.74	-0.012943118	6.19879E-05	0.012814722	2.883312414	1.86636391	2.16673587
61.745	-0.015444054	7.48374E-05	0.015362518	3.456566478	1.866424194	2.16673587
61.75	-0.015661328	7.63004E-05	0.015641876	3.519422203	1.866486185	2.16673587
61.755	-0.011684198	5.66978E-05	0.011686643	2.629494652	1.86652069	2.16673587
61.76	-0.009399474	4.55264E-05	0.009434895	2.122851319	1.866543019	2.16673587
61.765	-0.007567733	3.67142E-05	0.007659754	1.723444702	1.866557494	2.16673587
61.77	-8.6014E-05	-2.04954E-07	0.000232487	0.052309515	1.866557496	2.16673587
61.775	0.009395526	-4.74212E-05	-0.009244915	-2.08010577	1.866579807	2.16673587
61.78	0.013468003	-6.77923E-05	-0.013326847	-2.998540575	1.866625651	2.16673587
61.785	0.018116953	-9.08904E-05	-0.017950307	-4.03881912	1.866708607	2.16673587
61.79	0.028442497	-0.000142565	-0.02827536	-6.361955979	1.866913068	2.16673587
61.795	0.03525742	-0.000176949	-0.035131924	-7.904682899	1.867227247	2.16673587
61.8	0.038966085	-0.000195653	-0.038857248	-8.742880771	1.867610998	2.16673587
61.805	0.046823865	-0.000235272	-0.046738002	-10.51605044	1.868165126	2.16673587
61.81	0.051790453	-0.000260568	-0.051762618	-11.64658902	1.868843041	2.16673587
61.815	0.053105679	-0.000267337	-0.053106175	-11.94888937	1.869555825	2.16673587
61.82	0.058938109	-0.000296858	-0.058961341	-13.2663018	1.870433772	2.16673587
61.825	0.063623545	-0.000321035	-0.063702178	-14.33299016	1.871456857	2.16673587
61.83	0.065090507	-0.00032872	-0.065206198	-14.67139456	1.872527664	2.16673587
61.835	0.070637627	-0.000357278	-0.070790932	-15.92795961	1.87378876	2.16673587
61.84	0.075091023	-0.000380498	-0.075327287	-16.94863969	1.875213882	2.16673587
61.845	0.073986651	-0.000375249	-0.074267357	-16.71015535	1.876597393	2.16673587
61.85	0.073215279	-0.000371606	-0.073532195	-16.54474387	1.877952206	2.16673587
61.855	0.070856753	-0.000359929	-0.071176284	-16.01466391	1.879221138	2.16673587
61.86	0.064538215	-0.000328853	-0.064915613	-14.60601291	1.880273851	2.16673587
61.865	0.059578838	-0.000304358	-0.05998861	-13.49743722	1.88117099	2.16673587
61.87	0.053920333	-0.000276373	-0.054367655	-12.23272233	1.88190581	2.16673587
61.875	0.047010415	-0.000241951	-0.047464947	-10.67961304	1.882464363	2.16673587

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
74.90844727	2.65712E-05	0.085291895
74.91455078	1.48373E-05	0.047251299
74.9206543	2.89342E-06	0.009184504
74.92675781	5.94157E-06	0.018763983
74.93286133	9.85813E-06	0.031117497
74.93896484	9.42004E-06	0.029965147
74.94506836	1.63379E-05	0.05251021
74.95117188	3.68848E-05	0.11925362
74.95727539	4.72134E-05	0.151357134
74.96337891	4.46914E-05	0.14224603
74.96948242	4.72264E-05	0.151707846
74.97558594	6.23817E-05	0.201715738
74.98168945	8.32777E-05	0.270129911
74.98779297	9.53071E-05	0.312660868
74.99389648	8.91484E-05	0.293410986
75	7.07568E-05	0.231980563
75.00610352	5.30294E-05	0.174379643
75.01220703	4.52874E-05	0.149038669
75.01831055	5.57675E-05	0.184439383
75.02441406	7.22051E-05	0.243239104
75.03051758	7.50977E-05	0.254378951
75.03662109	6.72904E-05	0.225578249
75.04272461	6.61899E-05	0.222426867
75.04882813	7.08157E-05	0.240428619
75.05493164	6.91751E-05	0.236164411
75.06103516	6.03115E-05	0.207594965
75.06713867	5.75137E-05	0.199096593
75.07324219	6.08713E-05	0.210692577
75.0793457	5.28527E-05	0.182882592
75.08544922	3.8229E-05	0.131602513
75.09155273	2.81057E-05	0.096312091
75.09765625	2.55045E-05	0.087920874
75.10375977	3.21949E-05	0.111688233
75.10986328	4.02296E-05	0.139265394
75.1159668	3.10673E-05	0.106804563
75.12207031	1.9025E-05	0.064778405
75.12817383	1.9235E-05	0.065087707
75.13427734	6.51125E-06	0.02213233
75.14038086	1.29158E-05	0.044417547
75.14648438	2.51591E-05	0.087343733
75.15258789	2.56492E-05	0.088975533
75.15869141	2.09408E-05	0.072097517
75.16479492	1.09703E-05	0.037791951
75.17089844	9.72826E-06	0.033680625
75.17700195	1.32576E-05	0.045827524
75.18310547	2.54376E-05	0.088120179
75.18920898	4.31783E-05	0.149829807
75.1953125	5.38416E-05	0.184562573
75.20141602	6.02296E-05	0.203926823
75.20751953	5.45871E-05	0.183123098
75.21362305	4.24028E-05	0.140311631
75.21972656	5.00229E-05	0.164724693
75.22583008	6.48238E-05	0.214700095
75.23193359	6.30515E-05	0.208998405
75.23803711	4.31755E-05	0.142140796
75.24414063	2.65231E-05	0.08646606
75.25024414	2.91204E-05	0.094287609
75.25634766	4.04486E-05	0.131201848
75.26245117	4.39795E-05	0.143338306
75.26855469	4.83421E-05	0.157454475
75.2746582	5.48192E-05	0.178256158
75.28076172	4.66926E-05	0.151760252
75.28686523	3.03405E-05	0.098223928
75.29296875	2.3449E-05	0.075921015
75.29907227	3.31691E-05	0.107899908
75.30517578	5.40343E-05	0.175273668
75.3112793	6.96664E-05	0.225829946
75.31738281	7.33804E-05	0.239750635
75.32348633	6.54447E-05	0.214283087
75.32958984	5.01554E-05	0.164150368
75.33569336	3.99588E-05	0.131124812
75.34179688	4.38249E-05	0.144026378
75.34790039	5.27845E-05	0.174858587
75.35400391	5.23857E-05	0.176035953
75.36010742	5.106E-05	0.172864698
75.36621094	5.51833E-05	0.18636296
75.37231445	5.01591E-05	0.168738889
75.37841797	3.95738E-05	0.133662217
75.38452148	4.06201E-05	0.13828586
75.390625	4.64696E-05	0.158812212
75.39672852	4.4108E-05	0.151157938
75.40283203	3.58873E-05	0.123090793
75.40893555	2.66031E-05	0.090979399
75.41503906	1.80595E-05	0.06175486
75.42114258	1.27779E-05	0.043818141
75.42724609	7.56299E-06	0.026037541
75.43334961	2.83064E-05	0.098347806
75.43945313	3.62349E-05	0.126742808
75.44555664	2.30457E-05	0.080287061
75.45166016	2.54216E-05	0.088669109
75.45776367	4.19083E-05	0.147841029
75.46386719	4.31041E-05	0.152594439
75.4699707	3.25692E-05	0.115329388
75.47607422	2.35349E-05	0.083676778
75.48217773	1.86583E-05	0.066060563
75.48828125	1.33289E-05	0.046885054
75.49438477	1.21629E-05	0.042658634
75.50048828	1.48367E-05	0.051798276
75.5065918	1.59074E-05	0.055594894
75.51269531	1.40107E-05	0.049130019
75.51879883	1.34771E-05	0.047037359
75.52490234	1.89019E-05	0.065616382
75.53100586	2.68964E-05	0.093225233
75.53710938	2.45566E-05	0.085080765

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
61.88	0.046836064	-0.000241011	-0.047284785	-10.63907659	1.88301878	2.16673587
61.885	0.050982985	-0.000261802	-0.051478997	-11.58277435	1.883675721	2.16673587
61.89	0.047261364	-0.000243885	-0.0478629	-10.76915258	1.884240253	2.16673587
61.895	0.033778053	-0.000176913	-0.03445433	-7.752224333	1.88452862	2.16673587
61.9	0.017643133	-9.59914E-05	-0.018321303	-4.122293095	1.884607293	2.16673587
61.905	0.006925349	-4.17449E-05	-0.007538979	-1.696270311	1.884619415	2.16673587
61.91	0.008358705	-4.84595E-05	-0.008908936	-2.004510622	1.884637073	2.16673587
61.915	0.013260554	-7.29639E-05	-0.013849664	-3.116174503	1.884681516	2.16673587
61.92	0.003377193	-2.41593E-05	-0.004049037	-0.911033386	1.884684398	2.16673587
61.925	-0.012876565	5.80891E-05	0.012238985	2.75377153	1.884726304	2.16673587
61.93	-0.014800557	6.8268E-05	0.014227452	3.20117671	1.884781669	2.16673587
61.935	-0.011274436	5.07409E-05	0.010691383	2.405561121	1.884813796	2.16673587
61.94	-0.019165987	9.00413E-05	0.018551519	4.174091821	1.884906636	2.16673587
61.945	-0.027464347	0.000132351	0.026897654	6.051972184	1.885097277	2.16673587
61.95	-0.027383661	0.000132157	0.026844253	6.039956819	1.885286798	2.16673587
61.955	-0.02919926	0.000141354	0.028671726	6.451138347	1.885502285	2.16673587
61.96	-0.034817132	0.000170021	0.034316444	7.721199792	1.885808666	2.16673587
61.965	-0.035789176	0.000175222	0.035332639	7.9498438	1.886132393	2.16673587
61.97	-0.034472589	0.000168643	0.034004466	7.651004821	1.88643274	2.16673587
61.975	-0.03655121	0.000179317	0.036145349	8.132703443	1.8867704	2.16673587
61.98	-0.036391983	0.000178795	0.036019881	8.104473247	1.887105124	2.16673587
61.985	-0.030570234	0.000150122	0.030236759	6.80327071	1.887341321	2.16673587
61.99	-0.026727152	0.000131093	0.026404611	5.941037416	1.887521864	2.16673587
61.995	-0.023193312	0.000113712	0.022907955	5.15428991	1.887657821	2.16673587
62	-0.01363098	6.61896E-05	0.013364322	3.006972513	1.887704781	2.16673587
62.005	-0.007067126	3.32821E-05	0.006769255	1.523082481	1.887717404	2.16673587
62.01	-0.0044863	2.03998E-05	0.004190385	0.942836735	1.887722491	2.16673587
62.015	0.004414481	-2.41186E-05	-0.004709358	-1.059605655	1.887727417	2.16673587
62.02	0.010773728	-5.63019E-05	-0.01113164	-2.504618947	1.887756753	2.16673587
62.025	0.009388813	-4.95449E-05	-0.00976733	-2.197649343	1.887779032	2.16673587
62.03	0.01290929	-6.71894E-05	-0.013302143	-2.992982198	1.887821151	2.16673587
62.035	0.016097569	-8.34915E-05	-0.016550081	-3.723768133	1.887886645	2.16673587
62.04	0.010987633	-5.83592E-05	-0.011479026	-2.582780916	1.887917158	2.16673587
62.045	0.010029505	-5.35532E-05	-0.010511649	-2.365120932	1.887942581	2.16673587
62.05	0.012393342	-6.54395E-05	-0.012910531	-2.904869528	1.887981401	2.16673587
62.055	0.007690257	-4.23219E-05	-0.008247499	-1.855687355	1.887996348	2.16673587
62.06	0.003232994	-2.01528E-05	-0.003785434	-0.851722733	1.88799899	2.16673587
62.065	0.002920362	-1.86416E-05	-0.003481467	-0.783330186	1.888001145	2.16673587
62.07	-1.36622E-05	-4.2035E-06	-0.000578684	-0.130203792	1.888001145	2.16673587
62.075	-0.003933116	1.52515E-05	0.003329217	0.749073841	1.888005055	2.16673587
62.08	-0.007363735	3.22177E-05	0.006733951	1.515138976	1.88801876	2.16673587
62.085	-0.014934137	6.98625E-05	0.014278035	3.212557965	1.888075128	2.16673587
62.09	-0.023380926	0.000112169	0.022739877	5.116472223	1.888213294	2.16673587
62.095	-0.028296013	0.000136893	0.027677109	6.227349499	1.888415654	2.16673587
62.1	-0.034967628	0.000170359	0.034351238	7.729028587	1.88872469	2.16673587
62.105	-0.04384549	0.000215513	0.043260736	9.733665636	1.889210566	2.16673587
62.11	-0.049322637	0.000243697	0.048793994	10.97864857	1.889825415	2.16673587
62.115	-0.054383461	0.00026973	0.053899501	12.12738776	1.890572913	2.16673587
62.12	-0.0602209	0.000299861	0.059802342	13.45552704	1.891489493	2.16673587
62.125	-0.06073929	0.000302925	0.06038674	13.5870165	1.892421921	2.16673587
62.13	-0.058966525	0.000294108	0.058607052	13.18658673	1.893300714	2.16673587
62.135	-0.059849459	0.000298763	0.059546991	13.3980729	1.894206022	2.16673587
62.14	-0.060856121	0.00030401	0.060606023	13.63635518	1.895142041	2.16673587
62.145	-0.067783848	0.000339358	0.067529468	15.19413038	1.896303298	2.16673587
62.15	-0.084675509	0.000426691	0.08448269	19.00860533	1.898115437	2.16673587
62.155	-0.095656147	0.000484519	0.095649739	21.52119131	1.900428043	2.16673587
62.16	-0.090215204	0.000458301	0.090359779	20.33095031	1.902485049	2.16673587
62.165	-0.079436286	0.000405244	0.079680885	17.92819903	1.904079876	2.16673587
62.17	-0.074756505	0.000382218	0.075056146	16.88763285	1.905492329	2.16673587
62.175	-0.075918964	0.00038841	0.076306448	17.16895086	1.90694905	2.16673587
62.18	-0.074622728	0.000382628	0.075138925	16.90625811	1.908356452	2.16673587
62.185	-0.063638153	0.000328485	0.06428498	14.46412051	1.909380007	2.16673587
62.19	-0.051771236	0.000269415	0.052476566	11.80722729	1.910057419	2.16673587
62.195	-0.049395927	0.000257854	0.050169273	11.28808642	1.910674097	2.16673587
62.2	-0.04121249	0.000217634	0.042151823	9.48416016	1.91110337	2.16673587
62.205	-0.012860217	7.5455E-05	0.013923455	3.132777321	1.91114517	2.16673587
62.21	0.018294047	-8.27033E-05	-0.017280038	-3.88800858	1.911229755	2.16673587
62.215	0.036180015	-0.000174554	-0.035310732	-7.944914805	1.911560591	2.16673587
62.22	0.041886148	-0.000204576	-0.041190013	-9.267752925	1.912004013	2.16673587
62.225	0.030089722	-0.000146795	-0.029543621	-6.647314831	1.912232843	2.16673587
62.23	0.009965166	-4.6345E-05	-0.009385671	-2.11177589	1.912257941	2.16673587
62.235	0.014527732	-6.81161E-05	-0.01379444	-3.103749025	1.912311283	2.16673587
62.24	0.037525214	-0.000182739	-0.036818925	-8.284258103	1.912667179	2.16673587
62.245	0.037910853	-0.000185639	-0.037367932	-8.407784667	1.913030426	2.16673587
62.25	0.022170462	-0.000107403	-0.021625802	-4.865805443	1.913154656	2.16673587
62.255	0.026579497	-0.000128713	-0.025931162	-5.834511504	1.91333321	2.16673587
62.26	0.042381536	-0.000207506	-0.041763561	-9.396801166	1.913787182	2.16673587
62.265	0.043663904	-0.00021456	-0.043099655	-9.697422471	1.914269042	2.16673587
62.27	0.038328755	-0.000188171	-0.037777891	-8.500025494	1.914640343	2.16673587
62.275	0.041504667	-0.000203806	-0.040933751	-9.210093925	1.915075724	2.16673587
62.28	0.049606921	-0.000244832	-0.049062943	-11.0391621	1.915697681	2.16673587
62.285	0.054543411	-0.000270494	-0.054075301	-12.16694276	1.916449582	2.16673587
62.29	0.051257718	-0.000254493	-0.05084582	-11.44030943	1.917113622	2.16673587
62.295	0.047455517	-0.000235606	-0.047038221	-10.5835998	1.917682802	2.16673587
62.3	0.057576118	-0.000286228	-0.057146113	-12.85787536	1.918520641	2.16673587
62.305	0.068216778	-0.000341369	-0.067893536	-15.27604554	1.919696779	2.16673587
62.31	0.063796564	-0.000319876	-0.063556242	-14.30015445	1.920725436	2.16673587
62.315	0.061851069	-0.000310208	-0.061609216	-13.86207363	1.921692311	2.16673587
62.32	0.072738754	-0.000365162	-0.072524112	-16.31792515	1.923029546	2.16673587
62.325	0.077771689	-0.000391621	-0.077668667	-17.47545014	1.924558234	2.16673587
62.33	0.073751016	-0.000371673	-0.073642929	-16.56965913	1.925932947	2.16673587
62.335	0.077180811	-0.000388684	-0.077076305	-17.34216852	1.927438495	2.16673587
62.34	0.086823185	-0.000438582	-0.08678711	-19.52709983	1.929343725	2.16673587
62.345	0.086671473	-0.000438419	-0.086682753	-19.50361946	1.931242302	2.16673587
62.35	0.07920837	-0.000401602	-0.079261431	-17.83382199	1.932827991	2.16673587
62.355	0.082306307	-0.000416933	-0.082356363	-18.53018171	1.934540142	2.16673587
62.36	0.08912744	-0.000451363	-0.089266091	-20.08487055	1.936547842	2.16673587
62.365	0.082598853	-0.000419411	-0.082820424	-18.63459551	1.938272186	2.16673587
62.37	0.075661074	-0.000385026	-0.075898308	-17.07711937	1.939719028	2.16673587
62.375	0.078606135	-0.000399875	-0.07889555	-17.75149879	1.941280696	2.16673587
62.38	0.074232025	-0.0003787	-0.074626364	-16.79093185	1.942673399	2.16673587
62.385	0.062550205	-0.000320745	-0.062992651	-14.17334652	1.943662256	2.16673587
62.39	0.057357514	-0.000294936	-0.057822712	-13.01011014	1.944493745	2.16673587
62.395	0.050467608	-0.000260836	-0.051002007	-11.47545157	1.945137472	2.16673587

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
75.54321289	6.41189E-06	0.022192965
75.54931641	1.55451E-05	0.053547034
75.55541992	1.64533E-05	0.056358803
75.56152344	4.81542E-06	0.016487752
75.56762695	2.34369E-05	0.080122428
75.57373047	2.25215E-05	0.076343567
75.57983398	1.55368E-05	0.052448287
75.5859375	1.36541E-05	0.046139594
75.59204102	1.75895E-05	0.059054474
75.59814453	2.80773E-05	0.093782417
75.60424805	3.40572E-05	0.113972091
75.61035156	3.2158E-05	0.107258264
75.61645508	2.73686E-05	0.091295178
75.62255859	2.63991E-05	0.088890366
75.62866211	3.29518E-05	0.111512196
75.63476563	4.5774E-05	0.155424278
75.64086914	5.31188E-05	0.180721213
75.64697266	4.9301E-05	0.166347931
75.65307617	3.821E-05	0.127960317
75.65917969	2.78552E-05	0.093272347
75.6652832	2.75385E-05	0.092373939
75.67138672	3.94784E-05	0.13322547
75.67749023	5.3515E-05	0.181647722
75.68359375	5.07704E-05	0.172171195
75.68969727	4.33309E-05	0.147266982
75.69580078	4.00131E-05	0.137065968
75.7019043	2.65903E-05	0.091821623
75.70800781	1.46635E-05	0.051390785
75.71411133	1.03244E-05	0.036765206
75.72021484	1.04596E-05	0.037415189
75.72631836	2.01195E-05	0.072103416
75.73242188	3.22576E-05	0.115688019
75.73852539	3.62936E-05	0.13006417
75.74462891	3.18451E-05	0.115150532
75.75073242	2.08253E-05	0.075918415
75.75683594	1.21493E-05	0.044263555
75.76293945	1.74616E-05	0.063566321
75.76904297	3.10234E-05	0.112481175
75.77514648	4.21964E-05	0.153195031
75.78125	4.22143E-05	0.154545411
75.78735352	4.06417E-05	0.148480899
75.79345703	5.10145E-05	0.186572526
75.79956055	6.09501E-05	0.225056892
75.80566406	5.8686E-05	0.215762928
75.81176758	5.18472E-05	0.189311491
75.81787109	5.33132E-05	0.195544171
75.82397461	6.3238E-05	0.232724919
75.83007813	6.96329E-05	0.257296233
75.83618164	6.62184E-05	0.245546844
75.84228516	5.7126E-05	0.210182418
75.84838867	4.95353E-05	0.181512781
75.85449219	4.91762E-05	0.181418701
75.8605957	5.09198E-05	0.187677341
75.86669922	4.79908E-05	0.176464035
75.87280273	4.58515E-05	0.169302564
75.87890625	4.79758E-05	0.175527085
75.88500977	4.73462E-05	0.170720369
75.89111328	4.15505E-05	0.149797193
75.8972168	3.75676E-05	0.135490064
75.90332031	3.09729E-05	0.111257783
75.90942383	2.53399E-05	0.091128539
75.91552734	2.47234E-05	0.089002853
75.92163086	2.84384E-05	0.101926901
75.92773438	3.02727E-05	0.107561865
75.93383789	2.45021E-05	0.086528351
75.93994141	1.74854E-05	0.061755509
75.94604492	1.36711E-05	0.048053189
75.95214844	1.3692E-05	0.047729692
75.95825195	1.24846E-05	0.043498398
75.96435547	1.30804E-05	0.045469423
75.97045898	1.34877E-05	0.046275895
75.9765625	6.66172E-06	0.022655248
75.98266602	6.69631E-06	0.02290708
75.98876953	5.45751E-06	0.01880984
75.99487305	6.95607E-06	0.023940948
76.00097656	1.79322E-05	0.061722822
76.00708008	2.07778E-05	0.072356531
76.01318359	1.35077E-05	0.047846362
76.01928711	6.32503E-06	0.022583181
76.02539063	8.69706E-06	0.031060925
76.03149414	1.69316E-05	0.060857904
76.03759766	3.20023E-05	0.116014278
76.04370117	3.53419E-05	0.128936815
76.04980469	2.69215E-05	0.099059806
76.0559082	1.93123E-05	0.07111885
76.06201172	9.91063E-06	0.036373703
76.06811523	1.08335E-06	0.003992961
76.07421875	6.65361E-06	0.024526214
76.08032227	1.39252E-05	0.051284109
76.08642578	2.1205E-05	0.078693058
76.0925293	2.70755E-05	0.100693085
76.09863281	3.06824E-05	0.114324972
76.10473633	3.24033E-05	0.122317966
76.11083984	3.51443E-05	0.133360317
76.11694336	4.04771E-05	0.152936569
76.12304688	4.83231E-05	0.183355933
76.12915039	5.39754E-05	0.205791391
76.13525391	4.82537E-05	0.18403462
76.14135742	3.41513E-05	0.13116701
76.14746094	3.32954E-05	0.128641606
76.15356445	3.73494E-05	0.144040746
76.15966797	3.78059E-05	0.145963613
76.16577148	4.14599E-05	0.160288077
76.171875	4.89972E-05	0.189173264

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
62.4	0.035228761	-0.000184649	-0.035802216	-8.055498688	1.94545114	2.16673587
62.405	0.022563883	-0.000120836	-0.023111208	-5.200021689	1.945579818	2.16673587
62.41	0.014995337	-8.25663E-05	-0.015517002	-3.491325352	1.945636649	2.16673587
62.415	0.007083409	-4.2495E-05	-0.00757865	-1.70519622	1.94564933	2.16673587
62.42	0.003654202	-2.49283E-05	-0.004102789	-0.923127549	1.945652705	2.16673587
62.425	0.006253691	-3.807E-05	-0.006755603	-1.520010633	1.94566259	2.16673587
62.43	0.003394797	-2.41401E-05	-0.003946907	-0.888054184	1.945665502	2.16673587
62.435	-0.004094824	1.36672E-05	0.003525004	0.79312599	1.94566974	2.16673587
62.44	-0.006533563	2.59378E-05	0.005947545	1.338197601	1.945680529	2.16673587
62.445	-0.012848694	5.76059E-05	0.012194077	2.743667218	1.945722254	2.16673587
62.45	-0.027957066	0.000134274	0.027283709	6.138834563	1.945919796	2.16673587
62.455	-0.037961881	0.00018546	0.037332541	8.399821705	1.946284022	2.16673587
62.46	-0.045855167	0.000225809	0.04523951	10.17888965	1.94681546	2.16673587
62.465	-0.0605067	0.00030101	0.059943458	13.48727811	1.947740761	2.16673587
62.47	-0.068137088	0.000340865	0.067719171	15.23681352	1.948914152	2.16673587
62.475	-0.064005929	0.000320787	0.063667341	14.32515182	1.949949572	2.16673587
62.48	-0.058953746	0.000296147	0.058702136	13.20798058	1.950827985	2.16673587
62.485	-0.050231053	0.000253275	0.050079706	11.26793387	1.951465691	2.16673587
62.49	-0.036257671	0.000183904	0.036169018	8.138028948	1.951797949	2.16673587
62.495	-0.023761332	0.000121546	0.02370479	5.333577667	1.951940647	2.16673587
62.5	-0.008317197	4.42604E-05	0.008306314	1.868920583	1.95195813	2.16673587
62.505	0.014256738	-6.94867E-05	-0.014261862	-3.208918996	1.952009501	2.16673587
62.51	0.037247382	-0.00018632	-0.037330383	-8.39933623	1.952360146	2.16673587
62.515	0.0544705	-0.0002746	-0.054688927	-12.30500867	1.953110038	2.16673587
62.52	0.063572822	-0.000321806	-0.063946106	-14.38787382	1.954131492	2.16673587
62.525	0.066141161	-0.000335599	-0.066647847	-14.99576564	1.955237147	2.16673587
62.53	0.067133331	-0.000341217	-0.06774767	-15.24322576	1.956376222	2.16673587
62.535	0.067713565	-0.000344734	-0.068436199	-15.39814486	1.957535072	2.16673587
62.54	0.06555494	-0.000334271	-0.066323873	-14.92287154	1.958621214	2.16673587
62.545	0.061956701	-0.000316359	-0.062711612	-14.11011277	1.959591395	2.16673587
62.55	0.060191194	-0.000307852	-0.060997267	-13.72438499	1.960507071	2.16673587
62.555	0.053360675	-0.000274414	-0.054267574	-12.21020415	1.961226716	2.16673587
62.56	0.031887556	-0.000167942	-0.032918183	-7.406591278	1.961483707	2.16673587
62.565	0.007225227	-4.42811E-05	-0.008257977	-1.858044924	1.961496902	2.16673587
62.57	-0.007129057	2.82478E-05	0.006142547	1.382073055	1.961509747	2.16673587
62.575	-0.019787096	9.22744E-05	0.01881796	4.234040933	1.961608702	2.16673587
62.58	-0.0356946	0.000173082	0.034767609	7.822712095	1.961930721	2.16673587
62.585	-0.046526095	0.000228518	0.045679042	10.27778441	1.962477824	2.16673587
62.59	-0.053962525	0.000266666	0.053173944	11.9641375	1.963213794	2.16673587
62.595	-0.064629671	0.000321277	0.063883462	14.37377895	1.964269493	2.16673587
62.6	-0.077314011	0.000386615	0.076630688	17.24190485	1.965780242	2.16673587
62.605	-0.088022577	0.000442194	0.087436031	19.67310692	1.967738474	2.16673587
62.61	-0.094199001	0.00047459	0.093723954	21.08788957	1.96998116	2.16673587
62.615	-0.097997214	0.000494715	0.097616106	21.96362381	1.972408348	2.16673587
62.62	-0.100115981	0.000506213	0.09983303	22.46243177	1.974941625	2.16673587
62.625	-0.094203615	0.000477079	0.093955201	21.13992015	1.977184531	2.16673587
62.63	-0.084609425	0.000429485	0.084376034	18.98460775	1.978993843	2.16673587
62.635	-0.086153518	0.000436907	0.085878745	19.32271766	1.980869796	2.16673587
62.64	-0.095392348	0.000482708	0.095106635	21.39899298	1.983169664	2.16673587
62.645	-0.104249238	0.000527716	0.10397621	23.39464727	1.98591643	2.16673587
62.65	-0.116070626	0.000589361	0.115836493	26.06321097	1.989321457	2.16673587
62.655	-0.128284116	0.000653554	0.128159447	28.83587558	1.993480771	2.16673587
62.66	-0.131326539	0.000670316	0.131371284	29.55853881	1.997839712	2.16673587
62.665	-0.121383482	0.000621695	0.121568279	27.35286266	2.001563587	2.16673587
62.67	-0.111472321	0.000572461	0.111670369	25.12583293	2.004704168	2.16673587
62.675	-0.117160685	0.000600673	0.117362188	26.40649223	2.008173451	2.16673587
62.68	-0.122025477	0.000625508	0.122364188	27.53194235	2.011936821	2.16673587
62.685	-0.10879034	0.000560454	0.10926048	24.58360797	2.014928098	2.16673587
62.69	-0.100133272	0.000517286	0.100608324	22.63687294	2.01746225	2.16673587
62.695	-0.110634323	0.000569612	0.11115696	25.01031597	2.02055579	2.16673587
62.7	-0.120921123	0.000621882	0.121662397	27.37403941	2.02425135	2.16673587
62.705	-0.113189488	0.00058508	0.114239571	25.70390355	2.027489434	2.166863531
62.71	-0.085363103	0.000447705	0.086699998	19.5074996	2.029331123	2.167275005
62.715	-0.040420742	0.000222395	0.041960676	9.441152014	2.029744061	2.167599924
62.72	0.023759374	-0.000104323	-0.022182968	-4.991167851	2.029886735	2.16781967
62.725	0.087493743	-0.000434728	-0.086244505	-19.40501368	2.031821508	2.167912421
62.73	0.103367255	-0.000520333	-0.102717629	-23.11146661	2.034521993	2.167992987
62.735	0.067149928	-0.000341977	-0.066886715	-15.04951095	2.035661632	2.16800637
62.74	0.037001115	-0.000190607	-0.036721728	-8.262388774	2.036007655	2.16805267
62.745	0.04673686	-0.000238481	-0.046374297	-10.43421694	2.036559726	2.16833689
62.75	0.074036223	-0.000375247	-0.073809016	-16.60702863	2.037945092	2.168537568
62.755	0.082415352	-0.000418749	-0.082496896	-18.5618017	2.039661783	2.168647121
62.76	0.059003768	-0.000303537	-0.059312446	-13.34530038	2.040541687	2.168666699
62.765	0.035428624	-0.000185471	-0.035701658	-8.032873067	2.040858925	2.168666699
62.77	0.046697578	-0.000241122	-0.04691973	-10.55693928	2.041410068	2.168666699
62.775	0.058812234	-0.000302533	-0.0592572	-13.33286989	2.042284269	2.168666699
62.78	0.020938037	-0.000114514	-0.021633695	-4.867581287	2.042395071	2.168666699
62.785	-0.027232159	0.000130876	0.026701603	6.007860772	2.042582502	2.168666699
62.79	-0.023593036	0.000115076	0.023359714	5.255935693	2.042723185	2.168666699
62.795	-0.003768075	1.59904E-05	0.003459422	0.778370027	2.042726774	2.168666699
62.8	-0.031337039	0.000152202	0.030853999	6.942149745	2.042974968	2.168666699
62.805	-0.065601978	0.00032847	0.065285445	14.68922518	2.04406267	2.168666699
62.81	-0.060105619	0.000302323	0.059972219	13.49374932	2.044975744	2.168666699
62.815	-0.06542826	0.000328335	0.065221655	14.67487241	2.046057693	2.168666699
62.82	-0.103854288	0.000526984	0.103762706	23.34660896	2.048783686	2.168666699
62.825	-0.107501248	0.000549386	0.107821122	24.25975256	2.051704493	2.168666699
62.83	-0.067612378	0.000351122	0.068073969	15.31664296	2.052859883	2.168666699
62.835	-0.060372525	0.000313667	0.060654406	13.64724137	2.053781084	2.168666699
62.84	-0.084224504	0.000432481	0.084537851	19.02101639	2.055573971	2.168666699
62.845	-0.07689708	0.00039708	0.077389772	17.41269866	2.05706847	2.168666699
62.85	-0.061534459	0.00032046	0.061992087	13.94821958	2.058025471	2.168666699
62.855	-0.074651256	0.000385655	0.07513002	16.90425442	2.05943395	2.168666699
62.86	-0.063682613	0.000332538	0.064421088	14.49474482	2.060458935	2.168666699
62.865	-0.014751402	8.61967E-05	0.015524702	3.493057945	2.060513932	2.168684467
62.87	0.00535341	-1.73742E-05	-0.004861946	-1.093937947	2.060521176	2.168713692
62.875	-0.010738685	6.16635E-05	0.01105914	2.488306471	2.060550322	2.168713692
62.88	-0.020808998	0.000111542	0.021070322	4.740822375	2.060659762	2.168713692
62.885	-0.039005079	0.000201928	0.039149141	8.80855668	2.061044282	2.168713692
62.89	-0.080606044	0.000411436	0.080771178	18.17351505	2.062686425	2.168713692
62.895	-0.11437537	0.000584126	0.11478686	25.82704353	2.065992715	2.168713692
62.9	-0.129011971	0.000661829	0.12974175	29.19189372	2.070199361	2.168713692
62.905	-0.133570713	0.000687487	0.134662331	30.29902441	2.07470855	2.168713692
62.91	-0.117360735	0.000608759	0.118803522	26.73079238	2.07818969	2.168713692
62.915	-0.095508798	0.000500597	0.097125282	21.85318836	2.080495177	2.168975359

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
76.17797852	5.58112E-05	0.216033536
76.18408203	6.09014E-05	0.236141822
76.19018555	6.34509E-05	0.246667633
76.19628906	5.65888E-05	0.222278719
76.20239258	4.64922E-05	0.18386465
76.20849609	4.51744E-05	0.178143874
76.21459961	5.06528E-05	0.198732279
76.22070313	5.70312E-05	0.222690184
76.22680664	6.24595E-05	0.243305659
76.23291016	6.08914E-05	0.236090639
76.23901367	4.89394E-05	0.186968791
76.24511719	3.35867E-05	0.126959449
76.2512207	2.73446E-05	0.103668568
76.25732422	2.93686E-05	0.111030374
76.26342773	2.88378E-05	0.107600291
76.26953125	1.97692E-05	0.073117903
76.27563477	3.19856E-06	0.011753487
76.28173828	1.73557E-05	0.063816656
76.2878418	2.46689E-05	0.091800034
76.29394531	3.68918E-05	0.137159619
76.30004883	4.48922E-05	0.165040268
76.30615234	4.01149E-05	0.1479055
76.31225586	3.81811E-05	0.141616231
76.31835938	4.0436E-05	0.150028325
76.32446289	3.33343E-05	0.123797165
76.33056641	2.12915E-05	0.078678363
76.33666992	1.98064E-05	0.073046287
76.34277344	1.62866E-05	0.060606655
76.34887695	1.1985E-05	0.044815341
76.35498047	1.46773E-05	0.055053534
76.36108398	1.93763E-05	0.073261001
76.3671875	2.45312E-05	0.093264528
76.37329102	2.72866E-05	0.104719857
76.37939453	1.84092E-05	0.071443397
76.38549805	7.03308E-06	0.027361005
76.39160156	1.06013E-05	0.041604425
76.39770508	2.68174E-05	0.106989605
76.40380859	3.78507E-05	0.151894094
76.40991211	3.42591E-05	0.137730902
76.41601563	2.52052E-05	0.101568495
76.42211914	1.86663E-05	0.075000996
76.42822266	8.18929E-06	0.033003309
76.43432617	8.455E-06	0.034347208
76.44042969	1.97835E-05	0.080598288
76.4465332	2.04312E-05	0.083685706
76.45263672	1.7677E-05	0.072960065
76.45874023	2.29556E-05	0.095119234
76.46484375	2.69799E-05	0.112654371
76.47094727	2.17244E-05	0.091781316
76.47705078	6.11589E-06	0.02598886
76.4831543	1.77321E-05	0.075366326
76.48925781	3.27206E-05	0.139495885
76.49536133	4.13968E-05	0.177234247
76.50146484	4.14926E-05	0.177135661
76.50756836	3.7353E-05	0.158517896
76.51367188	3.71457E-05	0.157874025
76.51977539	4.12571E-05	0.177121749
76.52587891	4.34122E-05	0.187178394
76.53198242	3.86763E-05	0.164852187
76.53808594	3.14774E-05	0.132836565
76.54418945	2.27331E-05	0.09584744
76.55029297	1.29174E-05	0.054380742
76.55639648	1.14729E-05	0.048526409
76.5625	2.27415E-05	0.096499402
76.56860352	4.00072E-05	0.167575383
76.57470703	5.33465E-05	0.221421345
76.58081055	5.45363E-05	0.226653602
76.58691406	4.63329E-05	0.192142998
76.59301758	4.15877E-05	0.171765009
76.59912109	4.50296E-05	0.184250911
76.60522461	4.92058E-05	0.198874818
76.61132813	4.779E-05	0.192021596
76.61743164	4.02993E-05	0.160120343
76.62353516	2.66869E-05	0.104535121
76.62963867	1.46894E-05	0.057392358
76.63574219	8.60666E-06	0.033452087
76.6418457	1.11062E-05	0.042680382
76.64794922	1.36309E-05	0.052221615
76.65405273	1.6123E-05	0.061313436
76.66015625	2.10729E-05	0.079132287
76.66625977	1.63494E-05	0.061906019
76.67236328	1.06121E-05	0.041052909
76.6784668	1.39685E-05	0.054438747
76.68457031	3.01614E-05	0.116998965
76.69067383	4.18864E-05	0.162048107
76.69677734	3.7759E-05	0.147268011
76.70288086	2.22014E-05	0.087728113
76.70898438	1.84687E-05	0.0733649
76.71508789	2.18363E-05	0.0871746
76.72119141	1.03521E-05	0.041622101
76.72729492	6.43541E-06	0.025914404
76.73339844	1.22693E-05	0.049960765
76.73950195	1.35022E-05	0.055961818
76.74560547	8.06882E-06	0.033380239
76.75170898	6.04797E-06	0.024959614
76.7578125	1.842E-05	0.077492372
76.76391602	2.08702E-05	0.089344481
76.77001953	2.30995E-05	0.099401709
76.77612305	3.61082E-05	0.155980205
76.78222656	3.89412E-05	0.168222645
76.78833008	2.88962E-05	0.125411055
76.79443359	2.31487E-05	0.101940221
76.80053711	2.73967E-05	0.121534797
76.80664063	3.11477E-05	0.138153743

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
62.92	-0.093630144	0.000492353	0.09548408	21.4839179	2.082710859	2.169215503
62.925	-0.066858158	0.000360522	0.069214997	15.57337431	2.083840615	2.169337393
62.93	0.020477954	-8.16457E-05	-0.01781847	-4.00915582	2.083946601	2.169351331
62.935	0.111461713	-0.000553328	-0.109058212	-24.53809765	2.087086584	2.169351331
62.94	0.153179204	-0.000774833	-0.151319108	-34.04679936	2.093016869	2.169511111
62.945	0.147586105	-0.000750343	-0.146226627	-32.90099115	2.09852199	2.16962808
62.95	0.116576547	-0.000596946	-0.115452153	-25.97673449	2.101956765	2.16962808
62.955	0.10434863	-0.000535483	-0.103185948	-23.21683832	2.104708771	2.16962808
62.96	0.120721581	-0.000617066	-0.119618609	-26.91418704	2.108392145	2.16962808
62.965	0.122815513	-0.000628457	-0.121896575	-27.42672941	2.112204403	2.16962808
62.97	0.121394742	-0.000621856	-0.120566584	-27.1274813	2.115928969	2.16962808
62.975	0.128925985	-0.000660315	-0.128299535	-28.86739536	2.12013001	2.16962808
62.98	0.101660578	-0.000525954	-0.101287354	-22.78965474	2.122742057	2.16962808
62.985	0.069565313	-0.000363724	-0.069085063	-15.54413915	2.123965156	2.169787728
62.99	0.088412841	-0.000456603	-0.087786858	-19.75204296	2.12594079	2.169963978
62.995	0.107931342	-0.000555158	-0.107530378	-24.19433494	2.128885016	2.170017469
63	0.085979638	-0.000447324	-0.085826308	-19.31091925	2.130753404	2.170468413
63.005	0.062646759	-0.000330633	-0.062543786	-14.07235176	2.131745316	2.170958807
63.01	0.043994317	-0.000236433	-0.043971162	-9.893511388	2.132234496	2.171261741
63.015	0.004167307	-3.33935E-05	-0.004175286	-0.939439428	2.132238886	2.171671736
63.02	-0.036171494	0.000175184	0.036386474	8.186956684	2.132569566	2.172250001
63.025	-0.054891888	0.000273882	0.055471597	12.48110924	2.133331106	2.172646511
63.03	-0.04877484	0.000246014	0.049790622	11.20288994	2.133932373	2.172850228
63.035	-0.000135427	4.85501E-06	0.001505274	0.338686707	2.133932378	2.172879591
63.04	0.059061056	-0.000294875	-0.057784805	-13.00158108	2.134813991	2.172975415
63.045	0.063535765	-0.000319793	-0.062535086	-14.07039446	2.135834255	2.173338272
63.05	0.048811807	-0.000246026	-0.047696776	-10.73177453	2.136436434	2.17358452
63.055	0.088239434	-0.00044348	-0.086914632	-19.55579214	2.138404326	2.173709497
63.06	0.144857458	-0.000736005	-0.143777573	-32.34995394	2.143707766	2.173779005
63.065	0.149557115	-0.000764374	-0.148994557	-33.52377536	2.149360911	2.174041029
63.07	0.10465892	-0.000541545	-0.104346005	-23.47785107	2.152129308	2.174245775
63.075	0.077871415	-0.000405721	-0.077357684	-17.40547885	2.153661919	2.174379121
63.08	0.112265718	-0.000576212	-0.111615457	-25.11347773	2.156847365	2.174433127
63.085	0.141230873	-0.000723373	-0.140954825	-31.71483569	2.16188858	2.174433127
63.09	0.107299783	-0.000556102	-0.107341313	-24.15179538	2.16479845	2.174433127
63.095	0.083262081	-0.000435168	-0.083212938	-18.72291094	2.166550597	2.174433127
63.1	0.097224072	-0.000505123	-0.097308089	-21.89432013	2.168939637	2.174433127
63.105	0.063218147	-0.000336446	-0.063653007	-14.32192649	2.169949726	2.174433127
63.11	-0.004390368	8.93924E-06	0.004108323	0.924372587	2.169954598	2.174433127
63.115	-0.010634643	4.45659E-05	0.010809504	2.432138289	2.169983182	2.174433127
63.12	0.02377522	-0.000126429	-0.023488935	-5.28501045	2.170126046	2.174433127
63.125	0.028745167	-0.000151797	-0.028529662	-6.419174024	2.170334882	2.174433127
63.13	0.023596768	-0.000126054	-0.023338994	-5.251273548	2.170475611	2.174433127
63.135	0.034535961	-0.000180314	-0.034238194	-7.703593666	2.170777063	2.174433127
63.14	0.037749502	-0.00019668	-0.037490474	-8.435356651	2.171137226	2.174433127
63.145	0.034992668	-0.000182869	-0.034703191	-7.80821804	2.171446704	2.174433127
63.15	0.047848602	-0.000246949	-0.047495049	-10.68638599	2.172025352	2.174433127
63.155	0.066115728	-0.000339327	-0.065809836	-14.80721311	2.173130156	2.174433127
63.16	0.075692788	-0.00038848	-0.075526112	-16.99337524	2.174578211	2.174433127
63.165	0.070036119	-0.000361059	-0.069993518	-15.74854164	2.175817921	2.174433127
63.17	0.057212217	-0.000297227	-0.057150812	-12.85893263	2.176645203	2.174433127
63.175	0.0704227	-0.000362313	-0.070266878	-15.81004746	2.177898636	2.174433127
63.18	0.093094636	-0.000477471	-0.093067213	-20.94012302	2.180089045	2.174433127
63.185	0.085299227	-0.000439629	-0.085434821	-19.22283469	2.181927979	2.174433127
63.19	0.080569666	-0.000416034	-0.080690016	-18.15525352	2.183568641	2.174433127
63.195	0.095648014	-0.000491539	-0.095834411	-21.56274244	2.185880854	2.174433127
63.2	0.093459714	-0.000481563	-0.093775814	-21.09955821	2.188088476	2.174433127
63.205	0.089686853	-0.000463092	-0.090053209	-20.26197197	2.190121458	2.174433127
63.21	0.093017965	-0.000480256	-0.093517213	-21.04137285	2.192308261	2.174433127
63.215	0.073096864	-0.000381866	-0.073726606	-16.58848633	2.193658695	2.174433127
63.22	0.058342431	-0.000307734	-0.058885496	-13.24923665	2.194518985	2.174433127
63.225	0.069370294	-0.000362257	-0.069876628	-15.72224123	2.195735235	2.174433127
63.23	0.074978319	-0.000390601	-0.075576122	-17.00462754	2.197156082	2.174433127
63.235	0.077342213	-0.000402755	-0.078017519	-17.55394169	2.198667934	2.174433127
63.24	0.076462177	-0.00039917	-0.077285108	-17.38914934	2.200145576	2.174433127
63.245	0.059828004	-0.000317112	-0.060768523	-13.67291775	2.201050235	2.174433127
63.25	0.052622299	-0.000281301	-0.053606446	-12.06145024	2.201750102	2.174433127
63.255	0.043165401	-0.00023478	-0.044331002	-9.974475392	2.202221022	2.174701709
63.26	-0.000801414	-1.35176E-05	-0.000472296	-0.106266669	2.202221185	2.174946536
63.265	-0.039217308	0.000184303	0.038171698	8.588632084	2.2026099	2.175077377
63.27	-0.037807329	0.000179544	0.03705327	8.336985846	2.202971166	2.175096307
63.275	-0.018947388	8.63032E-05	0.018304842	4.118589433	2.203061901	2.175096307
63.28	-0.004115606	1.19327E-05	0.003415301	0.768442797	2.203066182	2.175096307
63.285	-0.008815598	3.45611E-05	0.007988112	1.797325096	2.203085824	2.175096307
63.29	-0.02696966	0.000124737	0.026119461	5.876878793	2.203269659	2.175096307
63.295	-0.038510194	0.000182555	0.037700076	8.482517013	2.203644482	2.175096307
63.3	-0.050454561	0.00024386	0.049690466	11.18035493	2.204287876	2.175096307
63.305	-0.05871549	0.000287261	0.058068949	13.06551351	2.205159203	2.175096307
63.31	-0.053628996	0.00026204	0.052979883	11.92047364	2.205886104	2.175096307
63.315	-0.057463782	0.000280841	0.056774665	12.77429952	2.206720677	2.175096307
63.32	-0.075680325	0.000375356	0.075035356	16.88295504	2.208168255	2.175096307
63.325	-0.084757745	0.000423455	0.084276399	18.96218985	2.209983916	2.175096307
63.33	-0.081302255	0.000406711	0.080896858	18.20179299	2.211654549	2.175096307
63.335	-0.080456524	0.000402885	0.080125945	18.02833757	2.213290606	2.175096307
63.34	-0.080759022	0.000404989	0.080550559	18.1238757	2.214938989	2.175096307
63.345	-0.06795196	0.000341967	0.067862877	15.26914743	2.216106013	2.175096307
63.35	-0.054739753	0.000276	0.054629567	12.29165263	2.216863337	2.175096307
63.355	-0.059493109	0.000299461	0.059363695	13.35683131	2.217757896	2.175096307
63.36	-0.060537249	0.000305054	0.060488219	13.60984927	2.218684132	2.175096307
63.365	-0.056442286	0.000284816	0.056406056	12.6913625	2.219489297	2.175096307
63.37	-0.067883143	0.000341869	0.067903169	15.27821294	2.220653959	2.175096307
63.375	-0.06082095	0.000307958	0.061059975	13.7384944	2.221588896	2.175096307
63.38	-0.029631646	0.000152196	0.029907411	6.729167556	2.221810811	2.175096307
63.385	-0.021316849	0.000109715	0.021456544	4.827722476	2.221925659	2.175096307
63.39	-0.025475528	0.000130239	0.025598563	5.759676769	2.222089688	2.175096307
63.395	-0.020552861	0.000105825	0.020683524	4.653792906	2.222196451	2.175096307
63.4	-0.018139676	9.36655E-05	0.018267931	4.110284559	2.222279615	2.175096307
63.405	-0.017557856	9.05295E-05	0.017647519	3.970691682	2.22235753	2.175096307
63.41	-0.029651762	0.000150331	0.029699944	6.682487335	2.222579747	2.175096307
63.415	-0.040992111	0.000207467	0.041177019	9.264829319	2.223004441	2.175096307
63.42	-0.023400944	0.0001206	0.023682725	5.32861304	2.223142843	2.175096307
63.425	-0.018743562	9.67534E-05	0.018919224	4.256825504	2.223231636	2.175096307
63.43	-0.034253719	0.000174108	0.034491125	7.760503071	2.223528182	2.175096307
63.435	-0.022841208	0.000118194	0.023220185	5.224541618	2.223660042	2.175096307

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
76.81274414	3.30876E-05	0.146427076
76.81884766	3.80546E-05	0.16783595
76.82495117	3.96139E-05	0.177022241
76.83105469	3.18215E-05	0.144963196
76.8371582	2.11334E-05	0.096511418
76.84326172	2.21765E-05	0.102003627
76.84936523	2.67881E-05	0.125032319
76.85546875	2.60721E-05	0.122394452
76.86157227	2.96641E-05	0.140523639
76.86767578	3.45323E-05	0.163730426
76.8737793	2.80007E-05	0.131415518
76.87988281	1.43572E-05	0.068182509
76.88598633	1.40032E-05	0.067405604
76.89208984	3.2594E-05	0.154849095
76.89819336	4.71494E-05	0.222031109
76.90429688	4.61358E-05	0.216911678
76.91040039	3.49374E-05	0.162606305
76.91650391	3.58461E-05	0.165966105
76.92260742	4.09333E-05	0.188482785
76.92871094	2.96053E-05	0.134904836
76.93481445	9.81994E-06	0.044685362
76.94091797	8.77159E-06	0.039712915
76.94702148	2.23638E-06	0.010019517
76.953125	1.76773E-05	0.079257013
76.95922852	2.76827E-05	0.123480023
76.96533203	3.56809E-05	0.15718232
76.97143555	4.18869E-05	0.184914641
76.97753906	4.26289E-05	0.188632251
76.98364258	3.61516E-05	0.158626976
76.98974609	2.33009E-05	0.1014427
76.99584961	1.80311E-05	0.077919802
77.00195313	2.38964E-05	0.10315907
77.00805664	3.70682E-05	0.16123269
77.01416016	4.46586E-05	0.194594136
77.02026367	4.65764E-05	0.202265667
77.02636719	4.61142E-05	0.20063328
77.0324707	3.85633E-05	0.169106122
77.03857422	3.0315E-05	0.133963551
77.04467773	3.09553E-05	0.137248142
77.05078125	3.73181E-05	0.165632617
77.05688477	3.92135E-05	0.174268185
77.06298828	3.03287E-05	0.135356817
77.0690918	1.5601E-05	0.069981946
77.07519531	1.2248E-05	0.054814553
77.08129883	1.42712E-05	0.063511742
77.08740234	9.55512E-06	0.042529544
77.09350586	1.11835E-05	0.050120392
77.09960938	1.78399E-05	0.080479167
77.10571289	2.72153E-05	0.12249258
77.11181641	2.93634E-05	0.13266212
77.11791992	2.89806E-05	0.133449553
77.12402344	3.55263E-05	0.165514463
77.13012695	3.41603E-05	0.160381914
77.13623047	2.61766E-05	0.125041916
77.14233398	2.2916E-05	0.10996903
77.1484375	2.7471E-05	0.131545893
77.15454102	3.3696E-05	0.164164376
77.16064453	2.99033E-05	0.148331941
77.16674805	1.44982E-05	0.072042872
77.17285156	1.28672E-05	0.063855236
77.17895508	2.26813E-05	0.112447652
77.18505859	2.88378E-05	0.142928525
77.19116211	3.82695E-05	0.189974255
77.19726563	4.68948E-05	0.232019346
77.20336914	4.96941E-05	0.246349483
77.20947266	5.0302E-05	0.253330789
77.21557617	5.08412E-05	0.257483248
77.22167969	4.64715E-05	0.233278493
77.2277832	3.76629E-05	0.188943588
77.23388672	2.89764E-05	0.145827481
77.23999023	2.5096E-05	0.126314479
77.24609375	2.76019E-05	0.139421858
77.25219727	3.37994E-05	0.170415733
77.25830078	4.12871E-05	0.206895828
77.2644043	4.48085E-05	0.224197726
77.27050781	3.79443E-05	0.189277158
77.27661133	2.11043E-05	0.10499449
77.28271484	8.19967E-06	0.040731936
77.28881836	1.26145E-05	0.062019172
77.29492188	2.61957E-05	0.127368561
77.30102539	3.10142E-05	0.149913846
77.30712891	2.7383E-05	0.131180937
77.31323242	2.86543E-05	0.13669882
77.31933594	2.94512E-05	0.140884021
77.32543945	2.7006E-05	0.128794666
77.33154297	1.92148E-05	0.091569699
77.33764648	8.31995E-06	0.039696743
77.34375	2.78744E-06	0.013129747
77.34985352	1.027E-05	0.047947838
77.35595703	2.49336E-05	0.117185397
77.36206055	3.78964E-05	0.178407189
77.36816406	4.06781E-05	0.191208226
77.37426758	3.31412E-05	0.155740493
77.38037109	1.73289E-05	0.080751264
77.38647461	1.42963E-06	0.006659338
77.39257813	6.971E-06	0.032954308
77.39868164	4.47884E-06	0.021382169
77.40478516	1.24656E-05	0.05974244
77.41088867	1.18277E-05	0.05677575
77.41699219	9.39808E-06	0.045325314
77.4230957	1.10994E-05	0.054729284
77.42919922	1.82559E-05	0.091926204
77.43530273	2.48732E-05	0.125865907
77.44140625	2.90579E-05	0.148913327

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
63.44	-0.006391738	3.55316E-05	0.006736525	1.515718231	2.223670368	2.175096307
63.445	-0.003268754	1.95313E-05	0.003567735	0.802740396	2.223673068	2.175096307
63.45	-0.001804923	1.18613E-05	0.002052936	0.461910551	2.223673892	2.175096307
63.455	-0.013988474	7.225E-05	0.014223463	3.200279206	2.223723347	2.175096307
63.46	-0.012514857	6.57026E-05	0.012889465	2.900129656	2.223762932	2.175096307
63.465	0.007843067	-3.64288E-05	-0.007498274	-1.687111662	2.223778479	2.175096307
63.47	0.000272664	5.15874E-07	-4.29229E-05	-0.009657652	2.223778498	2.175096307
63.475	-0.005145827	2.79173E-05	0.005466546	1.22997274	2.22378519	2.175096307
63.48	0.013509601	-6.54044E-05	-0.013218094	-2.97407117	2.223831318	2.175096307
63.485	0.005393625	-2.60546E-05	-0.005264669	-1.184550612	2.223838671	2.175096307
63.49	-0.014144638	7.14229E-05	0.014312768	3.220372707	2.223889237	2.175096307
63.495	-0.0121603	6.19611E-05	0.012397273	2.789386374	2.22392661	2.175096307
63.5	-0.014599104	7.39037E-05	0.01480819	3.331842775	2.223980478	2.175096307
63.505	-0.023707834	0.00011961	0.023955056	5.389887548	2.224122534	2.175096307
63.51	-0.022155654	0.000112353	0.022481706	5.058383794	2.224246598	2.175096307
63.515	-0.013223078	6.80399E-05	0.01355257	3.049328336	2.22429079	2.175096307
63.52	-0.014519272	7.39723E-05	0.014756627	3.320241102	2.22434407	2.175096307
63.525	-0.032825013	0.000165266	0.033070624	7.440890363	2.224616394	2.175096307
63.53	-0.033173366	0.000168058	0.033576944	7.554812497	2.224894528	2.175096307
63.535	-0.015474324	7.99633E-05	0.015857266	3.567884797	2.224955048	2.175096307
63.54	-0.025931447	0.00013133	0.026212957	5.897915335	2.225125001	2.175096307
63.545	-0.038756936	0.000195829	0.039162218	8.811499045	2.225504644	2.175096307
63.55	-0.022529303	0.000115639	0.023009637	5.177168223	2.225632928	2.175096307
63.555	-0.019696827	0.000100995	0.020081705	4.518383641	2.225730982	2.175096307
63.56	-0.032063032	0.000162604	0.032488833	7.309987457	2.22599081	2.175096307
63.565	-0.025992104	0.000133016	0.026519767	5.966947523	2.226161559	2.175096307
63.57	-0.016751662	8.71285E-05	0.017284319	3.888971711	2.226232483	2.175096307
63.575	-0.014175588	7.44915E-05	0.01474937	3.318608145	2.22628327	2.175096307
63.58	-0.000332683	5.59855E-06	0.000957429	0.215421624	2.226283298	2.175096307
63.585	0.016138555	-7.74147E-05	-0.01558694	-3.507061535	2.226349126	2.175096307
63.59	0.01493025	-7.20337E-05	-0.014463184	-3.254216367	2.226405465	2.175096307
63.595	0.013064832	-6.26478E-05	-0.012571829	-2.828661507	2.226448605	2.175096307
63.6	0.027286292	-0.000134371	-0.026804987	-6.031122147	2.226636781	2.175096307
63.605	0.029082531	-0.000144534	-0.02873803	-6.466056759	2.226850548	2.175096307
63.61	0.014443105	-7.178E-05	-0.014091217	-3.17052372	2.226903271	2.175096307
63.615	0.023515551	-0.000116172	-0.023042674	-5.184601551	2.227043032	2.175096307
63.62	0.042916491	-0.000214299	-0.042504737	-9.563565864	2.227508537	2.175096307
63.625	0.043171723	-0.000216051	-0.042807071	-9.631591014	2.227979595	2.175096307
63.63	0.049301874	-0.0002472	-0.048953067	-11.01444012	2.228593927	2.175096307
63.635	0.060687881	-0.00030589	-0.060435055	-13.59788742	2.229524777	2.175096307
63.64	0.056274335	-0.000284308	-0.05607978	-12.61795047	2.230325158	2.175096307
63.645	0.061567381	-0.000310583	-0.061352206	-13.80424646	2.231283184	2.175096307
63.65	0.078238898	-0.000396601	-0.078131183	-17.57951619	2.232830294	2.175096307
63.655	0.075644023	-0.000385032	-0.075731175	-17.03951428	2.234276484	2.175096307
63.66	0.063749585	-0.000326308	-0.06390999	-14.37974772	2.235303626	2.175096307
63.665	0.062688981	-0.000321162	-0.062880226	-14.14805096	2.236296876	2.175096307
63.67	0.065248833	-0.000334392	-0.06554994	-14.74873661	2.237372898	2.175096307
63.675	0.058222328	-0.000300185	-0.058663667	-13.19932511	2.23822965	2.175096307
63.68	0.041307901	-0.000216126	-0.041828785	-9.411476555	2.238660913	2.175096307
63.685	0.031311858	-0.000166173	-0.031856521	-7.167717277	2.238908709	2.175096307
63.69	0.022911017	-0.000124521	-0.023558582	-5.300680868	2.239041376	2.175096307
63.695	-0.004039735	1.08643E-05	0.003308024	0.744305362	2.239045501	2.175096307
63.7	-0.03356671	0.00016095	0.0329144	7.405739953	2.23933027	2.175096307
63.705	-0.049467301	0.000242699	0.048965663	11.01727423	2.239948731	2.175096307
63.71	-0.055879726	0.000276289	0.055546003	12.49785069	2.240737927	2.175096307
63.715	-0.048990965	0.000242532	0.048736606	10.96573645	2.241344534	2.175096307
63.72	-0.042246003	0.000209009	0.041988757	9.447470289	2.241795608	2.175096307
63.725	-0.052290156	0.000258831	0.052033351	11.70750389	2.242486668	2.175096307
63.73	-0.060002396	0.000298305	0.059854412	13.46724262	2.243396609	2.175096307
63.735	-0.058045688	0.000288804	0.057936108	13.03562432	2.24424817	2.175096307
63.74	-0.054647382	0.000272119	0.054570975	12.27846949	2.24500294	2.175096307
63.745	-0.047092837	0.000234809	0.047058044	10.58805993	2.245563453	2.175096307
63.75	-0.046019843	0.000229448	0.04598439	10.34648767	2.246098714	2.175096307
63.755	-0.048498468	0.000242055	0.048528241	10.91885419	2.246693187	2.175096307
63.76	-0.037059377	0.000185431	0.037139102	8.356297847	2.247040301	2.175096307
63.765	-0.031991989	0.00015981	0.032003158	7.200710509	2.247298979	2.175096307
63.77	-0.042668939	0.000212793	0.042683853	9.603866982	2.247759129	2.175096307
63.775	-0.04165695	0.000208313	0.041772898	9.398902029	2.248197711	2.175096307
63.78	-0.030782702	0.000154387	0.030915919	6.956081838	2.248437202	2.175096307
63.785	-0.029734493	0.000149018	0.029848327	6.715873618	2.24866066	2.175096307
63.79	-0.032481811	0.000162848	0.032639095	7.343796424	2.24892732	2.175096307
63.795	-0.02658682	0.000133839	0.02680201	6.030452329	2.249105972	2.175096307
63.8	-0.015361445	7.76914E-05	0.015581468	3.505830335	2.249165612	2.175096307
63.805	-0.010676116	5.39965E-05	0.010855041	2.442384293	2.24919442	2.175096307
63.81	-0.009541953	4.83543E-05	0.009730351	2.189328924	2.249217431	2.175096307
63.815	-0.000257715	1.80851E-06	0.000462939	0.104161381	2.249217448	2.175096307
63.82	0.008269855	-4.13885E-05	-0.008120689	-1.827155126	2.249234733	2.175096307
63.825	0.009055863	-4.55504E-05	-0.008946843	-2.013039769	2.24925546	2.175096307
63.83	0.014583501	-7.34009E-05	-0.014471497	-3.256086858	2.249309213	2.175096307
63.835	0.024281686	-0.000122638	-0.024222531	-5.450069472	2.249458229	2.175096307
63.84	0.027421941	-0.000138954	-0.027449316	-6.176096043	2.249648281	2.175096307
63.845	0.027343013	-0.000138827	-0.027423718	-6.170336493	2.24983724	2.175096307
63.85	0.029672158	-0.000150863	-0.029803346	-6.70575277	2.250059763	2.175096307
63.855	0.029863154	-0.000152223	-0.030058619	-6.76318929	2.25028516	2.175096307
63.86	0.024545033	-0.000126103	-0.024789656	-5.577672666	2.250437426	2.175096307
63.865	0.023765683	-0.00012226	-0.024017107	-5.403849036	2.250580176	2.175096307
63.87	0.027925745	-0.000143202	-0.028242074	-6.354466745	2.250777275	2.175096307
63.875	0.019961784	-0.000104153	-0.020368524	-4.582917821	2.250877986	2.175096307
63.88	0.010593277	-5.74653E-05	-0.010983078	-2.471192481	2.250906348	2.175096307
63.885	0.014010441	-7.4484E-05	-0.014417989	-3.244047477	2.250955959	2.175096307
63.89	0.007168701	-4.09134E-05	-0.007661286	-1.723789325	2.250968947	2.175096307
63.895	-0.005703678	2.34898E-05	0.005237619	1.178464326	2.25097717	2.175096307
63.9	-0.003372765	1.20501E-05	0.002927904	0.658778441	2.250980045	2.175096307
63.905	-0.010235981	4.58594E-05	0.009708514	2.184415716	2.251006526	2.175096307
63.91	-0.028395946	0.000137104	0.027897351	6.276904079	2.251210318	2.175096307
63.915	-0.03208905	0.000156049	0.031664691	7.12455554	2.251470568	2.175096307
63.92	-0.039328082	0.000192427	0.038889709	8.750184572	2.251861482	2.175096307
63.925	-0.055494186	0.000274428	0.055134705	12.40530872	2.252639825	2.175096307
63.93	-0.056754204	0.000281451	0.056495491	12.71148538	2.253453914	2.175096307
63.935	-0.0568818	0.000282264	0.056660348	12.74857824	2.254271668	2.175096307
63.94	-0.065134841	0.000324536	0.064982869	14.62114561	2.255343934	2.175096307
63.945	-0.064845895	0.000323562	0.064749307	14.56859406	2.256406708	2.175096307
63.95	-0.065734203	0.000328288	0.06570379	14.78335271	2.257498799	2.175096307
63.955	-0.073169147	0.000366719	0.073219273	16.47433632	2.258851905	2.175096307

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
77.44750977	3.13343E-05	0.163011802
77.45361328	2.83366E-05	0.148349641
77.4597168	1.74337E-05	0.092238174
77.46582031	1.37456E-05	0.07277538
77.47192383	2.30529E-05	0.121571178
77.47802734	2.14864E-05	0.115143536
77.48413086	1.76634E-05	0.095859804
77.49023438	2.05909E-05	0.112017114
77.49633789	2.71169E-05	0.148471986
77.50244141	3.33434E-05	0.182189394
77.50854492	4.12329E-05	0.226747776
77.51464844	4.82245E-05	0.269936157
77.52075195	4.29474E-05	0.240247954
77.52685547	3.14299E-05	0.176869058
77.53295898	2.56816E-05	0.146900858
77.5390625	2.69979E-05	0.153701569
77.54516602	3.08983E-05	0.176168676
77.55126953	2.91688E-05	0.168602491
77.55737305	1.72337E-05	0.099327438
77.56347656	5.33179E-06	0.030857033
77.56958008	2.95477E-06	0.017464776
77.57568359	7.0471E-06	0.041797373
77.58178711	1.24708E-05	0.073039738
77.58789063	1.82901E-05	0.106587588
77.59399414	2.14462E-05	0.124898859
77.60009766	1.91233E-05	0.111940439
77.60620117	1.80679E-05	0.1073829
77.61230469	1.46297E-05	0.086600958
77.6184082	1.5029E-05	0.08638131
77.62451172	1.85215E-05	0.103849709
77.63061523	1.22365E-05	0.067716288
77.63671875	2.72801E-06	0.015001529
77.64282227	4.51982E-06	0.024551834
77.64892578	2.02773E-05	0.107243539
77.6550293	3.75866E-05	0.195779787
77.66113281	4.42424E-05	0.229574939
77.66723633	3.81809E-05	0.19493472
77.67333984	2.81521E-05	0.141858235
77.67944336	2.38901E-05	0.120066194
77.68554688	2.70827E-05	0.135521801
77.69165039	3.10063E-05	0.155942062
77.69775391	3.36286E-05	0.170949992
77.70385742	3.57553E-05	0.18099642
77.70996094	3.59518E-05	0.181002483
77.71606445	3.23064E-05	0.164183714
77.72216797	2.51804E-05	0.129659715
77.72827148	1.90724E-05	0.099295741
77.734375	1.89738E-05	0.099387897
77.74047852	2.45196E-05	0.127603652
77.74658203	2.6164E-05	0.135566568
77.75268555	1.86878E-05	0.097489195
77.75878906	6.44447E-06	0.033836263
77.76489258	5.31707E-06	0.028236216
77.77099609	1.33694E-05	0.072049986
77.77709961	1.60177E-05	0.086794446
77.78320313	9.21137E-06	0.050202954
77.78930664	5.0917E-06	0.027876425
77.79541016	1.27253E-05	0.069957099
77.80151367	1.23816E-05	0.069442681
77.80761719	1.89539E-05	0.108511138
77.8137207	2.58384E-05	0.149444998
77.81982422	2.36502E-05	0.138008942
77.82592773	1.72735E-05	0.10074795
77.83203125	1.80171E-05	0.105374936
77.83813477	2.24243E-05	0.133844914
77.84423828	2.3315E-05	0.141534169
77.8503418	2.05724E-05	0.12565429
77.85644531	1.8182E-05	0.111855609
77.86254883	1.92264E-05	0.119061944
77.86865234	2.03408E-05	0.127168851
77.87475586	2.0691E-05	0.131816831
77.88085938	1.93014E-05	0.125152315
77.88696289	1.60855E-05	0.105697983
77.89306641	1.04468E-05	0.069454625
77.89916992	2.54201E-06	0.016786774
77.90527344	9.97516E-06	0.06529754
77.91137695	1.71489E-05	0.114117761
77.91748047	1.72933E-05	0.116346341
77.92358398	8.91139E-06	0.059811769
77.9296875	3.47096E-06	0.023281096
77.93579102	9.48245E-06	0.062142452
77.94189453	1.50354E-05	0.095880411
77.94799805	2.47237E-05	0.155800874
77.95410156	2.63854E-05	0.163287953
77.96020508	1.88596E-05	0.116637459
77.96630859	1.26969E-05	0.079635307
77.97241211	1.72272E-05	0.106279498
77.97851563	2.2682E-05	0.136540757
77.98461914	2.41996E-05	0.143709537
77.99072266	2.31903E-05	0.135895644
77.99682617	2.01051E-05	0.118488151
78.00292969	1.79077E-05	0.106616823
78.0090332	1.64544E-05	0.096785244
78.01513672	1.11814E-05	0.065094873
78.02124023	7.7486E-06	0.044642479
78.02734375	1.73377E-05	0.097536281
78.03344727	2.84822E-05	0.158761714
78.03955078	3.14528E-05	0.175744117
78.0456543	2.76637E-05	0.153889579
78.05175781	2.47502E-05	0.138334134
78.05786133	3.17396E-05	0.177637954
78.06396484	4.14841E-05	0.228006686
78.07006836	4.67773E-05	0.255259051
78.07617188	4.88565E-05	0.269466595

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
63.96	-0.071484105	0.000359003	0.071641003	16.11922567	2.260143406	2.175096307
63.965	-0.069557251	0.000349615	0.069747641	15.69321921	2.261366221	2.175096307
63.97	-0.077387334	0.000389392	0.077640828	17.46918635	2.262879837	2.175096307
63.975	-0.079457167	0.000400716	0.079829328	17.96159885	2.264475503	2.175096307
63.98	-0.071485325	0.000361663	0.071954454	16.18975212	2.265767049	2.175096307
63.985	-0.06688868	0.000339	0.067393112	15.16345012	2.266897837	2.175096307
63.99	-0.067849088	0.000344072	0.068417293	15.39389082	2.26806133	2.175096307
63.995	-0.063199727	0.000321363	0.063847358	14.36565556	2.26907083	2.175096307
64	-0.058210368	0.000296645	0.058883727	13.24883864	2.26992723	2.175096307
64.005	-0.063364315	0.000322486	0.064097599	14.42195968	2.270941995	2.175096307
64.01	-0.06232063	0.00031803	0.063195397	14.21896434	2.271923607	2.175096307
64.015	-0.048485871	0.000249643	0.049462219	11.1289993	2.272517771	2.175096307
64.02	-0.037603546	0.000195411	0.038618519	8.689166764	2.272875153	2.175096307
64.025	-0.030600238	0.000160568	0.031666023	7.124855107	2.273111814	2.175096307
64.03	-0.022921353	0.000122443	0.024071363	5.416056626	2.273244601	2.175096307
64.035	-0.00351046	2.54121E-05	0.00479983	1.079961638	2.273247716	2.175096307
64.04	0.036983672	-0.000179667	-0.035673949	-8.026638501	2.273593413	2.175096307
64.045	0.06674188	-0.00033275	-0.065670525	-14.77586816	2.274719243	2.175096307
64.05	0.064501341	-0.000323121	-0.063663745	-14.3243427	2.275770753	2.175096307
64.055	0.057292597	-0.000287683	-0.05652453	-12.71801933	2.276600361	2.175096307
64.06	0.058351419	-0.000293075	-0.057613613	-12.96306299	2.277460916	2.175096307
64.065	0.065327291	-0.000327795	-0.064614276	-14.53821207	2.278539528	2.175096307
64.07	0.077868478	-0.000392045	-0.077241808	-17.37940669	2.280072024	2.175096307
64.075	0.080126376	-0.000404396	-0.079616844	-17.91378984	2.281694681	2.175096307
64.08	0.073338955	-0.000371061	-0.072894556	-16.40127503	2.283054076	2.175096307
64.085	0.076932641	-0.000388901	-0.076495127	-17.21140364	2.284549957	2.175096307
64.09	0.087376885	-0.000442242	-0.087012007	-19.57770162	2.286479565	2.175096307
64.095	0.092905242	-0.000471368	-0.092671579	-20.85110524	2.288661071	2.175096307
64.1	0.088407953	-0.000449563	-0.088271364	-19.86105695	2.290636487	2.175096307
64.105	0.080757274	-0.000411779	-0.080661245	-18.14878023	2.292284798	2.175096307
64.11	0.08643071	-0.000440029	-0.086360765	-19.43117224	2.294172842	2.175096307
64.115	0.090769026	-0.000462236	-0.090833725	-20.43758812	2.29625518	2.175096307
64.12	0.07916003	-0.000405083	-0.079314275	-17.84571191	2.297838934	2.175096307
64.125	0.077923936	-0.000398801	-0.07806072	-17.56366205	2.299373614	2.175096307
64.13	0.088030602	-0.000449416	-0.088258187	-19.85809202	2.301332203	2.175096307
64.135	0.08149817	-0.000417847	-0.081889758	-18.42519564	2.303010897	2.175096307
64.14	0.065810078	-0.000340048	-0.06625735	-14.90790379	2.30410551	2.175096307
64.145	0.061044886	-0.000316256	-0.061491517	-13.83559128	2.305047345	2.175096307
64.15	0.060373171	-0.000313269	-0.060893568	-13.70105289	2.305968566	2.175096307
64.155	0.046988915	-0.000246806	-0.047610622	-10.71238991	2.306526608	2.175096307
64.16	0.029328114	-0.000158049	-0.029935479	-6.735482676	2.306744	2.175096307
64.165	0.026744216	-0.00014487	-0.02732303	-6.147681801	2.306924774	2.175096307
64.17	0.019264486	-0.000107627	-0.019925024	-4.483130301	2.307018571	2.175096307
64.175	-0.007133322	2.58715E-05	0.006475915	1.45708097	2.307031432	2.175096307
64.18	-0.019023018	8.70146E-05	0.018519447	4.16687547	2.307122892	2.175096307
64.185	-0.018088996	8.24977E-05	0.017607511	3.961689995	2.307205592	2.175096307
64.19	-0.032997758	0.000158385	0.032540291	7.321565402	2.30748079	2.175096307
64.195	-0.042972837	0.000210093	0.042673897	9.601626919	2.307947518	2.175096307
64.2	-0.037599313	0.000183936	0.037396228	8.414151396	2.30830482	2.175096307
64.205	-0.042141246	0.000206564	0.041962338	9.441526	2.308753659	2.175096307
64.21	-0.049869919	0.000246488	0.049794198	11.20369458	2.309382229	2.175096307
64.215	-0.049377014	0.000244513	0.049384055	11.11141243	2.309998434	2.175096307
64.22	-0.049558021	0.000245824	0.049648912	11.17100528	2.310619166	2.175096307
64.225	-0.049066817	0.000243748	0.049229648	11.07667086	2.311227653	2.175096307
64.23	-0.047782195	0.000237533	0.047975177	10.79441492	2.311804696	2.175096307
64.235	-0.048295485	0.000240544	0.048583221	10.93122466	2.312394203	2.175096307
64.24	-0.046050831	0.000229492	0.046353001	10.42942516	2.312930186	2.175096307
64.245	-0.043352069	0.000216073	0.043647809	9.820757137	2.313405188	2.175096307
64.25	-0.039177018	0.000195533	0.039511305	8.890043712	2.313793105	2.175096307
64.255	-0.031942407	0.000159843	0.032335141	7.275406812	2.314050981	2.175096307
64.26	-0.027330323	0.000137121	0.027773678	6.249077546	2.314239765	2.175096307
64.265	-0.020406881	0.000102936	0.020920799	4.707179739	2.314345017	2.175096307
64.27	-0.009412245	4.81407E-05	0.009960041	2.241009157	2.314367408	2.175096307
64.275	-0.001893201	1.05027E-05	0.002447703	0.550733143	2.314368313	2.175096307
64.28	0.004533497	-2.16348E-05	-0.003956545	-0.890222526	2.314373508	2.175096307
64.285	0.01271516	-6.26748E-05	-0.012121492	-2.727335612	2.31441437	2.175096307
64.29	0.021701395	-0.000107888	-0.021099798	-4.747454594	2.314533399	2.175096307
64.295	0.031350432	-0.000156613	-0.030755945	-6.920087536	2.314781805	2.175096307
64.3	0.039831574	-0.00019956	-0.039250534	-8.831370258	2.315182793	2.175096307
64.305	0.05159937	-0.000259231	-0.051028098	-11.48132204	2.315855715	2.175096307
64.31	0.065704675	-0.000331223	-0.065199604	-14.66991088	2.316946824	2.175096307
64.315	0.072821633	-0.000367968	-0.072417136	-16.29385559	2.318287108	2.175096307
64.32	0.078240588	-0.000395959	-0.077908088	-17.5293199	2.319834286	2.175096307
64.325	0.085045495	-0.000431171	-0.084807168	-19.08161288	2.321662296	2.175096307
64.33	0.085725073	-0.000435154	-0.085577013	-19.25482787	2.323519637	2.175096307
64.335	0.08787977	-0.000446412	-0.087790565	-19.75287716	2.325471519	2.175096307
64.34	0.095122335	-0.000483974	-0.095119124	-21.4018029	2.327758386	2.175096307
64.345	0.096685335	-0.000492637	-0.096795003	-21.77887559	2.330121024	2.175096307
64.35	0.09525719	-0.000485763	-0.09540725	-21.46663117	2.33241438	2.175096307
64.355	0.095542219	-0.000487647	-0.095787666	-21.55222478	2.334721481	2.175096307
64.36	0.095187638	-0.000486214	-0.095498243	-21.4871046	2.337011489	2.175096307
64.365	0.098134331	-0.000501685	-0.098556017	-22.17510379	2.339445474	2.175096307
64.37	0.101272476	-0.000518433	-0.10180391	-22.90587965	2.342037616	2.175096307
64.375	0.10068002	-0.000515988	-0.101310144	-22.79478234	2.344599518	2.175096307
64.38	0.099710787	-0.00051164	-0.100432331	-22.59727446	2.347112331	2.175171633
64.385	0.093791236	-0.000482641	-0.094584565	-21.28152711	2.349335643	2.175183977
64.39	0.082369877	-0.000426507	-0.083293431	-18.74102187	2.35105044	2.175183977
64.395	0.066701124	-0.000348942	-0.067746165	-15.24288721	2.352174896	2.175272995
64.4	0.042238426	-0.000226579	-0.043335893	-9.750575923	2.352625807	2.175716594
64.405	0.023765062	-0.000133233	-0.024803512	-5.58079009	2.35276855	2.176054979
64.41	0.016296931	-9.53146E-05	-0.017296557	-3.891725347	2.352835675	2.176295543
64.415	0.004678414	-3.62992E-05	-0.005636392	-1.268188155	2.352841207	2.176887438
64.42	0.002627866	-2.53311E-05	-0.003511503	-0.790088071	2.352842953	2.177306179
64.425	0.014995412	-8.68179E-05	-0.015897136	-3.576855556	2.352899785	2.177601465
64.43	0.006879063	-4.73067E-05	-0.007928449	-1.783901123	2.352911745	2.17777934
64.435	-0.019575861	8.64376E-05	0.018524277	4.167962338	2.353008599	2.177836322
64.44	-0.034550809	0.000163462	0.033626563	7.565976755	2.35331031	2.177836322
64.445	-0.037235147	0.000177733	0.036419639	8.194418815	2.353660725	2.177836322
64.45	-0.036899051	0.000176288	0.036127855	8.128767318	2.354004842	2.177836322
64.455	-0.042815252	0.000206601	0.042065029	9.464631617	2.354468153	2.177836322
64.46	-0.054805401	0.000268423	0.054134108	12.18017436	2.355227295	2.177836322
64.465	-0.055063555	0.000270419	0.05445648	12.252708	2.355993605	2.177836322
64.47	-0.04978039	0.000244358	0.049201651	11.07037153	2.356619919	2.177836322
64.475	-0.058753533	0.000289192	0.05818219	13.09099277	2.357492376	2.177836322

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
78.08227539	4.59372E-05	0.257718427
78.08837891	3.84497E-05	0.221012687
78.09448242	3.01105E-05	0.174289363
78.10058594	2.5333E-05	0.145044643
78.10668945	2.74761E-05	0.158320039
78.11279297	3.42548E-05	0.200156161
78.11889648	4.07937E-05	0.241156649
78.125	4.71739E-05	0.286869651
78.13110352	5.16208E-05	0.322644399
78.13720703	5.14797E-05	0.323598656
78.14331055	5.02454E-05	0.316805938
78.14941406	5.14664E-05	0.327431022
78.15551758	5.39621E-05	0.347604694
78.16162109	5.27033E-05	0.346599085
78.16772461	4.58371E-05	0.309094518
78.17382813	3.463E-05	0.239388834
78.17993164	2.37197E-05	0.16705369
78.18603516	1.92905E-05	0.135225674
78.19213867	2.2103E-05	0.152868578
78.19824219	2.87432E-05	0.200028414
78.2043457	3.59271E-05	0.253953302
78.21044922	3.63055E-05	0.259638244
78.21655273	2.92921E-05	0.211804281
78.22265625	2.48885E-05	0.179300633
78.22875977	2.50782E-05	0.17837271
78.23486328	2.46305E-05	0.175395963
78.2409668	2.44815E-05	0.176345627
78.24707031	2.71894E-05	0.198400118
78.25317383	3.27304E-05	0.241809126
78.25927734	3.75081E-05	0.278039384
78.26538086	3.63969E-05	0.268836983
78.27148438	2.88402E-05	0.212964966
78.27758789	2.13895E-05	0.158201066
78.28369141	2.17556E-05	0.161390182
78.28979492	2.7898E-05	0.208073689
78.29589844	3.34851E-05	0.247639207
78.30200195	3.39109E-05	0.244368612
78.30810547	2.70132E-05	0.18929276
78.31420898	1.78315E-05	0.122042334
78.3203125	1.16282E-05	0.079271622
78.32641602	7.14516E-06	0.049058794
78.33251953	8.13567E-06	0.054710149
78.33862305	1.13434E-05	0.073748974
78.34472656	1.48626E-05	0.094491984
78.35083008	1.39127E-05	0.08646222
78.35693359	1.87984E-05	0.115966575
78.36303711	2.93272E-05	0.182963843
78.36914063	3.48877E-05	0.217029479
78.37524414	3.50047E-05	0.214809774
78.38134766	3.55365E-05	0.215246182
78.38745117	3.99927E-05	0.237221794
78.39355469	4.49711E-05	0.261996926
78.3996582	4.71498E-05	0.27387919
78.40576172	4.82185E-05	0.283360303
78.41186523	4.90843E-05	0.294929923
78.41796875	4.87432E-05	0.296584284
78.42407227	4.95297E-05	0.298226795
78.43017578	5.25816E-05	0.314570501
78.4362793	5.59444E-05	0.340471419
78.44238281	5.89457E-05	0.367961129
78.44848633	6.03272E-05	0.386427768
78.45458984	5.82901E-05	0.380917342
78.46069336	5.44764E-05	0.357213329
78.46679688	5.2623E-05	0.347663931
78.47290039	5.37425E-05	0.359923799
78.47900391	5.3783E-05	0.362246559
78.48510742	4.86934E-05	0.33409069
78.49121094	4.15928E-05	0.290729754
78.49731445	3.79495E-05	0.263883333
78.50341797	3.74954E-05	0.261462096
78.50952148	3.73633E-05	0.263087059
78.515625	3.54406E-05	0.250010188
78.52172852	3.26665E-05	0.235128323
78.52783203	3.08075E-05	0.228527912
78.53393555	3.06897E-05	0.23139274
78.54003906	3.29283E-05	0.250994188
78.54614258	3.87864E-05	0.296914334
78.55224609	4.58028E-05	0.351624973
78.55834961	4.94565E-05	0.388510662
78.56445313	4.93929E-05	0.403639501
78.57055664	4.76027E-05	0.400826652
78.57666016	4.41467E-05	0.373421441
78.58276367	4.16493E-05	0.348138329
78.58886719	4.36036E-05	0.362461639
78.5949707	4.76957E-05	0.397768228
78.60107422	5.11486E-05	0.426434746
78.60717773	5.57445E-05	0.467021474
78.61328125	6.01727E-05	0.508351678
78.61938477	6.37301E-05	0.529294381
78.62548828	6.77046E-05	0.548153797
78.6315918	6.75526E-05	0.543399138
78.63769531	6.06099E-05	0.483784212
78.64379883	5.16227E-05	0.408048912
78.64990234	4.5594E-05	0.360384656
78.65600586	4.47874E-05	0.350312959
78.66210938	4.66413E-05	0.357103224
78.66821289	4.51711E-05	0.337375321
78.67431641	3.6683E-05	0.265238524
78.68041992	2.62428E-05	0.186810491
78.68652344	2.00467E-05	0.143748483
78.69262695	1.74028E-05	0.12371334
78.69873047	1.85082E-05	0.128120887
78.70483398	2.1202E-05	0.143655274
78.7109375	2.17558E-05	0.14431656

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
64.48	-0.067229081	0.000333302	0.06676946	15.02312858	2.358634703	2.177836322
64.485	-0.063934366	0.00031736	0.063551786	14.29915181	2.359667808	2.177836322
64.49	-0.062026193	0.000308056	0.061675594	13.87700861	2.360640166	2.177836322
64.495	-0.067553862	0.000335741	0.067243854	15.12986706	2.361793556	2.177836322
64.5	-0.072030429	0.000359254	0.071815129	16.15840402	2.363104874	2.177836322
64.505	-0.068288951	0.000341045	0.068140171	15.33153849	2.364283502	2.177836322
64.51	-0.063967726	0.000319766	0.063851238	14.36652852	2.365317686	2.177836322
64.515	-0.069181852	0.00034584	0.069112102	15.55022291	2.366527337	2.177836322
64.52	-0.069617257	0.00034862	0.069669583	15.67565613	2.367752263	2.177873996
64.525	-0.059287833	0.000297787	0.059427012	13.37107775	2.36864066	2.178178698
64.53	-0.054249334	0.000272919	0.054427717	12.24623632	2.369384475	2.178565636
64.535	-0.050075319	0.000252539	0.050335658	11.32552314	2.370018233	2.178965999
64.54	-0.038459496	0.000194937	0.038792582	8.728331022	2.37039207	2.179202068
64.545	-0.027086475	0.000138208	0.027456027	6.17760612	2.370577501	2.179311555
64.55	-0.01577342	8.15862E-05	0.016170247	3.638305477	2.370640383	2.179541303
64.555	-0.003325538	1.90119E-05	0.003731179	0.83951523	2.370643178	2.179950472
64.56	0.009483516	-4.56174E-05	-0.009081143	-2.043257222	2.370665909	2.18022628
64.565	0.0224996	-0.000111679	-0.022141378	-4.981810126	2.370793854	2.180362531
64.57	0.029085236	-0.00014537	-0.028788374	-6.477384044	2.371007661	2.18037693
64.575	0.036178691	-0.000181451	-0.035896797	-8.076779282	2.371338473	2.18037693
64.58	0.049169824	-0.000247847	-0.048951035	-11.01398289	2.371949518	2.180531669
64.585	0.052368707	-0.00026472	-0.052259839	-11.75846387	2.372642656	2.180567525
64.59	0.052016614	-0.000263095	-0.051931769	-11.68464804	2.373326505	2.180567525
64.595	0.061627999	-0.000312324	-0.061595097	-13.85889681	2.374286418	2.180567525
64.6	0.063901066	-0.000324592	-0.063972971	-14.39391848	2.375318448	2.180567525
64.605	0.058432179	-0.000297775	-0.05856393	-13.17688429	2.376181387	2.180567525
64.61	0.061745342	-0.000314422	-0.061923796	-13.93285403	2.377144959	2.180567525
64.615	0.061015308	-0.00031137	-0.061306231	-13.79390194	2.378085881	2.180567525
64.62	0.051272099	-0.000263324	-0.051628101	-11.61632283	2.378750294	2.180567525
64.625	0.047129678	-0.000242817	-0.04750581	-10.68880721	2.379311684	2.180567525
64.63	0.045626106	-0.000235644	-0.046065003	-10.36462564	2.379837826	2.180567525
64.635	0.037913035	-0.000197557	-0.038423554	-8.645299711	2.380201116	2.180567525
64.64	0.027311216	-0.000144758	-0.027854392	-6.267238311	2.380389636	2.180567525
64.645	0.019879038	-0.000107619	-0.020436023	-4.598105255	2.380489513	2.180567525
64.65	0.012004344	-6.82923E-05	-0.012594334	-2.833725213	2.380525934	2.180626756
64.655	-0.00109485	-2.48491E-06	0.000496578	0.111729985	2.380526237	2.180731039
64.66	-0.010339539	4.43081E-05	0.009782167	2.200987563	2.380553257	2.180731039
64.665	-0.015484585	7.03247E-05	0.014936851	3.360791379	2.380613857	2.180842986
64.67	-0.027416193	0.000130691	0.026875667	6.047025083	2.380803829	2.180978277
64.675	-0.038402938	0.000186746	0.037935079	8.535392723	2.381176568	2.180989305
64.68	-0.04345025	0.000212724	0.043051987	9.686696995	2.381653725	2.180989305
64.685	-0.050258296	0.000247673	0.049927457	11.23367783	2.382292122	2.180989305
64.69	-0.053590267	0.000265128	0.053357702	12.00548302	2.383017974	2.180989305
64.695	-0.053414501	0.000264614	0.05325402	11.98215447	2.383739072	2.180989305
64.7	-0.054649078	0.000271317	0.054573405	12.27901604	2.384493889	2.180989305
64.705	-0.048879738	0.000242902	0.048840674	10.98915167	2.385097745	2.180989305
64.71	-0.044745763	0.00022245	0.044720935	10.0622103	2.385603779	2.180989305
64.715	-0.04931419	0.000245378	0.049347563	11.10320165	2.386218418	2.180989305
64.72	-0.042616947	0.000212681	0.042754861	9.61984377	2.386677447	2.180989305
64.725	-0.033082548	0.000165253	0.033224777	7.475574924	2.386954061	2.180989305
64.73	-0.037106702	0.000185318	0.037273999	8.386649818	2.387302062	2.180989305
64.735	-0.034881258	0.00017485	0.035160138	7.911031068	2.387609573	2.180989305
64.74	-0.023218944	0.000117084	0.023569338	5.30310103	2.38774583	2.180989305
64.745	-0.013116777	6.68203E-05	0.013518398	3.04163948	2.387789314	2.180989305
64.75	0.004262114	-2.01703E-05	-0.00382151	-0.859839844	2.387793906	2.180989305
64.755	0.021559131	-0.000107615	-0.021184715	-4.766560986	2.387911379	2.180989305
64.76	0.025429601	-0.0001276	-0.025143772	-5.657348812	2.388074817	2.180989305
64.765	0.026405589	-0.000132675	-0.02614862	-5.883439454	2.388251042	2.180989305
64.77	0.030002134	-0.000150929	-0.029761139	-6.696256219	2.388478542	2.180989305
64.775	0.033734935	-0.000169872	-0.033507215	-7.539123378	2.388766173	2.180989305
64.78	0.040389196	-0.000203675	-0.040184434	-9.041497628	2.389178466	2.180989305
64.785	0.045627291	-0.000230513	-0.045479211	-10.23282248	2.389704635	2.180989305
64.79	0.04676213	-0.000236504	-0.046660359	-10.49858074	2.390257303	2.180989305
64.795	0.050211429	-0.000254129	-0.050133526	-11.28004333	2.390894511	2.180989305
64.8	0.056859783	-0.000288161	-0.056833	-12.78742491	2.391711632	2.180989305
64.805	0.060398353	-0.00030663	-0.060464898	-13.60460204	2.392633622	2.180989305
64.81	0.056930593	-0.000289753	-0.057058587	-12.83818205	2.393452779	2.180989305
64.815	0.05290755	-0.000269955	-0.053067669	-11.94022548	2.394160255	2.180989305
64.82	0.055441662	-0.000282669	-0.055634073	-12.51766644	2.394937125	2.180989305
64.825	0.057478947	-0.000293146	-0.057747307	-12.99314409	2.395772138	2.180989305
64.83	0.055355638	-0.000282979	-0.055694737	-12.53131574	2.396546599	2.180989305
64.835	0.053359014	-0.000273433	-0.05376897	-12.09801823	2.3972662	2.180989305
64.84	0.047487132	-0.000244669	-0.047977313	-10.79489551	2.397836138	2.180989305
64.845	0.038317399	-0.000199244	-0.038850825	-8.741435592	2.398207219	2.180989305
64.85	0.031085013	-0.000163231	-0.031630435	-7.11684782	2.398451437	2.180989305
64.855	0.026863798	-0.000142068	-0.027393456	-6.163527589	2.398633831	2.180989305
64.86	0.031505456	-0.000165053	-0.032031591	-7.207107875	2.3988847	2.180989305
64.865	0.038106021	-0.000198264	-0.038720993	-8.712223421	2.399251698	2.180989305
64.87	0.030152395	-0.000159408	-0.030884432	-6.94899718	2.399481481	2.180989305
64.875	0.015411133	-8.59212E-05	-0.016173013	-3.638927887	2.399541508	2.180989305
64.88	0.007038895	-4.38039E-05	-0.007775439	-1.749473706	2.399554031	2.180989305
64.885	0.004716789	-3.20462E-05	-0.005433964	-1.22264192	2.399559654	2.181045534
64.89	0.004533442	-3.12435E-05	-0.005274165	-1.186687181	2.399564848	2.181095333
64.895	-0.004072098	1.17741E-05	0.003281781	0.738400714	2.399569039	2.181095333
64.9	-0.017056463	7.74229E-05	0.0163081	3.669322502	2.399642567	2.181095333
64.905	-0.016903237	7.70424E-05	0.016197808	3.644506807	2.39971478	2.181095333
64.91	-0.014622522	6.56486E-05	0.013899541	3.12739675	2.399768821	2.181095333
64.915	-0.023708939	0.000111135	0.022983217	5.171223723	2.39991089	2.181095333
64.92	-0.02814147	0.000133939	0.027493238	6.185978497	2.400111046	2.181095333
64.925	-0.023916159	0.000113006	0.02326887	5.235495755	2.40025561	2.181095333
64.93	-0.023986964	0.000113315	0.023332589	5.249832531	2.400401031	2.181095333
64.935	-0.027942545	0.000133013	0.027306444	6.143949817	2.400598368	2.181095333
64.94	-0.0287325	0.000137125	0.02811987	6.326970747	2.40080702	2.181095333
64.945	-0.027372845	0.000130471	0.026776334	6.024675078	2.400996392	2.181095333
64.95	-0.02946589	0.000140871	0.028863389	6.494262422	2.401215831	2.181095333
64.955	-0.032025978	0.000153738	0.031405404	7.066215889	2.401475059	2.181095333
64.96	-0.029771923	0.000142689	0.029174832	6.564337221	2.40169908	2.181095333
64.965	-0.03152026	0.000151302	0.030913882	6.955623552	2.401950185	2.181095333
64.97	-0.037095187	0.000179689	0.036528328	8.218873775	2.40229797	2.181095333
64.975	-0.034534881	0.000167238	0.034014906	7.653353913	2.402599404	2.181095333
64.98	-0.033051123	0.00015981	0.032517357	7.316405287	2.402875493	2.181095333
64.985	-0.039649446	0.000192913	0.039136769	8.805773028	2.403272821	2.181095333
64.99	-0.039526558	0.000192638	0.039048724	8.785962984	2.403667691	2.181095333
64.995	-0.035483882	0.000172655	0.035018148	7.879083244	2.403985919	2.181095333

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
78.71704102	2.19143E-05	0.144319791
78.72314453	1.9393E-05	0.129694734
78.72924805	1.26468E-05	0.084993901
78.73535156	1.14069E-05	0.076200784
78.74145508	1.39659E-05	0.09316202
78.74755859	1.72247E-05	0.113094209
78.75366211	1.91504E-05	0.123673442
78.75976563	1.68525E-05	0.109384835
78.76586914	1.4636E-05	0.096155451
78.77197266	1.82849E-05	0.121582355
78.77807617	2.38088E-05	0.15917515
78.78417969	2.97101E-05	0.196426234
78.7902832	3.39618E-05	0.221811419
78.79638672	3.39672E-05	0.221807572
78.80249023	3.31898E-05	0.221414706
78.80859375	3.3492E-05	0.232084455
78.81469727	3.3025E-05	0.234066558
78.82080078	3.55196E-05	0.251658607
78.8269043	4.22781E-05	0.301616945
78.83300781	4.75711E-05	0.345993275
78.83911133	4.89496E-05	0.361703177
78.84521484	4.95655E-05	0.374025657
78.85131836	4.98294E-05	0.38812602
78.85742188	5.22095E-05	0.413300064
78.86352539	5.85042E-05	0.465302827
78.86962891	6.42967E-05	0.517086483
78.87573242	6.63487E-05	0.536401133
78.88183594	6.59615E-05	0.539750948
78.88793945	6.78775E-05	0.571431704
78.89404297	7.27253E-05	0.624211989
78.90014648	7.65244E-05	0.6641772
78.90625	7.65539E-05	0.665400075
78.91235352	7.21839E-05	0.625128435
78.91845703	6.45099E-05	0.56903273
78.92456055	5.59355E-05	0.501548123
78.93066406	5.11676E-05	0.458666996
78.93676758	5.38127E-05	0.485850295
78.94287109	5.74453E-05	0.514452809
78.94897461	5.64752E-05	0.493182261
78.95507813	5.47123E-05	0.473080675
78.96118164	5.48615E-05	0.471396439
78.96728516	5.6024E-05	0.476354713
78.97338867	5.74174E-05	0.486798075
78.97949219	5.73984E-05	0.480861512
78.9855957	5.53105E-05	0.451543459
78.99169922	4.99032E-05	0.400219003
78.99780273	3.95925E-05	0.313482189
79.00390625	2.6461E-05	0.207573351
79.01000977	1.48576E-05	0.117532835
79.01611328	8.49077E-06	0.067392702
79.0222168	5.75256E-06	0.044744519
79.02832031	3.1048E-06	0.023576765
79.03442383	3.19834E-06	0.023653496
79.04052734	4.75087E-06	0.034603627
79.04663086	8.12692E-06	0.05955563
79.05273438	1.27903E-05	0.093132969
79.05883789	1.46942E-05	0.104651993
79.06494141	9.21211E-06	0.06424568
79.07104492	6.91473E-06	0.046839863
79.07714844	2.24395E-05	0.149725954
79.08325195	3.43861E-05	0.231684376
79.08935547	3.78955E-05	0.256793569
79.09545898	3.46251E-05	0.236161488
79.1015625	2.81133E-05	0.193974956
79.10766602	2.37216E-05	0.1623805
79.11376953	2.72844E-05	0.184990304
79.11987305	3.7915E-05	0.259457248
79.12597656	4.50448E-05	0.312843867
79.13208008	3.85767E-05	0.276018336
79.13818359	2.55938E-05	0.189713741
79.14428711	2.05506E-05	0.151950391
79.15039063	1.90572E-05	0.139629732
79.15649414	1.75287E-05	0.131106553
79.16259766	2.02257E-05	0.154072931
79.16870117	2.89839E-05	0.225518779
79.17480469	4.20829E-05	0.337647966
79.1809082	5.07023E-05	0.408764583
79.18701172	4.85479E-05	0.395049874
79.19311523	3.83071E-05	0.319787332
79.19921875	2.7741E-05	0.232722581
79.20532227	2.42253E-05	0.207067457
79.21142578	2.79722E-05	0.248839655
79.2175293	3.37525E-05	0.3038897
79.22363281	3.93325E-05	0.354345494
79.22973633	4.40218E-05	0.399981098
79.23583984	4.27292E-05	0.390539984
79.24194336	3.53454E-05	0.327227911
79.24804688	2.90619E-05	0.275226763
79.25415039	2.80506E-05	0.271898442
79.26025391	3.16229E-05	0.309990721
79.26635742	3.60167E-05	0.350135807
79.27246094	3.56192E-05	0.342133053
79.27856445	2.98948E-05	0.287881617
79.28466797	2.38641E-05	0.233399234
79.29077148	1.55777E-05	0.154236392
79.296875	4.75209E-06	0.047220222
79.30297852	4.82744E-06	0.047692408
79.30908203	4.90552E-06	0.047273131
79.31518555	4.79052E-06	0.044829973
79.32128906	4.63325E-06	0.042636263
79.32739258	4.7833E-06	0.043416085
79.33349609	1.337E-05	0.119782754
79.33959961	2.06512E-05	0.182254896
79.34570313	2.00728E-05	0.171337298

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
65	-0.038354459	0.000186922	0.037897887	8.527024534	2.404357718	2.181095333
65.005	-0.039105539	0.000190913	0.038702144	8.707982318	2.40474422	2.181095333
65.01	-0.035078028	0.000171118	0.034708332	7.809374743	2.40505521	2.181095333
65.015	-0.032356199	0.000157707	0.032006278	7.201412624	2.405319811	2.181095333
65.02	-0.02951535	0.000143723	0.029191154	6.568009647	2.405539988	2.181095333
65.025	-0.026310893	0.000127904	0.026009305	5.852093527	2.405714951	2.181095333
65.03	-0.022558463	0.000109331	0.022276975	5.012319459	2.405843567	2.181095333
65.035	-0.017537938	8.43292E-05	0.017258629	3.883191484	2.405921305	2.181095333
65.04	-0.013981079	6.65188E-05	0.013687591	3.079708039	2.405970708	2.181095333
65.045	-0.012077184	5.69545E-05	0.011771232	2.64852716	2.406007573	2.181095333
65.05	-0.010746021	5.02689E-05	0.010432192	2.347243191	2.406036759	2.181095333
65.055	-0.009724008	4.51377E-05	0.009404789	2.116077557	2.406060657	2.181095333
65.06	-0.00937435	4.33513E-05	0.009047191	2.035618037	2.406082867	2.181095333
65.065	-0.00983903	4.5707E-05	0.009522928	2.142658738	2.406107334	2.181095333
65.07	-0.006662317	2.99371E-05	0.006362697	1.431606745	2.406118553	2.181095333
65.075	-0.00211653	7.08647E-06	0.001793787	0.403602043	2.406119685	2.181095333
65.08	-0.003913853	1.59059E-05	0.003574378	0.804235096	2.406123556	2.181095333
65.085	-0.006385436	2.8309E-05	0.006076542	1.36722196	2.406133862	2.181095333
65.09	-0.006531737	2.90433E-05	0.006224604	1.400535809	2.406144645	2.181095333
65.095	-0.009868552	4.57577E-05	0.009593157	2.158460351	2.406169259	2.181095333
65.1	-0.01033637	4.82902E-05	0.01010161	2.272862224	2.406196262	2.181095333
65.105	-0.008248706	3.78868E-05	0.008001843	1.800414582	2.406213458	2.181095333
65.11	-0.010919907	5.12971E-05	0.010708773	2.409473937	2.406243596	2.181095333
65.115	-0.00949175	4.43776E-05	0.009310688	2.094904751	2.406266367	2.181095333
65.12	-0.00522016	2.31457E-05	0.005028733	1.131464817	2.406273254	2.181095333
65.125	-0.009752182	4.55114E-05	0.009541987	2.146947113	2.406297291	2.181095333
65.13	-0.013054653	6.20835E-05	0.012880121	2.898027232	2.406340364	2.181095333
65.135	-0.012485651	5.9264E-05	0.012310782	2.769926009	2.406379764	2.181095333
65.14	-0.020462711	9.88989E-05	0.0202814	4.563314906	2.406485592	2.181095333
65.145	-0.027854274	0.000136106	0.027746773	6.243023845	2.406681684	2.181095333
65.15	-0.025297091	0.00012367	0.025236522	5.678217512	2.406843424	2.181095333
65.155	-0.025396938	0.000124177	0.025339823	5.701460266	2.407006443	2.181095333
65.16	-0.032239045	0.000158377	0.032208697	7.246956875	2.407269131	2.181095333
65.165	-0.03615428	0.000178282	0.036192425	8.143295615	2.407599497	2.181095333
65.17	-0.036638036	0.000180984	0.036733055	8.264937483	2.407938763	2.181095333
65.175	-0.03913746	0.000193728	0.039281165	8.83826219	2.408325897	2.181095333
65.18	-0.040995914	0.00020341	0.041206389	9.271437627	2.40875067	2.181095333
65.185	-0.038179574	0.000189757	0.038450475	8.651356902	2.409119086	2.181095333
65.19	-0.034332589	0.000171009	0.034670339	7.800826254	2.409416999	2.181095333
65.195	-0.02976417	0.000148708	0.030179495	6.79038641	2.409640904	2.181095333
65.2	-0.019805602	9.94854E-05	0.020286931	4.564559494	2.409740044	2.181095333
65.205	-0.009459182	4.79517E-05	0.009956984	2.240321432	2.409762659	2.181095333
65.21	-0.003252349	1.69807E-05	0.003761376	0.846309527	2.409765332	2.181095333
65.215	0.005086734	-2.46793E-05	-0.004558254	-1.025607228	2.409771872	2.181095333
65.22	0.013248505	-6.57398E-05	-0.012742574	-2.867079163	2.409816234	2.181095333
65.225	0.013973097	-6.94551E-05	-0.013476949	-3.032313568	2.409865581	2.181095333
65.23	0.016859553	-8.36804E-05	-0.016313826	-3.670610904	2.409937421	2.181095333
65.235	0.030304183	-0.000151195	-0.029727927	-6.688783606	2.410169524	2.181095333
65.24	0.042300397	-0.000212025	-0.041780669	-9.400650507	2.41062176	2.181095333
65.245	0.044744451	-0.000224674	-0.044283084	-9.963693962	2.411127764	2.181095333
65.25	0.047130169	-0.000236769	-0.046674553	-10.50177431	2.411689166	2.181095333
65.255	0.054510272	-0.000274196	-0.054067402	-12.16516543	2.412440153	2.181095333
65.26	0.061670179	-0.000310719	-0.061268586	-13.78543187	2.413401381	2.181095333
65.265	0.06799654	-0.000343227	-0.067643884	-15.21987383	2.414569937	2.181095333
65.27	0.073943424	-0.000373992	-0.073658606	-16.57318641	2.415951832	2.181095333
65.275	0.076166816	-0.000385761	-0.075957707	-17.090484	2.417418081	2.181095333
65.28	0.077157347	-0.000391109	-0.077001929	-17.32543391	2.418922713	2.181095333
65.285	0.080523309	-0.000408603	-0.080416801	-18.09378013	2.420561488	2.181095333
65.29	0.083160939	-0.000422443	-0.083116689	-18.701255	2.42230938	2.181095333
65.295	0.085022824	-0.000432289	-0.085036533	-19.13321995	2.424136415	2.181095333
65.3	0.087734355	-0.000446526	-0.087811526	-19.75759334	2.426081844	2.181095333
65.305	0.088129373	-0.000448957	-0.088279198	-19.86281945	2.42804483	2.181095333
65.31	0.087850355	-0.000447843	-0.088054295	-19.81221629	2.429995407	2.181095333
65.315	0.089760258	-0.000457962	-0.090039304	-20.25884349	2.432031718	2.181095333
65.32	0.089243697	-0.000455758	-0.089581834	-20.15591272	2.434044659	2.181095333
65.325	0.086925817	-0.000444221	-0.087253657	-19.63207282	2.435954395	2.181095333
65.33	0.087815075	-0.000449086	-0.088235918	-19.85308151	2.437903405	2.181095333
65.335	0.087458482	-0.000447747	-0.08796551	-19.79223965	2.439836619	2.181095333
65.34	0.082486348	-0.000423524	-0.083081236	-18.69327801	2.441556269	2.181095333
65.345	0.077794806	-0.000400588	-0.078463644	-17.65431995	2.443085866	2.181095333
65.35	0.070585014	-0.00036518	-0.07134648	-16.05295807	2.444345084	2.181095333
65.355	0.056848082	-0.000296944	-0.057667784	-12.97525131	2.445161869	2.181095333
65.36	0.045778526	-0.000241503	-0.046587426	-10.4821709	2.445691532	2.181095333
65.365	0.041778866	-0.000221424	-0.042581476	-9.580832001	2.446132685	2.181095333
65.37	0.036663686	-0.000195846	-0.037483684	-8.433828928	2.446472426	2.181095333
65.375	0.030961648	-0.000167137	-0.031768892	-7.148000809	2.446714709	2.181095333
65.38	0.031864963	-0.000171613	-0.032678292	-7.352615703	2.446971337	2.181095333
65.385	0.03286148	-0.000176872	-0.033739283	-7.591338733	2.447244266	2.181095333
65.39	0.024780755	-0.000136675	-0.025713205	-5.785471018	2.447399471	2.181095333
65.395	0.015282804	-8.87373E-05	-0.016199376	-3.644859503	2.447458502	2.181095333
65.4	0.0139989	-8.20696E-05	-0.014885009	-3.349126974	2.447508031	2.181095333
65.405	0.016537446	-9.49144E-05	-0.017477501	-3.932437671	2.447577153	2.181095333
65.41	0.015681646	-9.08259E-05	-0.016651721	-3.746637271	2.447639305	2.181095333
65.415	0.01019683	-6.35519E-05	-0.011208887	-2.521999544	2.447665584	2.181095333
65.42	0.002052406	-2.24602E-05	-0.003077914	-0.692530559	2.447666649	2.181095333
65.425	-0.003917229	7.83017E-06	0.002906853	0.65404202	2.447670527	2.181095333
65.43	-0.007032128	2.35996E-05	0.006019629	1.354416477	2.447683025	2.181095333
65.435	-0.014652782	6.21732E-05	0.01362534	3.06570159	2.44773729	2.181095333
65.44	-0.025528237	0.000117624	0.024537971	5.521043444	2.447901999	2.181095333
65.445	-0.029976768	0.000140653	0.029063123	6.539202694	2.448129114	2.181095333
65.45	-0.029747441	0.000139729	0.028876449	6.497200955	2.448352767	2.181095333
65.455	-0.03189641	0.000150812	0.031057934	6.988035165	2.448609901	2.181095333
65.46	-0.034545445	0.000164545	0.033753225	7.594475514	2.448911519	2.181095333
65.465	-0.034056031	0.000162348	0.033303479	7.493282853	2.449204652	2.181095333
65.47	-0.031480541	0.000149432	0.030697001	6.906825118	2.449455124	2.181095333
65.475	-0.030676983	0.000145425	0.029888976	6.725019535	2.449692973	2.181095333
65.48	-0.032208217	0.000153406	0.031500244	7.087554886	2.449955159	2.181095333
65.485	-0.02881543	0.000136786	0.028147005	6.333076147	2.450165018	2.181095333
65.49	-0.02216669	0.000103795	0.021504249	4.838456096	2.450289205	2.181095333
65.495	-0.022457975	0.000105173	0.021785353	4.901704349	2.450416678	2.181095333
65.5	-0.022403343	0.000105087	0.021767547	4.89769805	2.450543531	2.181095333
65.505	-0.015556088	7.1093E-05	0.014931542	3.359596881	2.450604692	2.181095333
65.51	-0.013936486	6.28264E-05	0.013274317	2.986721338	2.450653781	2.181095333
65.515	-0.016704732	7.66218E-05	0.016058589	3.613182461	2.450724308	2.181095333

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
79.35180664	1.48437E-05	0.121695841
79.35791016	1.2367E-05	0.09826712
79.36401367	1.40816E-05	0.109158615
79.37011719	1.99033E-05	0.151852507
79.3762207	2.71702E-05	0.205507947
79.38232422	2.87191E-05	0.213872299
79.38842773	2.33078E-05	0.169472948
79.39453125	1.82688E-05	0.129804644
79.40063477	1.83021E-05	0.128726838
79.40673828	2.15732E-05	0.151996927
79.4128418	2.63756E-05	0.185086348
79.41894531	3.10567E-05	0.216525445
79.42504883	3.26442E-05	0.227038123
79.43115234	2.9766E-05	0.205195866
79.43725586	2.4413E-05	0.167897938
79.44335938	1.85111E-05	0.128169489
79.44946289	1.55878E-05	0.108008567
79.45556641	1.55638E-05	0.108926433
79.46166992	1.33107E-05	0.094345975
79.46777344	1.2626E-05	0.08891326
79.47387695	1.25977E-05	0.088878795
79.47998047	9.81669E-06	0.070333806
79.48608398	6.12419E-06	0.044389993
79.4921875	7.50545E-07	0.005592236
79.49829102	5.74802E-06	0.04411042
79.50439453	1.16044E-05	0.088660682
79.51049805	1.56791E-05	0.118962393
79.51660156	1.43394E-05	0.109931333
79.52270508	1.03084E-05	0.07980422
79.52880859	9.34196E-06	0.073903154
79.53491211	7.15101E-06	0.058437141
79.54101563	4.93068E-06	0.040912536
79.54711914	5.17237E-06	0.043562383
79.55322266	7.22902E-06	0.062128705
79.55932617	1.22786E-05	0.106010937
79.56542969	1.66611E-05	0.1474521
79.5715332	1.61451E-05	0.150695863
79.57763672	1.35551E-05	0.1300051
79.58374023	1.24253E-05	0.121194967
79.58984375	1.15722E-05	0.115678271
79.59594727	1.18868E-05	0.118130862
79.60205078	1.23718E-05	0.122579971
79.6081543	1.07554E-05	0.109744349
79.61425781	7.40558E-06	0.077398045
79.62036133	7.02114E-06	0.073693247
79.62646484	8.07106E-06	0.083364034
79.63256836	5.86351E-06	0.058806769
79.63867188	1.76264E-06	0.017486346
79.64477539	2.96622E-06	0.029530875
79.65087891	6.82274E-06	0.068037583
79.65698242	1.35123E-05	0.135282597
79.66308594	1.84004E-05	0.182006394
79.66918945	2.19911E-05	0.209267664
79.67529297	2.40216E-05	0.221526579
79.68139648	2.31005E-05	0.209100661
79.6875	2.21849E-05	0.19664855
79.69360352	2.5189E-05	0.221616952
79.69970703	2.83869E-05	0.249292027
79.70581055	2.72079E-05	0.232542942
79.71191406	2.53362E-05	0.208523289
79.71801758	2.60565E-05	0.206791741
79.72412109	2.62109E-05	0.201255028
79.73022461	2.51815E-05	0.191914395
79.73632813	2.42346E-05	0.185968303
79.74243164	2.51989E-05	0.191573674
79.74853516	3.01465E-05	0.225062463
79.75463867	3.41447E-05	0.249660514
79.76074219	3.03285E-05	0.217735287
79.7668457	1.98878E-05	0.142799275
79.77294922	1.07721E-05	0.077949864
79.77905273	8.41746E-06	0.060892106
79.78515625	1.0641E-05	0.076780562
79.79125977	1.48668E-05	0.106599395
79.79736328	1.69544E-05	0.120560854
79.8034668	1.50391E-05	0.107002051
79.80957031	1.21032E-05	0.086575357
79.81567383	1.09356E-05	0.078942377
79.82177734	7.92704E-06	0.058226435
79.82788086	4.14657E-06	0.030618858
79.83398438	3.26638E-06	0.023935158
79.84008789	6.26431E-06	0.046320163
79.84619141	1.02337E-05	0.077363242
79.85229492	1.16314E-05	0.090438251
79.85839844	1.98581E-05	0.160504904
79.86450195	2.50159E-05	0.206692626
79.87060547	2.20582E-05	0.182351521
79.87670898	2.03838E-05	0.16894069
79.8828125	2.34215E-05	0.196017812
79.88891602	2.64848E-05	0.229123769
79.89501953	2.78513E-05	0.251194853
79.90112305	2.62608E-05	0.239621112
79.90722656	2.40596E-05	0.220921581
79.91333008	2.73855E-05	0.254097347
79.91943359	3.51089E-05	0.323634559
79.92553711	4.05819E-05	0.377158179
79.93164063	3.95379E-05	0.38013887
79.93774414	3.31412E-05	0.326782425
79.94384766	2.67226E-05	0.267678811
79.94995117	2.03446E-05	0.205503249
79.95605469	1.55255E-05	0.154018374
79.9621582	1.58942E-05	0.154290682
79.96826172	1.85335E-05	0.181060914
79.97436523	2.41142E-05	0.241103754
79.98046875	2.68078E-05	0.27222922

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
65.52	-0.013991406	6.31648E-05	0.01334217	3.001988361	2.450773784	2.181095333
65.525	-0.012827919	5.72165E-05	0.012147609	2.733212049	2.450815374	2.181095333
65.53	-0.016118572	7.35553E-05	0.015445077	3.475142344	2.450881039	2.181095333
65.535	-0.016005024	7.30283E-05	0.015338002	3.451050369	2.450945781	2.181095333
65.54	-0.016006132	7.29157E-05	0.015315417	3.445968826	2.451010532	2.181095333
65.545	-0.020820044	9.67107E-05	0.020112059	4.525213237	2.451120089	2.181095333
65.55	-0.025025064	0.000117661	0.024329136	5.474055574	2.451278369	2.181095333
65.555	-0.027601169	0.000130504	0.026911672	6.055126297	2.451470914	2.181095333
65.56	-0.031949293	0.000152185	0.031267545	7.035197645	2.451728901	2.181095333
65.565	-0.035783832	0.000171469	0.035111704	7.900133291	2.452052532	2.181095333
65.57	-0.036333727	0.000174406	0.03568672	8.029512083	2.452386185	2.181095333
65.575	-0.036564372	0.000175667	0.035935207	8.085421576	2.452724088	2.181095333
65.58	-0.037929987	0.00018262	0.037298652	8.392196591	2.453087703	2.181095333
65.585	-0.036782384	0.000177099	0.036183877	8.141372437	2.453429647	2.181095333
65.59	-0.033789479	0.000162251	0.033188038	7.467308591	2.453718209	2.181095333
65.595	-0.034104442	0.000163775	0.033496399	7.536689804	2.454012176	2.181095333
65.6	-0.037449217	0.000180477	0.036866581	8.294980661	2.454366631	2.181095333
65.605	-0.040694684	0.000196782	0.040074736	9.016815626	2.454785185	2.181095333
65.61	-0.043398604	0.000210451	0.04275274	9.619366404	2.455261207	2.181095333
65.615	-0.043407279	0.00021077	0.042798912	9.629755305	2.45573742	2.181095333
65.62	-0.039506996	0.000191579	0.038926691	8.758505544	2.456131899	2.181095333
65.625	-0.038132472	0.000184775	0.037555194	8.449918687	2.456499406	2.181095333
65.63	-0.041011058	0.000199179	0.040462419	9.104044216	2.456924493	2.181095333
65.635	-0.039107896	0.000190031	0.038615506	8.688488819	2.457311042	2.181095333
65.64	-0.033855949	0.000164037	0.033377645	7.50997017	2.457600741	2.181095333
65.645	-0.034624142	0.000167829	0.034144776	7.682574643	2.457903735	2.181095333
65.65	-0.035964832	0.000174683	0.035528021	7.993804669	2.458230648	2.181095333
65.655	-0.032444462	0.000157348	0.032031357	7.207055339	2.458496694	2.181095333
65.66	-0.031722749	0.000153764	0.031311654	7.045122092	2.458751035	2.181095333
65.665	-0.033132618	0.000160897	0.032751678	7.369127584	2.459028487	2.181095333
65.67	-0.031362851	0.000152237	0.031003318	6.975746652	2.459277091	2.181095333
65.675	-0.032122923	0.000156038	0.031771859	7.148668187	2.45953789	2.181095333
65.68	-0.035211412	0.000171564	0.034904283	7.853463745	2.459851249	2.181095333
65.685	-0.034011342	0.000165855	0.033751593	7.594108447	2.460143613	2.181095333
65.69	-0.03255195	0.000158743	0.032316185	7.271141687	2.460411425	2.181095333
65.695	-0.032971476	0.000161022	0.032776446	7.374700241	2.460686184	2.181095333
65.7	-0.031385033	0.000153388	0.031235998	7.028099578	2.460935139	2.181095333
65.705	-0.02963087	0.000144927	0.029532764	6.644871947	2.461157043	2.181095333
65.71	-0.024836116	0.000121447	0.024814324	5.583222931	2.461312942	2.181095333
65.715	-0.013145318	6.33786E-05	0.013169329	2.963098948	2.461356616	2.181095333
65.72	-0.002767595	1.14252E-05	0.002778786	0.62522696	2.461358552	2.181095333
65.725	0.003910226	-2.21366E-05	-0.003920001	-0.882000291	2.461362416	2.181095333
65.73	0.009655729	-5.11606E-05	-0.009704769	-2.183572958	2.46138598	2.181095333
65.735	0.008566051	-4.59223E-05	-0.008639894	-1.943976164	2.461404525	2.181095333
65.74	0.005532731	-3.07871E-05	-0.005586669	-1.257000416	2.461412262	2.181095333
65.745	0.011022626	-5.78998E-05	-0.01104688	-2.485548086	2.461442969	2.181095333
65.75	0.01629996	-8.45406E-05	-0.016348424	-3.678395428	2.46151012	2.181095333
65.755	0.016075415	-8.34995E-05	-0.016135579	-3.630505224	2.461575433	2.181095333
65.76	0.01689329	-8.7575E-05	-0.016951877	-3.814172333	2.461647561	2.181095333
65.765	0.017940257	-9.2808E-05	-0.01799238	-4.048285411	2.461728907	2.181095333
65.77	0.019915106	-0.000102631	-0.019944912	-4.487605273	2.461829147	2.181095333
65.775	0.024591217	-0.000126163	-0.024618989	-5.539272609	2.461981986	2.181095333
65.78	0.025210674	-0.000129343	-0.025243149	-5.679708547	2.462142623	2.181095333
65.785	0.025744756	-0.000131868	-0.025751433	-5.794072446	2.462310138	2.181095333
65.79	0.033648928	-0.000171629	-0.033636102	-7.568122916	2.462596304	2.181095333
65.795	0.038796967	-0.00019781	-0.038820705	-8.734658624	2.462976731	2.181095333
65.8	0.038423152	-0.000195982	-0.038451588	-8.65160734	2.463349863	2.181095333
65.805	0.0426355	-0.000217231	-0.042662935	-9.59916036	2.463809292	2.181095333
65.81	0.046907358	-0.000239029	-0.046971713	-10.56863542	2.464365398	2.181095333
65.815	0.04503161	-0.000229703	-0.04508891	-10.14500472	2.464877918	2.181095333
65.82	0.044200348	-0.000225481	-0.044237143	-9.953357129	2.465371691	2.181095333
65.825	0.045650461	-0.000232848	-0.045724389	-10.28798752	2.465898395	2.181095333
65.83	0.045335717	-0.000231307	-0.04541325	-10.21798122	2.466417861	2.181095333
65.835	0.045586184	-0.000232576	-0.04566959	-10.27565773	2.466943082	2.181095333
65.84	0.046306531	-0.000236273	-0.046415565	-10.44350221	2.467485033	2.181095333
65.845	0.045230985	-0.000230885	-0.045327692	-10.19873075	2.468002102	2.181095333
65.85	0.04406425	-0.000225	-0.044139934	-9.931485117	2.468492839	2.181095333
65.855	0.041959411	-0.000214381	-0.04199827	-9.449610781	2.468937813	2.181095333
65.86	0.038631663	-0.000197484	-0.038593457	-8.683527716	2.469315005	2.181095333
65.865	0.037994651	-0.000194137	-0.037919742	-8.531941913	2.469679861	2.181095333
65.87	0.037799204	-0.000193115	-0.037713689	-8.485579927	2.470040972	2.181095333
65.875	0.035205483	-0.000179921	-0.035058136	-7.888080687	2.470354226	2.181095333
65.88	0.034734273	-0.000177378	-0.034547346	-7.773152778	2.47065915	2.181095333
65.885	0.035280884	-0.000180067	-0.035090476	-7.895357035	2.470973748	2.181095333
65.89	0.033471551	-0.000170797	-0.033223022	-7.475180059	2.471256905	2.181095333
65.895	0.034527307	-0.000175914	-0.034256697	-7.707756935	2.471558206	2.181095333
65.9	0.038140756	-0.000194085	-0.037922561	-8.532576115	2.471925873	2.181095333
65.905	0.039833509	-0.000202569	-0.039632507	-8.917314139	2.4723269	2.181095333
65.91	0.043879114	-0.000222663	-0.043679164	-9.82781198	2.472813522	2.181095333
65.915	0.049485253	-0.000250769	-0.049290748	-11.09041821	2.473432432	2.181095333
65.92	0.051641025	-0.000261753	-0.051459298	-11.57834197	2.47410644	2.181095333
65.925	0.054241221	-0.000274927	-0.054059074	-12.16329173	2.474850033	2.181095333
65.93	0.056837744	-0.000288167	-0.056670548	-12.7508734	2.47566652	2.181095333
65.935	0.056460093	-0.000286321	-0.056297682	-12.66697835	2.476472194	2.181095333
65.94	0.058910181	-0.000298656	-0.058738402	-13.21614043	2.477349309	2.181095333
65.945	0.064056309	-0.00032484	-0.063896403	-14.37669058	2.478386359	2.181095333
65.95	0.067476659	-0.000342332	-0.067339076	-15.15129214	2.479537115	2.181095333
65.955	0.072370979	-0.000367335	-0.072256048	-16.25761073	2.480860861	2.181095333
65.96	0.077213411	-0.000392231	-0.077147191	-17.358118	2.482367681	2.181095333
65.965	0.077774895	-0.000395336	-0.077754804	-17.4948308	2.483896496	2.181095333
65.97	0.079555974	-0.000404518	-0.079559236	-17.90082817	2.485496133	2.181095333
65.975	0.084804941	-0.000431461	-0.084844493	-19.09001086	2.487313816	2.181095333
65.98	0.08745608	-0.000445297	-0.087556375	-19.70018446	2.489246923	2.181095333
65.985	0.087196073	-0.000444221	-0.087339089	-19.65129512	2.491168553	2.181095333
65.99	0.088741406	-0.000452264	-0.088921366	-20.00730738	2.493158899	2.181095333
65.995	0.091601496	-0.000467092	-0.091817196	-20.65886921	2.495279608	2.181095333
66	0.092166256	-0.000470252	-0.092431099	-20.79699717	2.497426548	2.181095333
66.005	0.092092374	-0.000470064	-0.09239312	-20.78845191	2.499570047	2.181095333
66.01	0.094636811	-0.000483226	-0.094957698	-21.36548206	2.501833628	2.181095333
66.015	0.096648201	-0.000493773	-0.097009459	-21.82712827	2.504194451	2.181095333
66.02	0.09601905	-0.000490866	-0.096422507	-21.69506407	2.506524638	2.181095333
66.025	0.095662776	-0.000489313	-0.096108976	-21.62451956	2.508837565	2.181095333
66.03	0.094154713	-0.000481876	-0.094607801	-21.28675522	2.511078143	2.181095333
66.035	0.091179372	-0.000466837	-0.091574934	-20.60436006	2.513179351	2.181095333

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
79.98657227	2.81757E-05	0.285026042
79.99267578	3.04306E-05	0.300135024
79.9987793	3.05215E-05	0.292476745
80.00488281	2.95727E-05	0.27831013
80.01098633	2.92543E-05	0.27330205
80.01708984	2.82836E-05	0.26489549
80.02319336	2.56768E-05	0.240079514
80.02929688	2.27982E-05	0.207871603
80.03540039	2.03011E-05	0.179025963
80.04150391	1.73062E-05	0.148520292
80.04760742	1.43215E-05	0.119069695
80.05371094	1.16636E-05	0.094874263
80.05981445	1.03327E-05	0.084000131
80.06591797	1.22815E-05	0.098779447
80.07202148	1.56357E-05	0.121866089
80.078125	1.82469E-05	0.136769518
80.08422852	1.97455E-05	0.142842596
80.09033203	1.54326E-05	0.110643986
80.09643555	3.74752E-06	0.027067254
80.10253906	7.44546E-06	0.053437117
80.10864258	1.01521E-05	0.072010326
80.11474609	5.53504E-06	0.038647992
80.12084961	4.88475E-07	0.003352307
80.12695313	3.46396E-06	0.023889924
80.13305664	1.15439E-05	0.080847159
80.13916016	1.96981E-05	0.139535011
80.14526367	2.0777E-05	0.149979435
80.15136719	1.53945E-05	0.112368459
80.1574707	1.03338E-05	0.075077836
80.16357422	9.10758E-06	0.066523087
80.16967773	9.37828E-06	0.069986148
80.17578125	6.04113E-06	0.046325632
80.18188477	3.52832E-06	0.027765325
80.18798828	4.75711E-06	0.037858613
80.1940918	5.59638E-06	0.04444158
80.20019531	5.78139E-06	0.046189973
80.20629883	1.12664E-05	0.091524493
80.21240234	1.64112E-05	0.136684737
80.21850586	1.9389E-05	0.167965105
80.22460938	1.91849E-05	0.170828917
80.23071289	1.35775E-05	0.121106045
80.23681641	9.48157E-06	0.085561568
80.24291992	8.33527E-06	0.076980678
80.24902344	7.80622E-06	0.073817245
80.25512695	1.23049E-05	0.11997786
80.26123047	1.21098E-05	0.119993478
80.26733398	8.64279E-06	0.086444778
80.2734375	9.96469E-06	0.101195584
80.27954102	1.07224E-05	0.107879068
80.28564453	1.3933E-05	0.139572692
80.29174805	1.21011E-05	0.124405041
80.29785156	2.81773E-06	0.029551286
80.30395508	5.12576E-06	0.05464599
80.31005859	4.17329E-06	0.045100586
80.31616211	6.44805E-06	0.068373331
80.32226563	1.40036E-05	0.145006334
80.32836914	1.575E-05	0.163167524
80.33447266	1.10098E-05	0.115638181
80.34057617	9.12745E-06	0.097180856
80.34667969	1.23128E-05	0.130596795
80.3527832	1.60811E-05	0.164832576
80.35888672	2.3665E-05	0.232351393
80.36499023	3.1203E-05	0.297136633
80.37109375	3.5421E-05	0.328038398
80.37719727	3.53184E-05	0.319062127
80.38330078	3.17708E-05	0.283040282
80.3894043	2.68145E-05	0.233630303
80.39550781	2.47916E-05	0.20797667
80.40161133	2.77708E-05	0.223183101
80.40771484	3.12628E-05	0.241220235
80.41381836	2.9473E-05	0.223399677
80.41992188	2.34795E-05	0.178629238
80.42602539	1.95512E-05	0.148418493
80.43212891	1.81899E-05	0.136646255
80.43823242	1.64481E-05	0.121455677
80.44433594	1.51193E-05	0.10907808
80.45043945	1.53614E-05	0.10986774
80.45654297	1.81398E-05	0.130485599
80.46264648	2.15353E-05	0.155286299
80.46875	2.08467E-05	0.149962699
80.47485352	1.75137E-05	0.125184923
80.48095703	1.54752E-05	0.109806735
80.48706055	1.70783E-05	0.121361888
80.49316406	2.059E-05	0.14764403
80.49926758	2.29196E-05	0.166620061
80.50537109	2.16343E-05	0.160556485
80.51147461	1.61739E-05	0.121651806
80.51757813	1.0075E-05	0.075530768
80.52368164	1.30189E-05	0.097580565
80.52978516	1.74499E-05	0.132537844
80.53588867	1.77835E-05	0.138659714
80.54199219	1.66194E-05	0.134612824
80.5480957	1.58924E-05	0.131933667
80.55419922	1.53435E-05	0.127631775
80.56030273	1.59187E-05	0.132708178
80.56640625	1.7518E-05	0.146911428
80.57250977	1.98046E-05	0.170221358
80.57861328	2.53274E-05	0.229540641
80.5847168	2.99971E-05	0.28323249
80.59082031	2.67036E-05	0.255079304
80.59692383	1.8562E-05	0.179771932
80.60302734	1.33623E-05	0.13126397
80.60913086	1.45716E-05	0.144120824
80.61523438	1.96445E-05	0.199035805

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
66.04	0.093266162	-0.000477544	-0.093736333	-21.09067495	2.515377839	2.181095333
66.045	0.098912114	-0.00050621	-0.099428014	-22.37130305	2.517850559	2.181095333
66.05	0.101735753	-0.000521039	-0.102308965	-23.01951714	2.520466471	2.181095333
66.055	0.104291205	-0.00053456	-0.104929446	-23.60912528	2.523215449	2.181095333
66.06	0.105126429	-0.000539439	-0.105863957	-23.81939031	2.526008634	2.181095333
66.065	0.09776044	-0.000503503	-0.098616384	-22.18868629	2.528424107	2.181095333
66.07	0.086932866	-0.000450026	-0.087859857	-19.76846775	2.530334154	2.181095333
66.075	0.079337752	-0.000412342	-0.080298385	-18.06713667	2.531925028	2.181095333
66.08	0.075678331	-0.000394182	-0.076659479	-17.24838281	2.533372529	2.181095333
66.085	0.077656121	-0.000404303	-0.078702886	-17.70814939	2.534896678	2.181095333
66.09	0.080125632	-0.000417259	-0.081316155	-18.2961349	2.536519305	2.181095333
66.095	0.067652016	-0.000356181	-0.069055642	-15.53751948	2.53767605	2.181095333
66.1	0.033299976	-0.000184392	-0.034846503	-7.840463089	2.537956311	2.181095333
66.105	-0.007437136	2.21387E-05	0.005948701	1.338457741	2.537970291	2.181095333
66.11	-0.030347719	0.000140013	0.029080173	6.543039016	2.538203061	2.181095333
66.115	-0.029846171	0.000138996	0.028803023	6.480680191	2.538428202	2.181095333
66.12	-0.014939436	6.55843E-05	0.014024234	3.155452632	2.53848461	2.181095333
66.125	0.002917388	-2.36842E-05	-0.003868968	-0.870517769	2.538486761	2.181095333
66.13	-0.000812137	-6.14052E-06	-0.000306985	-0.069071623	2.538486928	2.181095333
66.135	-0.031351417	0.000146015	0.030231122	6.802002476	2.53873535	2.181095333
66.14	-0.041317243	0.000198233	0.040446847	9.100540601	2.539166808	2.181095333
66.145	-0.010910437	4.75724E-05	0.010163085	2.28669406	2.539196894	2.181095333
66.15	0.004453184	-3.03203E-05	-0.005403203	-1.215720706	2.539201906	2.181095333
66.155	-0.022164594	0.00010149	0.021109211	4.749572427	2.53932607	2.181095333
66.16	-0.038790331	0.000185604	0.037933637	8.535068431	2.539706367	2.181095333
66.165	-0.016958571	7.78579E-05	0.016247333	3.655649952	2.539779053	2.181095333
66.17	0.00206261	-1.77477E-05	-0.002892699	-0.650857354	2.539780129	2.181095333
66.175	-0.010934677	4.61469E-05	0.009983744	2.246342488	2.539810348	2.181095333
66.18	-0.024843607	0.000115954	0.023998878	5.399747595	2.539966341	2.181095333
66.185	-0.006665848	2.62522E-05	0.005935111	1.335399872	2.539977571	2.181095333
66.19	0.011576248	-6.57544E-05	-0.012465874	-2.804821607	2.540011441	2.181095333
66.195	-0.009801836	3.97053E-05	0.008761653	1.971371832	2.540035723	2.181095333
66.2	-0.025507654	0.000118957	0.024635724	5.543037824	2.540200167	2.181095333
66.205	0.001318191	-1.40675E-05	-0.002120084	-0.477018955	2.540200606	2.181095333
66.21	0.005444402	-3.61056E-05	-0.006491992	-1.460698237	2.540208098	2.181095333
66.215	-0.026724983	0.00012414	0.025671676	5.776127201	2.540388612	2.181095333
66.22	-0.019330314	8.86387E-05	0.01848333	4.158749333	2.540483051	2.181095333
66.225	0.002376322	-2.0182E-05	-0.003355221	-0.754924706	2.540484479	2.181095333
66.23	-0.022221295	0.000101399	0.021106375	4.74893436	2.540609279	2.181095333
66.235	-0.032061865	0.000151539	0.031123488	7.002784717	2.540869087	2.181095333
66.24	-0.005304502	1.84253E-05	0.004363439	0.981773804	2.540876199	2.181095333
66.245	-0.012661953	5.38138E-05	0.011516771	2.591273455	2.540916719	2.181095333
66.25	-0.035301867	0.000166981	0.034225569	7.700753046	2.541231691	2.181095333
66.255	-0.023816129	0.000110519	0.022844474	5.140006737	2.541375048	2.181095333
66.26	-0.015558857	6.89141E-05	0.014482039	3.258458789	2.541436231	2.181095333
66.265	-0.026872275	0.000124821	0.025751439	5.794073744	2.54161874	2.181095333
66.27	-0.028178318	0.000131532	0.027096396	6.096689166	2.541819421	2.181095333
66.275	-0.022951102	0.000105436	0.021833554	4.912549545	2.541952553	2.181095333
66.28	-0.026639628	0.000123336	0.025446229	5.725401421	2.542131916	2.181095333
66.285	-0.03737936	0.000176698	0.036163308	8.136744193	2.54248505	2.181095333
66.29	-0.043794335	0.000209105	0.042589219	9.582574387	2.542969793	2.181095333
66.295	-0.041518561	0.000197773	0.040301758	9.067895652	2.543405466	2.181095333
66.3	-0.042628902	0.000203156	0.041388835	9.312487905	2.543864753	2.181095333
66.305	-0.050151754	0.000241472	0.048905666	11.00377478	2.544500447	2.181095333
66.31	-0.054359696	0.000263199	0.053141268	11.9567853	2.545247291	2.181095333
66.315	-0.055838684	0.000270852	0.054632326	12.29227337	2.546035328	2.181095333
66.32	-0.05822925	0.000283163	0.057030109	12.83177459	2.546892283	2.181095333
66.325	-0.061522214	0.000300101	0.060327204	13.57362083	2.547848904	2.181095333
66.33	-0.066443094	0.000325504	0.065268135	14.68533032	2.548964677	2.181095333
66.335	-0.06879866	0.000337843	0.067666318	15.22492161	2.550160965	2.181095333
66.34	-0.067836531	0.000333031	0.066694703	15.0063082	2.551324028	2.181095333
66.345	-0.069278751	0.000340481	0.068178994	15.34027358	2.55253707	2.181095333
66.35	-0.072627328	0.000357792	0.071541495	16.09683638	2.553870211	2.181095333
66.355	-0.076226177	0.000376438	0.075160848	16.91119082	2.555338746	2.181095333
66.36	-0.079031849	0.000391097	0.078004701	17.55105779	2.556917375	2.181095333
66.365	-0.078117429	0.000386624	0.077101478	17.34783265	2.558459686	2.181095333
66.37	-0.077852044	0.000385354	0.076845108	17.2901492	2.559991535	2.181095333
66.375	-0.080129181	0.000397205	0.079189094	17.81754621	2.561614306	2.181095333
66.38	-0.080378908	0.000398663	0.079467458	17.88017797	2.563247208	2.181095333
66.385	-0.081704621	0.0004056	0.080816521	18.18371712	2.564934418	2.181095333
66.39	-0.083487183	0.000414999	0.08263817	18.59358821	2.566696052	2.181095333
66.395	-0.081598997	0.000405455	0.08071136	18.16005603	2.568378902	2.181095333
66.4	-0.083829617	0.000416633	0.082954807	18.66483157	2.570155016	2.181095333
66.405	-0.088583944	0.000441584	0.087755433	19.74497238	2.572138305	2.181095333
66.41	-0.086906749	0.000433202	0.086063166	19.36421227	2.574047204	2.181095333
66.415	-0.086361774	0.00043046	0.08551025	19.23980615	2.575932237	2.181095333
66.42	-0.090239515	0.000449885	0.089347601	20.10321012	2.577990351	2.181095333
66.425	-0.090187886	0.000449925	0.089328343	20.0988772	2.580046111	2.181095333
66.43	-0.090691153	0.000452573	0.089863193	20.21921834	2.582124878	2.181095333
66.435	-0.093403243	0.000466255	0.092486204	20.80939587	2.584329833	2.181095333
66.44	-0.093670398	0.000467824	0.092787081	20.87709317	2.58654742	2.181095333
66.445	-0.096737307	0.000483779	0.095844098	21.56492202	2.588912599	2.181095333
66.45	-0.099930777	0.000500862	0.099115647	22.30102058	2.591436512	2.181095333
66.455	-0.097610909	0.000489098	0.096740712	21.76666017	2.593844601	2.181095333
66.46	-0.098654048	0.000494699	0.097871989	22.02119743	2.596304435	2.181095333
66.465	-0.104027036	0.00052281	0.10331583	23.24606178	2.599039505	2.181095333
66.47	-0.103833323	0.000522326	0.103172698	23.21385705	2.601764397	2.181095333
66.475	-0.100912467	0.000507447	0.100170378	22.53833501	2.604338143	2.181095333
66.48	-0.099932903	0.000502686	0.099210449	22.32235106	2.606862164	2.181095333
66.485	-0.098135164	0.000493723	0.097403964	21.91589189	2.60929619	2.181095333
66.49	-0.09414735	0.000473899	0.093411798	21.01765451	2.611536417	2.181095333
66.495	-0.089203081	0.000449695	0.088543631	19.92231704	2.613547526	2.181095333
66.5	-0.083873033	0.000423588	0.083300013	18.742503	2.615325481	2.181095333
66.505	-0.074370916	0.000376703	0.073900544	16.62762248	2.6167234	2.181095333
66.51	-0.058208218	0.000296232	0.057817729	13.00898895	2.617579737	2.181095333
66.515	-0.036898394	0.000189271	0.036531725	8.219638046	2.617923842	2.181095333
66.52	-0.015709449	8.19286E-05	0.015268764	3.435471911	2.617986215	2.181095333
66.525	-0.008565204	4.49413E-05	0.00796421	1.791947267	2.618004757	2.181095333
66.53	-0.019504685	9.87252E-05	0.018806401	4.231440193	2.618100908	2.181095333
66.535	-0.029578403	0.00014909	0.028928582	6.508930853	2.618322026	2.181095333
66.54	-0.025039376	0.000127023	0.024475554	5.506999693	2.618480487	2.181095333
66.545	-0.011416649	5.94068E-05	0.010868665	2.445449519	2.61851343	2.181095333
66.55	-0.003107354	1.72208E-05	0.002496982	0.561820958	2.61851587	2.181095333
66.555	-0.004878034	2.60376E-05	0.00427706	0.962338534	2.618521884	2.181095333

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
80.62133789	2.29618E-05	0.240861541
80.62744141	2.07629E-05	0.22108469
80.63354492	1.52787E-05	0.164344251
80.63964844	1.261E-05	0.135120232
80.64575195	1.40126E-05	0.145072955
80.65185547	1.78683E-05	0.18186738
80.65795898	2.21812E-05	0.228971575
80.6640625	2.33295E-05	0.244366208
80.67016602	2.06707E-05	0.217720318
80.67626953	1.64214E-05	0.168185273
80.68237305	1.0739E-05	0.10510534
80.68847656	8.03846E-06	0.077223159
80.69458008	1.26299E-05	0.119699606
80.70068359	1.51738E-05	0.141398865
80.70678711	1.45907E-05	0.135984912
80.71289063	1.28328E-05	0.11778266
80.71899414	1.12424E-05	0.09921719
80.72509766	1.35682E-05	0.11650364
80.73120117	1.82703E-05	0.153435876
80.73730469	1.93897E-05	0.159281872
80.7434082	1.64482E-05	0.134564355
80.74951172	1.34345E-05	0.109585758
80.75561523	9.97203E-06	0.080013621
80.76171875	5.72847E-06	0.044955832
80.76782227	8.75666E-06	0.066458571
80.77392578	1.02673E-05	0.076260934
80.7800293	7.83598E-06	0.058735792
80.78613281	5.7691E-06	0.043586556
80.79223633	8.08367E-06	0.06075702
80.79833984	1.13135E-05	0.083901882
80.80444336	1.21776E-05	0.087957193
80.81054688	1.13123E-05	0.080891917
80.81665039	1.03679E-05	0.075156239
80.82275391	9.26142E-06	0.067823813
80.82885742	8.33731E-06	0.06153665
80.83496094	9.21795E-06	0.068084633
80.84106445	1.14387E-05	0.083542568
80.84716797	1.35501E-05	0.099078133
80.85327148	1.3862E-05	0.102624168
80.859375	1.26407E-05	0.095086737
80.86547852	9.54227E-06	0.074075574
80.87158203	6.34963E-06	0.051041843
80.87768555	8.24142E-06	0.06753335
80.88378906	1.17705E-05	0.097482233
80.88989258	1.54934E-05	0.12983231
80.89599609	1.76262E-05	0.151825693
80.90209961	1.37666E-05	0.12532542
80.90820313	4.20658E-06	0.040291284
80.91430664	5.47611E-06	0.053208281
80.92041016	7.73724E-06	0.075580306
80.92651367	1.03106E-05	0.101177064
80.93261719	1.33012E-05	0.131261145
80.9387207	1.45948E-05	0.149014044
80.94482422	1.38008E-05	0.145041539
80.95092773	1.19786E-05	0.126032197
80.95703125	1.70285E-05	0.181978085
80.96313477	2.26671E-05	0.242885487
80.96923828	2.28695E-05	0.240367531
80.9753418	1.93825E-05	0.205501254
80.98144531	1.58673E-05	0.170823695
80.98754883	1.38261E-05	0.150227616
80.99365234	1.4292E-05	0.158285654
80.99975586	1.72601E-05	0.189799448
81.00585938	2.24002E-05	0.238852563
81.01196289	2.51849E-05	0.26457538
81.01806641	2.16316E-05	0.226132965
81.02416992	1.54717E-05	0.16084051
81.03027344	1.27949E-05	0.132569373
81.03637695	1.5809E-05	0.160812015
81.04248047	2.21247E-05	0.216419161
81.04858398	2.70233E-05	0.256974563
81.0546875	2.76169E-05	0.258403776
81.06079102	2.4973E-05	0.228825501
81.06689453	2.15814E-05	0.195426753
81.07299805	1.85554E-05	0.165869621
81.07910156	1.5998E-05	0.138921797
81.08520508	1.39413E-05	0.117860032
81.09130859	1.16008E-05	0.095103517
81.09741211	9.62941E-06	0.07678759
81.10351563	8.52363E-06	0.067925006
81.10961914	6.36071E-06	0.050722326
81.11572266	4.90958E-06	0.03840833
81.12182617	3.20879E-06	0.024436319
81.12792969	1.87134E-06	0.013781164
81.1340332	5.8569E-06	0.042243158
81.14013672	7.32873E-06	0.053096751
81.14624023	9.29204E-06	0.06777106
81.15234375	1.31944E-05	0.096332762
81.15844727	1.82211E-05	0.1331636
81.16455078	2.22761E-05	0.161487105
81.1706543	2.10282E-05	0.151973276
81.17675781	1.30801E-05	0.096236495
81.18286133	4.72101E-06	0.035504976
81.18896484	3.74045E-06	0.028755229
81.19506836	9.07614E-06	0.0715851
81.20117188	1.44929E-05	0.115039409
81.20727539	1.59645E-05	0.126540456
81.21337891	1.31233E-05	0.105587549
81.21948242	8.62343E-06	0.070569345
81.22558594	5.53942E-06	0.046493118
81.23168945	4.07903E-06	0.035595026
81.23779297	3.62188E-06	0.032206375
81.24389648	8.95231E-06	0.079988208
81.25	1.62522E-05	0.146430783

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
66.56	-0.000946816	6.44563E-06	0.000373501	0.084037667	2.618522111	2.181095333
66.565	0.01099623	-5.43846E-05	-0.011597207	-2.609371646	2.618552671	2.181095333
66.57	0.013544354	-6.77532E-05	-0.014215453	-3.198476827	2.618599037	2.181095333
66.575	0.011781516	-5.88525E-05	-0.012418693	-2.794205863	2.618634118	2.181095333
66.58	0.016794353	-8.41119E-05	-0.017436652	-3.92324673	2.618705404	2.181095333
66.585	0.020234867	-0.000101809	-0.020909786	-4.704701898	2.618808889	2.181095333
66.59	0.023683743	-0.000119469	-0.024373149	-5.483958428	2.618950656	2.181095333
66.595	0.029985702	-0.000151862	-0.03071967	-6.911925663	2.619177906	2.181095333
66.6	0.030600088	-0.000155303	-0.031378746	-7.06021789	2.619414564	2.181095333
66.605	0.031079179	-0.000157867	-0.031895253	-7.176431826	2.619658691	2.181095333
66.61	0.033649659	-0.000171258	-0.034515962	-7.766091533	2.61994487	2.181095333
66.615	0.028858776	-0.000147495	-0.029720864	-6.687194449	2.62015536	2.181095333
66.62	0.028414383	-0.000145155	-0.029251784	-6.581651443	2.620359417	2.181095333
66.625	0.037038623	-0.0001886	-0.037907857	-8.529267812	2.620706143	2.181095333
66.63	0.035818704	-0.000183175	-0.036772205	-8.273746053	2.621030404	2.181095333
66.635	0.02877679	-0.000148344	-0.02975193	-6.694184141	2.6212397	2.181095333
66.64	0.028773264	-0.000148312	-0.029747652	-6.693221643	2.621448945	2.181095333
66.645	0.029653309	-0.000152838	-0.030661424	-6.89882045	2.621671185	2.181095333
66.65	0.027518671	-0.000142431	-0.028561496	-6.426336667	2.62186258	2.181095333
66.655	0.022774502	-0.000118956	-0.023839911	-5.363980085	2.621993671	2.181095333
66.66	0.019319088	-0.000101667	-0.020366238	-4.582403486	2.622088001	2.181095333
66.665	0.023541011	-0.000122601	-0.024590859	-5.532943323	2.622228065	2.181095333
66.67	0.024544944	-0.000127901	-0.025657685	-5.772979048	2.62238033	2.181095333
66.675	0.015735669	-8.42623E-05	-0.016872516	-3.796316206	2.622442911	2.181095333
66.68	0.013757866	-7.41814E-05	-0.01485533	-3.342449304	2.62249075	2.181095333
66.685	0.018910501	-9.98149E-05	-0.020026135	-4.505880309	2.622581132	2.181095333
66.69	0.014947567	-8.04368E-05	-0.016115363	-3.625956575	2.622637602	2.181095333
66.695	0.008181644	-4.66516E-05	-0.009333399	-2.100014741	2.62265452	2.181095333
66.7	0.008721307	-4.92217E-05	-0.009855625	-2.217515736	2.622673744	2.181095333
66.705	0.008548772	-4.84186E-05	-0.009693251	-2.180981404	2.622692215	2.181095333
66.71	0.005623468	-3.37891E-05	-0.006758296	-1.520616697	2.622700207	2.181095333
66.715	0.004555989	-2.83846E-05	-0.005676785	-1.277276677	2.622705453	2.181095333
66.72	0.002560543	-1.83492E-05	-0.003669316	-0.825596172	2.62270711	2.181095333
66.725	0.002276731	-1.67445E-05	-0.003353251	-0.754481587	2.62270842	2.181095333
66.73	0.005608507	-3.32934E-05	-0.006692791	-1.505877988	2.62271637	2.181095333
66.735	0.004914433	-2.97985E-05	-0.005986714	-1.347010614	2.622722475	2.181095333
66.74	0.00576163	-3.37643E-05	-0.006787597	-1.527209388	2.622730865	2.181095333
66.745	0.013980081	-7.44668E-05	-0.014986139	-3.371881317	2.622780261	2.181095333
66.75	0.016352348	-8.63941E-05	-0.0173845	-3.911512504	2.622847844	2.181095333
66.755	0.016325259	-8.60885E-05	-0.017322845	-3.897640116	2.622915203	2.181095333
66.76	0.025899733	-0.000133639	-0.026871712	-6.046135101	2.623084741	2.181482452
66.765	0.032307505	-0.000165844	-0.03332533	-7.498199154	2.623348546	2.182311712
66.77	0.032915904	-0.000168965	-0.033950248	-7.638805871	2.62362238	2.183081013
66.775	0.038417411	-0.000196551	-0.039462085	-8.878969149	2.6239954	2.183789471
66.78	0.041410047	-0.000212121	-0.042504569	-9.563528017	2.624428798	2.184435423
66.785	0.041554984	-0.000213012	-0.042678561	-9.602676217	2.624865236	2.185017731
66.79	0.044417297	-0.000227857	-0.045577592	-10.2549583	2.625363868	2.185535961
66.795	0.042068994	-0.000216446	-0.043274068	-9.736665392	2.625811169	2.1859894
66.8	0.039406835	-0.00020325	-0.0406124	-9.137789989	2.62620365	2.186378514
66.805	0.043818973	-0.000225251	-0.045052237	-10.13675344	2.626688939	2.186703787
66.81	0.042019624	-0.000216704	-0.043323431	-9.747772026	2.627135191	2.186964311
66.815	0.034141457	-0.000177687	-0.035460288	-7.97856471	2.627429796	2.187160652
66.82	0.032230981	-0.000168089	-0.033528866	-7.543994937	2.627692353	2.187294879
66.825	0.034100362	-0.000177336	-0.035395804	-7.964055894	2.627986249	2.187367775
66.83	0.038731853	-0.00020032	-0.04003084	-9.006938943	2.6283654	2.187381111
66.835	0.045790232	-0.000235846	-0.04713709	-10.60584514	2.628895334	2.187381111
66.84	0.046896783	-0.000241867	-0.048296816	-10.86678368	2.62945119	2.187381111
66.845	0.042766127	-0.000221588	-0.044204946	-9.946112852	2.629913438	2.187381111
66.85	0.036993467	-0.000193221	-0.03849022	-8.66029956	2.630259319	2.187381111
66.855	0.027750698	-0.000147364	-0.02927137	-6.586058174	2.630453955	2.187381111
66.86	0.024051843	-0.000128784	-0.025542499	-5.747062348	2.630600164	2.187381111
66.865	0.027781776	-0.000147486	-0.029317065	-6.596339523	2.630795236	2.187381111
66.87	0.021309139	-0.000115632	-0.022905134	-5.153655109	2.630910001	2.187381111
66.875	0.01113952	-6.46328E-05	-0.012694623	-2.856290112	2.630941363	2.187381111
66.88	0.018852758	-0.0001027	-0.020372304	-4.583768351	2.631031194	2.187381111
66.885	0.02453721	-0.00013146	-0.026160926	-5.88620825	2.631183363	2.187381111
66.89	0.008218217	-5.06771E-05	-0.009904917	-2.228606436	2.631200433	2.187381111
66.895	-0.000177676	-8.11535E-06	-0.001408161	-0.316836145	2.631200441	2.187381111
66.9	0.009621777	-5.6533E-05	-0.01117021	-2.513297278	2.631223839	2.187381111
66.905	0.010697089	-6.21258E-05	-0.012291411	-2.765567567	2.63125276	2.187381111
66.91	0.008835893	-5.28086E-05	-0.010411721	-2.342637239	2.631272492	2.187381111
66.915	0.01686786	-9.2789E-05	-0.018461757	-4.153895429	2.631344403	2.187381111
66.92	0.015045912	-8.42513E-05	-0.016731954	-3.764689562	2.631401619	2.187381111
66.925	0.005891492	-3.88387E-05	-0.007583801	-1.70635512	2.631410391	2.187381111
66.93	0.007846053	-4.84868E-05	-0.009532	-2.144699983	2.63142595	2.187381111
66.935	0.004205921	-3.08077E-05	-0.005968518	-1.342916646	2.631430421	2.187381111
66.94	-0.010794787	4.43372E-05	0.009040461	2.034103685	2.631459872	2.187381111
66.945	-0.012927193	5.55359E-05	0.011247524	2.530692844	2.631502108	2.187381111
66.95	-0.005492721	1.86747E-05	0.003816101	0.858622832	2.631509734	2.187381111
66.955	-0.007773506	2.973E-05	0.006048559	1.360925823	2.631525006	2.187381111
66.96	-0.014344457	6.23575E-05	0.012624497	2.840511884	2.631577011	2.187381111
66.965	-0.016844796	7.48777E-05	0.015112959	3.400415858	2.631648725	2.187381111
66.97	-0.018865793	8.49381E-05	0.017111528	3.850093873	2.631738681	2.187381111
66.975	-0.022206087	0.00010158	0.020415676	4.593527035	2.63186331	2.187381111
66.98	-0.024607932	0.000113612	0.022803068	5.130690289	2.632016357	2.187381111
66.985	-0.025970932	0.000120451	0.024159554	5.43589966	2.632186829	2.187381111
66.99	-0.028513356	0.000133132	0.026673509	6.001539517	2.63239231	2.187381111
66.995	-0.030957656	0.000145391	0.029102792	6.548128233	2.632634531	2.187381111
67	-0.031545552	0.000148408	0.029700404	6.68259082	2.632886039	2.187381111
67.005	-0.033767083	0.000159487	0.031894207	7.176196505	2.633174219	2.187381111
67.01	-0.036856775	0.000174974	0.034959441	7.865874157	2.633517548	2.187381111
67.015	-0.037500081	0.000178329	0.035623211	8.015222476	2.633872967	2.187381111
67.02	-0.038919208	0.000185498	0.037041201	8.334270295	2.634255795	2.187381111
67.025	-0.039392856	0.000188064	0.03754284	8.447139008	2.634647998	2.187381111
67.03	-0.036178556	0.00017223	0.034347302	7.728142997	2.634978808	2.187381111
67.035	-0.036730088	0.000174961	0.034899391	7.852362952	2.63531978	2.187381111
67.04	-0.039621687	0.00018949	0.037830695	8.511906351	2.635716553	2.187381111
67.045	-0.036765693	0.000175541	0.035014878	7.878347512	2.636058188	2.187381111
67.05	-0.034297714	0.00016333	0.032552403	7.324290779	2.636355495	2.187381111
67.055	-0.035614082	0.000169926	0.033884175	7.62393943	2.636676063	2.187381111
67.06	-0.03436091	0.000163863	0.03265998	7.348495559	2.636974467	2.187381111
67.065	-0.032834934	0.000156361	0.031147803	7.008255581	2.637246956	2.187381111
67.07	-0.032803166	0.000156309	0.031137277	7.005887367	2.637518917	2.187381111
67.075	-0.030169874	0.00014338	0.028533209	6.419972049	2.637748968	2.187381111

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
81.25610352	1.8518E-05	0.168841286
81.26220703	1.57314E-05	0.148626343
81.26831055	1.50222E-05	0.148266185
81.27441406	1.55843E-05	0.156717066
81.28051758	1.53526E-05	0.156368746
81.28662109	1.96395E-05	0.20197142
81.29272461	2.33599E-05	0.240485522
81.29882813	1.96624E-05	0.206307729
81.30493164	1.25753E-05	0.135600983
81.31103516	1.0754E-05	0.117948907
81.31713867	8.64167E-06	0.097033292
81.32324219	2.35035E-06	0.026552313
81.3293457	5.36505E-06	0.058880013
81.33544922	9.25304E-06	0.100345469
81.34155273	8.57296E-06	0.093967399
81.34765625	3.77584E-06	0.04172081
81.35375977	3.34879E-06	0.037796677
81.35986328	8.24749E-06	0.093318469
81.3659668	7.24067E-06	0.07823891
81.37207031	3.17185E-06	0.032859468
81.37817383	2.73841E-06	0.027715833
81.38427734	6.25437E-06	0.06235922
81.39038086	8.61327E-06	0.085902269
81.39648438	8.12842E-06	0.080154091
81.40258789	7.14251E-06	0.067630594
81.40869141	7.33456E-06	0.066596418
81.41479492	1.01502E-05	0.08887082
81.42089844	9.76284E-06	0.083011488
81.42700195	5.95403E-06	0.050390309
81.43310547	6.66532E-06	0.056687226
81.43920898	1.01394E-05	0.085008191
81.4453125	1.37256E-05	0.112832459
81.45141602	1.79534E-05	0.144547496
81.45751953	2.32395E-05	0.183005498
81.46362305	2.73605E-05	0.215646658
81.46972656	2.5181E-05	0.200885471
81.47583008	1.72877E-05	0.138230608
81.48193359	1.18599E-05	0.094907441
81.48803711	1.2097E-05	0.095137821
81.49414063	1.50071E-05	0.115576443
81.50024414	1.80083E-05	0.139774959
81.50634766	1.93742E-05	0.151955694
81.51245117	1.64086E-05	0.129772386
81.51855469	1.05456E-05	0.084708484
81.5246582	6.93226E-06	0.055314353
81.53076172	5.28545E-06	0.041815609
81.53686523	9.5656E-06	0.076958239
81.54296875	1.34778E-05	0.110444475
81.54907227	1.1745E-05	0.098473325
81.55517578	7.17114E-06	0.062275838
81.5612793	6.83102E-06	0.060579938
81.56738281	9.44413E-06	0.084348368
81.57348633	1.24349E-05	0.112385475
81.57958984	1.37292E-05	0.126601459
81.58569336	1.06693E-05	0.102055942
81.59179688	6.05267E-06	0.060808586
81.59790039	9.54778E-06	0.098833908
81.60400391	1.6568E-05	0.172552785
81.61010742	2.10181E-05	0.219915984
81.61621094	1.98541E-05	0.209236595
81.62231445	1.6371E-05	0.177048383
81.62841797	1.31011E-05	0.148453297
81.63452148	8.85921E-06	0.103250349
81.640625	8.94419E-06	0.105274556
81.64672852	1.18568E-05	0.139489988
81.65283203	1.10685E-05	0.127455684
81.65893555	4.40136E-06	0.050516622
81.66503906	3.40007E-06	0.039688563
81.67114258	7.78399E-06	0.091580059
81.67724609	1.09536E-05	0.13076157
81.68334961	9.6126E-06	0.114210319
81.68945313	7.62094E-06	0.085960544
81.69555664	1.19618E-05	0.129105656
81.70166016	1.27534E-05	0.134510044
81.70776367	1.15814E-05	0.11990749
81.71386719	1.32852E-05	0.137470988
81.7199707	1.37112E-05	0.141118185
81.72607422	1.26642E-05	0.125954886
81.73217773	1.38362E-05	0.13355393
81.73828125	1.45567E-05	0.137243894
81.74438477	1.3179E-05	0.120856834
81.75048828	1.08429E-05	0.099102656
81.7565918	9.58234E-06	0.08842134
81.76269531	9.66132E-06	0.088044254
81.76879883	5.74982E-06	0.051320968
81.77490234	3.76509E-06	0.032627481
81.78100586	9.21671E-06	0.077137393
81.78710938	9.78187E-06	0.08135972
81.79321289	6.58042E-06	0.054908264
81.79931641	4.34662E-06	0.035790288
81.80541992	6.07028E-06	0.049525524
81.81152344	1.15492E-05	0.092448649
81.81762695	1.52629E-05	0.118345978
81.82373047	1.38815E-05	0.107232444
81.82983398	9.57878E-06	0.075172969
81.8359375	7.55501E-06	0.059886055
81.84204102	8.44295E-06	0.067622277
81.84814453	8.49326E-06	0.067740089
81.85424805	7.26545E-06	0.05718312
81.86035156	7.01531E-06	0.055745168
81.86645508	8.52594E-06	0.069284661
81.87255859	9.55221E-06	0.079757291
81.87866211	9.01109E-06	0.078314139
81.88476563	8.61031E-06	0.076571021

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
67.08	-0.027939569	0.000132357	0.026314379	5.920735362	2.637946262	2.187381111
67.085	-0.026643267	0.000125995	0.025034591	5.632782923	2.638125674	2.187381111
67.09	-0.023549156	0.000110672	0.021953624	4.939565398	2.638265835	2.187381111
67.095	-0.023777078	0.000111736	0.022171232	4.988527152	2.638408722	2.187381111
67.1	-0.024724677	0.000116525	0.023137886	5.206024439	2.638563225	2.187381111
67.105	-0.020954786	9.78154E-05	0.019370687	4.358404663	2.638674204	2.187381111
67.11	-0.02251926	0.000105389	0.020902343	4.703027102	2.638802374	2.187381111
67.115	-0.02835405	0.000134463	0.026763972	6.021893693	2.639005565	2.187381111
67.12	-0.024893917	0.000117552	0.0233508	5.253930037	2.639162191	2.187381111
67.125	-0.021008858	9.81718E-05	0.019444053	4.374911851	2.639273744	2.187381111
67.13	-0.024986353	0.000117859	0.023417131	5.26885447	2.639431535	2.187381111
67.135	-0.024812714	0.000117176	0.023277857	5.237517741	2.63958714	2.187381111
67.14	-0.021867212	0.000102566	0.020330046	4.57426031	2.639707994	2.187381111
67.145	-0.023339182	0.000109854	0.021801547	4.905348077	2.639845667	2.187381111
67.15	-0.022328006	0.00010495	0.020811398	4.68256459	2.639971668	2.187381111
67.155	-0.01991488	9.29722E-05	0.018398107	4.139573972	2.640071906	2.187381111
67.16	-0.019858231	9.26905E-05	0.018341551	4.126848961	2.640171574	2.187381111
67.165	-0.017467727	8.08585E-05	0.015966578	3.59247994	2.640248691	2.187381111
67.17	-0.016649513	7.66896E-05	0.015131726	3.404638367	2.640318753	2.187381111
67.175	-0.019063534	8.86508E-05	0.017546098	3.947871997	2.640410603	2.187381111
67.18	-0.01813846	8.41368E-05	0.016634576	3.74277957	2.640493756	2.187381111
67.185	-0.017585125	8.13579E-05	0.016073748	3.616593283	2.640571913	2.187381111
67.19	-0.019104666	8.89525E-05	0.01760697	3.961568165	2.640664161	2.187381111
67.195	-0.016689696	7.71118E-05	0.015216675	3.423751938	2.640734561	2.187381111
67.2	-0.012975614	5.86201E-05	0.011506675	2.589001833	2.640777114	2.187381111
67.205	-0.010407953	4.58133E-05	0.008940528	2.011618725	2.640804492	2.187381111
67.21	-0.007322736	3.04002E-05	0.005854293	1.317215886	2.640818045	2.187381111
67.215	-0.005599491	2.17302E-05	0.004119281	0.92683827	2.640825969	2.187381111
67.22	-0.004391417	1.56535E-05	0.002903647	0.653320644	2.640830843	2.187381111
67.225	-0.003500294	1.11249E-05	0.00199795	0.449538693	2.64083394	2.187381111
67.23	-0.004546631	1.63014E-05	0.003043212	0.684722677	2.640839164	2.187381111
67.235	-0.00302646	8.7863E-06	0.001530316	0.34432106	2.640841479	2.187381111
67.24	0.001046389	-1.16533E-05	-0.002554648	-0.574795897	2.640841756	2.187381111
67.245	0.002360147	-1.83845E-05	-0.003899061	-0.87728868	2.640843164	2.187381111
67.25	0.002060924	-1.70053E-05	-0.003620503	-0.814613083	2.640844237	2.187381111
67.255	0.000810705	-1.08642E-05	-0.002380674	-0.535651615	2.640844403	2.187381111
67.26	-0.001895286	2.63594E-06	0.000342935	0.077160354	2.640845311	2.187381111
67.265	-0.002506722	5.73429E-06	0.000967535	0.21769543	2.640846899	2.187381111
67.27	-0.001951518	2.93501E-06	0.00040225	0.090506144	2.640847862	2.187381111
67.275	-0.002779292	7.04144E-06	0.001231195	0.277018818	2.640849814	2.187381111
67.28	-0.003281041	9.55889E-06	0.001738664	0.391199387	2.640852535	2.187381111
67.285	-0.003183157	9.06802E-06	0.001639524	0.368892959	2.640855096	2.187381111
67.29	-0.003123598	8.74349E-06	0.00157398	0.354145478	2.640857562	2.187381111
67.295	-0.003745559	1.1802E-05	0.002190775	0.492924348	2.640861108	2.187381111
67.3	-0.005765257	2.18741E-05	0.004220035	0.949507875	2.640869508	2.187381111
67.305	-0.008143046	3.37672E-05	0.006614626	1.488290785	2.640886267	2.187381111
67.31	-0.011477947	5.04821E-05	0.009977338	2.244901023	2.640919564	2.187381111
67.315	-0.014159123	6.40401E-05	0.012702651	2.858096571	2.640970234	2.187381111
67.32	-0.013351185	6.01183E-05	0.011910695	2.67990645	2.641015286	2.187381111
67.325	-0.01402506	6.35027E-05	0.012594154	2.833684603	2.641065001	2.187381111
67.33	-0.016206486	7.45476E-05	0.014813417	3.333018868	2.641131384	2.187381111
67.335	-0.014051141	6.38879E-05	0.012661428	2.848821348	2.641181283	2.187381111
67.34	-0.014214907	6.46587E-05	0.012817731	2.883989512	2.641232353	2.187381111
67.345	-0.018176736	8.4446E-05	0.016800762	3.780171498	2.641315857	2.187381111
67.35	-0.0145797	6.68663E-05	0.013252684	2.981853828	2.641369582	2.187381111
67.355	-0.009084231	3.95311E-05	0.007743957	1.742390229	2.641390439	2.187381111
67.36	-0.011214346	5.00062E-05	0.009858685	2.218204066	2.641422224	2.187381111
67.365	-0.012001257	5.40376E-05	0.010671654	2.401122149	2.641458626	2.187381111
67.37	-0.008722916	3.78054E-05	0.007396499	1.664212325	2.641477857	2.187381111
67.375	-0.008140008	3.48601E-05	0.006803956	1.530890093	2.641494604	2.187381111
67.38	-0.008155665	3.49703E-05	0.006826187	1.535891984	2.641511415	2.187381111
67.385	-0.006658227	2.7567E-05	0.005335723	1.200537758	2.641522619	2.187381111
67.39	-0.005153383	2.0099E-05	0.003833328	0.862498757	2.641529331	2.187381111
67.395	-0.003646682	1.25997E-05	0.002325255	0.523182298	2.641532693	2.187381111
67.4	-0.003731459	1.29965E-05	0.00240628	0.541413075	2.641536212	2.187381111
67.405	-0.003222671	1.05416E-05	0.001911482	0.430083486	2.641538837	2.187381111
67.41	0.000516572	-8.0211E-06	-0.001818324	-0.409122816	2.641538904	2.187381111
67.415	0.002195685	-1.64703E-05	-0.003514804	-0.790830826	2.641540122	2.187381111
67.42	0.001842062	-1.4695E-05	-0.003156281	-0.710163307	2.64154098	2.187381111
67.425	0.005143708	-3.11499E-05	-0.006447508	-1.450689403	2.641547667	2.187381111
67.43	0.008348704	-4.73151E-05	-0.009672533	-2.176319887	2.641565283	2.187381111
67.435	0.007858852	-4.49354E-05	-0.009191746	-2.068142745	2.641580893	2.187381111
67.44	0.008455965	-4.78799E-05	-0.009785167	-2.201662483	2.641598965	2.187381111
67.445	0.011801799	-6.46292E-05	-0.013124124	-2.952927818	2.641634167	2.187381111
67.45	0.01506326	-8.10334E-05	-0.016391855	-3.688167344	2.641691515	2.187381111
67.455	0.017260668	-9.2113E-05	-0.018597553	-4.184449527	2.641766814	2.187381111
67.46	0.020104835	-0.000106401	-0.021440442	-4.824099537	2.641868973	2.187381111
67.465	0.025168915	-0.000131977	-0.026524702	-5.968057838	2.642029078	2.187381111
67.47	0.028432588	-0.000148677	-0.029841439	-6.714323778	2.642233397	2.187381111
67.475	0.026378465	-0.000138571	-0.02780119	-6.255267644	2.64240926	2.187381111
67.48	0.025003806	-0.000131704	-0.026415693	-5.943530982	2.642567271	2.187381111
67.485	0.027600783	-0.000144894	-0.029078186	-6.542591757	2.64275981	2.187381111
67.49	0.027838627	-0.00014637	-0.029374482	-6.609258474	2.642955682	2.187381111
67.495	0.02384583	-0.000126665	-0.025398495	-5.714661279	2.643099397	2.187381111
67.5	0.020140364	-0.000108397	-0.021717159	-4.886360809	2.643201917	2.187381111
67.505	0.017218591	-9.40467E-05	-0.018828013	-4.23630299	2.64327685	2.187381111
67.51	0.01205245	-6.85365E-05	-0.013697927	-3.082033575	2.643313563	2.187381111
67.515	0.004255282	-2.97995E-05	-0.00592126	-1.332283533	2.64331814	2.187381111
67.52	-0.003925108	1.10448E-05	0.002261956	0.508940088	2.643322034	2.187381111
67.525	-0.011826257	5.06456E-05	0.010180557	2.290625347	2.643357382	2.187381111
67.53	-0.019747487	9.05335E-05	0.018141732	4.081889629	2.643455942	2.187381111
67.535	-0.024610812	0.000115267	0.023071047	5.190985506	2.643609025	2.187381111
67.54	-0.024846493	0.00011676	0.023364814	5.257083114	2.643765055	2.187381111
67.545	-0.024137368	0.000113417	0.022689854	5.105217254	2.643912305	2.187381111
67.55	-0.023309189	0.000109462	0.021891377	4.925559714	2.644049624	2.187381111
67.555	-0.021853767	0.000102293	0.020444919	4.600106718	2.644170329	2.187381111
67.56	-0.022937125	0.000107851	0.021567104	4.8525984	2.6443033	2.187381111
67.565	-0.023272651	0.000109816	0.021963518	4.941791488	2.644440188	2.187381111
67.57	-0.018043817	8.4099E-05	0.016776902	3.774802967	2.644522476	2.187381111
67.575	-0.015410954	7.10173E-05	0.014142104	3.181973291	2.644582501	2.187381111
67.58	-0.017751331	8.27857E-05	0.016517804	3.716505788	2.644662142	2.187381111
67.585	-0.014477612	6.68451E-05	0.013302201	2.992995247	2.644715117	2.187381111
67.59	-0.008355688	3.64791E-05	0.007195154	1.6189097	2.644732763	2.187381111
67.595	-0.006847725	2.90154E-05	0.005695639	1.281518814	2.644744614	2.187381111

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
81.89086914	9.47331E-06	0.084157218
81.89697266	1.2018E-05	0.107746751
81.90307617	1.62183E-05	0.148871305
81.90917969	1.8235E-05	0.174209579
81.9152832	1.6708E-05	0.169031667
81.92138672	1.67512E-05	0.17596588
81.92749023	1.88228E-05	0.199834825
81.93359375	1.84668E-05	0.198447428
81.93969727	1.5726E-05	0.171303451
81.94580078	1.43245E-05	0.159863214
81.9519043	1.34565E-05	0.157232751
81.95800781	1.00601E-05	0.121527849
81.96411133	5.37688E-06	0.065361078
81.97021484	2.17169E-06	0.026402475
81.97631836	7.98836E-07	0.009559414
81.98242188	4.05821E-06	0.047834572
81.98852539	6.58738E-06	0.079562093
81.99462891	9.04671E-06	0.113401499
82.00073242	1.2334E-05	0.156437151
82.00683594	1.38433E-05	0.17464984
82.01293945	1.31314E-05	0.160934357
82.01904297	1.40559E-05	0.165954935
82.02514648	1.62948E-05	0.190755444
82.03125	1.42028E-05	0.168013797
82.03735352	8.24004E-06	0.098291489
82.04345703	4.68566E-06	0.05578437
82.04956055	7.43145E-06	0.086123478
82.05566406	1.13098E-05	0.126096739
82.06176758	1.11368E-05	0.120524059
82.06787109	8.68094E-06	0.091786502
82.07397461	8.0198E-06	0.084234536
82.08007813	8.60449E-06	0.091048285
82.08618164	1.21793E-05	0.126426287
82.09228516	1.41573E-05	0.140960842
82.09838867	1.34003E-05	0.12921454
82.10449219	1.27369E-05	0.11901917
82.1105957	1.08106E-05	0.098937758
82.11669922	9.14881E-06	0.083889111
82.12280273	1.02529E-05	0.093363382
82.12890625	1.22451E-05	0.108889995
82.13500977	1.37479E-05	0.118212674
82.14111328	1.44057E-05	0.119266704
82.1472168	1.21201E-05	0.099339146
82.15332031	8.0453E-06	0.066430015
82.15942383	6.0978E-06	0.050207128
82.16552734	5.38926E-06	0.044587554
82.17163086	7.81969E-06	0.064668021
82.17773438	1.08611E-05	0.088295233
82.18383789	1.00977E-05	0.082389652
82.18994141	3.91181E-06	0.032674562
82.19604492	3.54611E-06	0.030441487
82.20214844	3.98693E-06	0.035506869
82.20825195	2.76159E-06	0.025165274
82.21435547	6.99312E-06	0.06365238
82.22045898	4.13093E-06	0.037848634
82.2265625	4.97924E-06	0.04662524
82.23266602	9.77772E-06	0.094418613
82.23876953	9.25473E-06	0.093151832
82.24487305	5.27427E-06	0.054551854
82.25097656	7.78682E-07	0.008000263
82.25708008	1.62037E-06	0.016536763
82.26318359	2.26963E-07	0.002338992
82.26928711	4.82455E-06	0.050883388
82.27539063	8.55316E-06	0.094512274
82.28149414	6.82949E-06	0.078514993
82.28759766	4.31128E-06	0.050201519
82.29370117	7.77462E-06	0.092077212
82.29980469	1.00989E-05	0.120319834
82.3059082	1.10007E-05	0.13180017
82.31201172	9.55258E-06	0.11978688
82.31811523	5.80738E-06	0.076535254
82.32421875	3.9236E-06	0.053309485
82.33032227	4.01737E-06	0.055597893
82.33642578	6.60428E-06	0.089783385
82.3425293	1.005E-05	0.133205199
82.34863281	9.54793E-06	0.126485398
82.35473633	7.89203E-06	0.105670749
82.36083984	9.52473E-06	0.129054726
82.36694336	8.08726E-06	0.109171217
82.37304688	3.91138E-06	0.050852352
82.37915039	7.43998E-06	0.092146485
82.38525391	1.07646E-05	0.129200266
82.39135742	1.1255E-05	0.132418392
82.39746094	9.28331E-06	0.107767816
82.40356445	7.28142E-06	0.08431428
82.40966797	4.98926E-06	0.056634011
82.41577148	7.32634E-07	0.007975227
82.421875	3.99736E-06	0.042045684
82.42797852	9.31611E-06	0.094543374
82.43408203	1.2975E-05	0.127969571
82.44018555	9.04781E-06	0.089071366
82.44628906	4.79506E-06	0.046817305
82.45239258	7.54572E-06	0.07197238
82.45849609	3.17174E-06	0.029543116
82.46459961	3.48009E-06	0.031410085
82.47070313	3.7025E-06	0.032962024
82.47680664	2.76433E-06	0.02487428
82.48291016	7.23743E-06	0.065209705
82.48901367	6.67379E-06	0.060205321
82.49511719	2.55039E-06	0.02307931
82.5012207	2.5512E-06	0.022705563
82.50732422	5.12788E-06	0.045507679
82.51342773	5.02343E-06	0.04546305
82.51953125	4.52815E-06	0.041389627

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
67.6	-0.003889374	1.4435E-05	0.002768015	0.622803319	2.644748437	2.187381111
67.605	0.000852512	-9.17784E-06	-0.001968581	-0.442930836	2.644748621	2.187381111
67.61	0.002320003	-1.64969E-05	-0.0034356	-0.773009938	2.644749981	2.187381111
67.615	0.004450448	-2.70429E-05	-0.005548481	-1.248408292	2.644754987	2.187381111
67.62	0.007372429	-4.15996E-05	-0.00846309	-1.904195349	2.644768724	2.187381111
67.625	0.008801035	-4.86856E-05	-0.009881154	-2.223259666	2.644788301	2.187381111
67.63	0.012492714	-6.70725E-05	-0.013558476	-3.050657147	2.644827746	2.187381111
67.635	0.01587309	-8.40682E-05	-0.016954738	-3.814816071	2.644891426	2.187381111
67.64	0.015758176	-8.35543E-05	-0.016849217	-3.791073914	2.644954186	2.187381111
67.645	0.016518959	-8.73482E-05	-0.017609865	-3.962219709	2.645023153	2.187381111
67.65	0.017004636	-8.98109E-05	-0.018100691	-4.072655531	2.645096235	2.187381111
67.655	0.016008561	-8.47711E-05	-0.017083069	-3.843690417	2.645161006	2.187381111
67.66	0.018780175	-9.85286E-05	-0.019842234	-4.464502617	2.645250147	2.187381111
67.665	0.022816911	-0.000118803	-0.023887385	-5.374661626	2.645381727	2.187381111
67.67	0.023630375	-0.000122956	-0.024715507	-5.560989072	2.645522856	2.187381111
67.675	0.024661099	-0.000128142	-0.025749482	-5.79363334	2.645676565	2.187381111
67.68	0.025416366	-0.00013201	-0.026520447	-5.967100593	2.645839834	2.187381111
67.685	0.023381054	-0.000121841	-0.024467473	-5.505181438	2.645978001	2.187381111
67.69	0.023320613	-0.000121446	-0.024388278	-5.487362536	2.646115455	2.187381111
67.695	0.026041477	-0.000135089	-0.027134124	-6.105177877	2.646286853	2.187381111
67.7	0.025291823	-0.000131437	-0.026392831	-5.938387014	2.646448526	2.187381111
67.705	0.022017534	-0.000114985	-0.023073365	-5.191507082	2.646571047	2.187381111
67.71	0.022273261	-0.000116129	-0.023305108	-5.243649225	2.646696432	2.187381111
67.715	0.024001487	-0.000124765	-0.025048345	-5.6358776	2.646842029	2.187381111
67.72	0.022842664	-0.000118936	-0.023871247	-5.371030617	2.646973906	2.187381111
67.725	0.022472947	-0.000116929	-0.023466269	-5.279910418	2.647101549	2.187381111
67.73	0.025458374	-0.00013175	-0.02645725	-5.952881223	2.647265357	2.187381111
67.735	0.02925975	-0.00015073	-0.030248959	-6.806015701	2.647481737	2.187381111
67.74	0.03414613	-0.000175327	-0.035129288	-7.904089817	2.647776423	2.187381111
67.745	0.039234836	-0.000201095	-0.040236528	-9.053218769	2.648165486	2.187381111
67.75	0.041372917	-0.000212052	-0.042406511	-9.541465028	2.648598107	2.187381111
67.755	0.041759378	-0.00021414	-0.042819977	-9.634494901	2.649038849	2.187381111
67.76	0.04054456	-0.000208126	-0.041605573	-9.361254002	2.64945432	2.187381111
67.765	0.038310149	-0.00019684	-0.039328244	-8.848854818	2.64982526	2.187381111
67.77	0.040481604	-0.000207732	-0.041527106	-9.343598911	2.650239442	2.187381111
67.775	0.044062731	-0.000225774	-0.045122695	-10.15260648	2.650730145	2.187381111
67.78	0.041569641	-0.000213513	-0.042647602	-9.595710551	2.651166891	2.187381111
67.785	0.037502718	-0.000193336	-0.038579036	-8.680283212	2.651522359	2.187381111
67.79	0.037653095	-0.000194007	-0.03871568	-8.711027925	2.651880685	2.187381111
67.795	0.039232471	-0.000201906	-0.040309939	-9.069736207	2.6522697	2.187381111
67.8	0.036809259	-0.000190051	-0.037917217	-8.531373825	2.652612145	2.187381111
67.805	0.030117567	-0.000156796	-0.031223762	-7.025346494	2.652841398	2.187381111
67.81	0.027086057	-0.0001415	-0.028149349	-6.333603591	2.653026823	2.187381111
67.815	0.028138106	-0.000146629	-0.029185057	-6.566637731	2.653226931	2.187381111
67.82	0.026095206	-0.000136387	-0.027122103	-6.102473253	2.653399038	2.187381111
67.825	0.027080556	-0.000141024	-0.028061526	-6.31384336	2.653584387	2.187381111
67.83	0.034627858	-0.000178394	-0.035595104	-8.008898418	2.653887446	2.187381111
67.835	0.036537097	-0.000188083	-0.037544322	-8.447472341	2.654224845	2.187381111
67.84	0.032364594	-0.000167419	-0.033374752	-7.509319101	2.654489583	2.187381111
67.845	0.032039482	-0.000165635	-0.033015978	-7.428594976	2.654749029	2.187381111
67.85	0.035524837	-0.00018281	-0.036481573	-8.20835397	2.655067992	2.187381111
67.855	0.039687457	-0.000203489	-0.040644465	-9.145004652	2.655466083	2.187381111
67.86	0.042407859	-0.0002171	-0.043380135	-9.760530378	2.65592062	2.187381111
67.865	0.043245366	-0.000221316	-0.044227137	-9.951105864	2.656393286	2.187381111
67.87	0.045570395	-0.000232905	-0.046533523	-10.4700426	2.656918144	2.187381111
67.875	0.047510085	-0.00024268	-0.048466837	-10.90503823	2.657488633	2.187381111
67.88	0.046088634	-0.000235709	-0.047059428	-10.58837139	2.658025497	2.187381111
67.885	0.045945937	-0.000234967	-0.046909976	-10.55474459	2.65855904	2.187381111
67.89	0.048657003	-0.000248445	-0.049595408	-11.15896691	2.659157406	2.187381111
67.895	0.050990478	-0.000260105	-0.051869414	-11.67061805	2.65981454	2.187381111
67.9	0.053594474	-0.000273103	-0.054403377	-12.2407598	2.660540506	2.187381111
67.905	0.057211736	-0.000291175	-0.057924194	-13.03294358	2.661367774	2.187381111
67.91	0.060731449	-0.000308811	-0.061357813	-13.80550783	2.662299961	2.187381111
67.915	0.063980836	-0.000325145	-0.064535986	-14.52059694	2.663334569	2.187381111
67.92	0.066421437	-0.000337501	-0.066938862	-15.06124393	2.664449614	2.187381111
67.925	0.067702716	-0.000344124	-0.068226399	-15.35093977	2.665608093	2.187381111
67.93	0.066897544	-0.000340386	-0.067471591	-15.18110808	2.66673918	2.187381111
67.935	0.06429093	-0.000327599	-0.064890963	-14.60046658	2.667783841	2.187381111
67.94	0.064075016	-0.000326627	-0.064695455	-14.55647744	2.668821497	2.187381111
67.945	0.06427677	-0.00032787	-0.064946324	-14.61292291	2.669865698	2.187381111
67.95	0.059338653	-0.000303557	-0.060045185	-13.51016652	2.670755619	2.187381111
67.955	0.05582452	-0.00028607	-0.056524973	-12.71811899	2.671543255	2.187381111
67.96	0.058287616	-0.000298342	-0.059002331	-13.27552448	2.67240193	2.187381111
67.965	0.058625941	-0.000300252	-0.059387113	-13.36210035	2.673270601	2.187381111
67.97	0.055577348	-0.000285244	-0.056358777	-12.68072493	2.674051278	2.187381111
67.975	0.055055705	-0.000282712	-0.05585004	-12.56625905	2.67481737	2.187381111
67.98	0.055588199	-0.000285513	-0.056415658	-12.69352314	2.675598352	2.187381111
67.985	0.054122886	-0.000278397	-0.054981369	-12.37080805	2.676338703	2.187381111
67.99	0.053466432	-0.000275236	-0.054345803	-12.22780576	2.677061204	2.187381111
67.995	0.054860445	-0.00028233	-0.055778179	-12.55009024	2.677821871	2.187381111
68	0.0547396	-0.000281974	-0.055705954	-12.53383962	2.678579191	2.187381111
68.005	0.054122287	-0.000279108	-0.055127382	-12.40366105	2.679319525	2.187381111
68.01	0.055362471	-0.000285585	-0.056435104	-12.69789836	2.680094178	2.187381111
68.015	0.051753755	-0.00026817	-0.052925061	-11.90813865	2.680771133	2.187381111
68.02	0.04153627	-0.000217645	-0.042782662	-9.626099006	2.681207177	2.187381111
68.025	0.030186838	-0.000161201	-0.031482299	-7.083517174	2.681437486	2.187381111
68.03	0.013679586	-7.86305E-05	-0.015005618	-3.376264145	2.681484782	2.187381111
68.035	-0.004672666	1.40634E-05	0.003418648	0.76919579	2.6814903	2.187381111
68.04	-0.00811168	3.21363E-05	0.006989611	1.572662425	2.681506931	2.187381111
68.045	0.00214611	-1.84227E-05	-0.003201235	-0.720277871	2.681508095	2.187381111
68.05	0.009442629	-5.49009E-05	-0.0105352	-2.370420019	2.68153063	2.187381111
68.055	0.005704908	-3.66787E-05	-0.006857535	-1.542945406	2.681538856	2.187381111
68.06	-0.006077899	2.18821E-05	0.004932715	1.109860769	2.681548192	2.187381111
68.065	-0.009942856	4.17112E-05	0.008896846	2.001790382	2.681573178	2.187381111
68.07	0.001796641	-1.62957E-05	-0.002794579	-0.628780222	2.681573994	2.187381111
68.075	0.007826845	-4.66904E-05	-0.008904842	-2.003589429	2.681589477	2.187381111
68.08	-0.002482872	4.24217E-06	0.001363457	0.306777888	2.681591035	2.187381111
68.085	-0.007092033	2.75055E-05	0.006043037	1.359683297	2.681603747	2.187381111
68.09	0.001874983	-1.6858E-05	-0.00290274	-0.653116551	2.681604635	2.187381111
68.095	0.003993017	-2.7749E-05	-0.005091988	-1.145697319	2.681608665	2.187381111
68.1	-0.005426969	1.88619E-05	0.004303607	0.968311614	2.681616109	2.187381111
68.105	-0.008551132	3.46477E-05	0.007478365	1.682632119	2.68163459	2.187412525
68.11	-0.003533759	9.7921E-06	0.002463151	0.554208997	2.681637746	2.188084719
68.115	-0.005533127	1.94512E-05	0.004413654	0.993072127	2.681645484	2.188734479

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
82.52563477	1.92978E-06	0.017868559
82.53173828	2.84104E-06	0.026590111
82.5378418	4.13009E-06	0.038078029
82.54394531	3.00831E-06	0.027596614
82.55004883	4.56856E-06	0.042667453
82.55615234	5.26048E-06	0.050134908
82.56225586	8.38404E-06	0.082592556
82.56835938	1.33049E-05	0.135371522
82.57446289	1.40081E-05	0.143040981
82.58056641	1.11363E-05	0.114171493
82.58666992	1.05499E-05	0.110343046
82.59277344	1.21655E-05	0.131274152
82.59887695	1.3953E-05	0.158854073
82.60498047	1.45724E-05	0.174546121
82.61108398	1.18582E-05	0.144902924
82.6171875	7.39276E-06	0.092050442
82.62329102	6.30817E-06	0.080500077
82.62939453	6.42948E-06	0.083879505
82.63549805	6.59785E-06	0.089752473
82.64160156	9.13326E-06	0.131367597
82.64770508	1.04294E-05	0.154768109
82.65380859	1.2363E-05	0.186971545
82.65991211	1.59425E-05	0.243503972
82.66601563	1.51532E-05	0.22640154
82.67211914	9.99511E-06	0.148156167
82.67822266	8.53798E-06	0.129559993
82.68432617	1.23187E-05	0.188645472
82.69042969	1.47577E-05	0.226640534
82.6965332	1.32744E-05	0.198864503
82.70263672	1.03021E-05	0.143821947
82.70874023	9.14413E-06	0.12206583
82.71484375	9.61619E-06	0.126395559
82.72094727	1.14557E-05	0.14726654
82.72705078	1.26579E-05	0.160683896
82.7331543	1.61477E-05	0.200343523
82.73925781	2.23685E-05	0.264220714
82.74536133	2.18778E-05	0.249703993
82.75146484	1.39446E-05	0.155956579
82.75756836	7.22225E-06	0.079000049
82.76367188	7.86213E-06	0.086071701
82.76977539	1.32788E-05	0.146868804
82.77587891	1.6431E-05	0.17864797
82.78198242	1.48324E-05	0.157611118
82.78808594	8.21512E-06	0.085013526
82.79418945	2.18114E-06	0.021934145
82.80029297	8.27019E-06	0.083784679
82.80639648	7.3823E-06	0.075749278
82.8125	2.33162E-06	0.023503303
82.81860352	2.95247E-06	0.029173705
82.82470703	1.30649E-06	0.012461773
82.83081055	5.14885E-06	0.047643772
82.83691406	9.70955E-06	0.090912701
82.84301758	1.0036E-05	0.095006972
82.84912109	7.47535E-06	0.07058382
82.85522461	4.55882E-06	0.043073625
82.86132813	2.47568E-06	0.023061308
82.86743164	1.74892E-06	0.016236726
82.87353516	2.65144E-06	0.025136171
82.87963867	7.01616E-06	0.06808119
82.88574219	8.06322E-06	0.080887781
82.8918457	4.72281E-06	0.04894195
82.89794922	1.44502E-06	0.015127301
82.90405273	2.51522E-06	0.026501721
82.91015625	6.4202E-06	0.0689487
82.91625977	8.21347E-06	0.091628726
82.92236328	6.64856E-06	0.078546117
82.9284668	6.40121E-06	0.080017663
82.93457031	7.33736E-06	0.093696532
82.94067383	6.1442E-06	0.078452656
82.94677734	2.78259E-06	0.036293213
82.95288086	7.54155E-07	0.010203285
82.95898438	2.04204E-06	0.029115509
82.96508789	4.84262E-06	0.073934793
82.97119141	9.329E-06	0.145335748
82.97729492	1.08659E-05	0.169160606
82.98339844	8.84877E-06	0.140284981
82.98950195	6.54756E-06	0.102636249
82.99560547	6.52942E-06	0.102067394
83.00170898	7.15311E-06	0.114708783
83.0078125	3.6627E-06	0.059055837
83.01391602	5.70574E-06	0.092482164
83.02001953	9.97207E-06	0.158709258
83.02612305	1.05293E-05	0.157270847
83.03222656	1.1839E-05	0.170076942
83.03833008	1.36263E-05	0.193770978
83.04443359	1.33291E-05	0.188000952
83.05053711	1.52878E-05	0.21735637
83.05664063	1.97892E-05	0.281729282
83.06274414	2.09595E-05	0.285923163
83.06884766	1.77623E-05	0.232127463
83.07495117	1.2899E-05	0.166637544
83.08105469	1.10564E-05	0.141492879
83.0871582	1.24934E-05	0.159346115
83.09326172	1.31731E-05	0.16896333
83.09936523	1.24996E-05	0.155632873
83.10546875	1.18722E-05	0.141797254
83.11157227	1.22922E-05	0.142899359
83.11767578	1.3017E-05	0.145805946
83.1237793	1.15324E-05	0.126712853
83.12988281	9.91325E-06	0.109464237
83.13598633	1.1807E-05	0.128321955
83.14208984	1.25168E-05	0.132479594
83.14819336	9.75249E-06	0.100046473
83.15429688	6.40878E-06	0.063387494

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
68.12	-0.013037873	5.69728E-05	0.011922572	2.682578739	2.681688446	2.189361108
68.125	-0.013995358	6.19836E-05	0.012904314	2.903470703	2.681737951	2.191140261
68.13	-0.012310679	5.347E-05	0.011185806	2.516806375	2.681776254	2.193029156
68.135	-0.015908634	7.14386E-05	0.014785975	3.326844444	2.681840219	2.19562356
68.14	-0.019992612	9.21672E-05	0.018886023	4.249355266	2.681941241	2.19813998
68.145	-0.020333978	9.39807E-05	0.019242108	4.329474329	2.682045742	2.200574589
68.15	-0.021794616	0.000101333	0.020697876	4.657022187	2.682165795	2.202926119
68.155	-0.026624553	0.000125824	0.025535789	5.745552498	2.682344955	2.205192559
68.16	-0.028927862	0.000137686	0.027877155	6.272359909	2.682556454	2.207369629
68.165	-0.026571044	0.000125863	0.025490483	5.735358642	2.682734895	2.209455062
68.17	-0.026613164	0.000126016	0.025522056	5.742462513	2.682913901	2.211449993
68.175	-0.03022063	0.000144329	0.029187929	6.567283946	2.683144726	2.213353952
68.18	-0.030019396	0.000143456	0.028997006	6.524326261	2.683372487	2.215164092
68.185	-0.02824901	0.000134459	0.027181207	6.115771642	2.683574177	2.216880107
68.19	-0.031742151	0.000151946	0.030690387	6.905337044	2.683828829	2.218502668
68.195	-0.034440037	0.000165797	0.033421466	7.519829848	2.68412861	2.220028949
68.2	-0.031435615	0.000150671	0.030368295	6.832866388	2.684378368	2.221456772
68.205	-0.030439652	0.00014553	0.029331726	6.599638305	2.684612551	2.222787955
68.21	-0.033663555	0.000161885	0.032632575	7.34232929	2.684898966	2.22402306
68.215	-0.033669082	0.000162038	0.032662501	7.349062788	2.685185475	2.225159765
68.22	-0.031463264	0.000150828	0.030399924	6.839982982	2.685435673	2.226197857
68.225	-0.033580474	0.000161497	0.032553921	7.324632306	2.685720676	2.227144559
68.23	-0.035875209	0.000173242	0.034888816	7.8499836	2.686045962	2.228022789
68.235	-0.033559296	0.000161559	0.032530308	7.319319404	2.686330605	2.228833463
68.24	-0.033415162	0.00016072	0.032361641	7.281369181	2.686612809	2.229577462
68.245	-0.037328533	0.00018053	0.036324578	8.173029979	2.686964984	2.230254679
68.25	-0.037471659	0.000181402	0.036479848	8.207965776	2.687319864	2.230863198
68.255	-0.035078141	0.000169325	0.034042557	7.659575263	2.687630856	2.231402807
68.26	-0.036369372	0.000175769	0.0353438	7.952354996	2.687965164	2.231874541
68.265	-0.03841274	0.000186127	0.037427216	8.421123564	2.688338094	2.232278538
68.27	-0.038427799	0.00018625	0.037448883	8.425998714	2.688711315	2.232638964
68.275	-0.039457076	0.000191429	0.03847131	8.656044717	2.689104798	2.232963319
68.28	-0.041844092	0.00020352	0.040851476	9.191582145	2.68954733	2.233251257
68.285	-0.042866821	0.000208804	0.041891479	9.425582848	2.690011758	2.233502118
68.29	-0.041879391	0.000203925	0.040906248	9.203905779	2.690455036	2.233715607
68.295	-0.041059762	0.000199824	0.040078296	9.017616628	2.690881134	2.233891966
68.3	-0.041521493	0.000202198	0.040557907	9.12552906	2.691316868	2.234031428
68.305	-0.040831513	0.000198804	0.039872513	8.971315424	2.691738241	2.234133964
68.31	-0.039234601	0.00019076	0.038249599	8.60615985	2.692127299	2.234199817
68.315	-0.040145363	0.000195331	0.039172603	8.813835705	2.692534629	2.234229396
68.32	-0.041450348	0.000201981	0.040514844	9.115839903	2.692968872	2.234230551
68.325	-0.040839072	0.000198946	0.039902078	8.977967567	2.693390401	2.234230551
68.33	-0.041982834	0.000204708	0.041065064	9.239639473	2.693835872	2.234230551
68.335	-0.044419402	0.000217085	0.043520581	9.792130655	2.694334551	2.234230551
68.34	-0.044338001	0.000216794	0.0434545	9.777262439	2.694831405	2.234230551
68.345	-0.044410666	0.00021719	0.043534509	9.795264464	2.695329888	2.234230551
68.35	-0.046959193	0.000230106	0.04608126	10.36828361	2.695887224	2.234230551
68.355	-0.048690177	0.000238988	0.047827226	10.76112593	2.696486406	2.234230551
68.36	-0.048865563	0.000240003	0.048026678	10.80600262	2.697089912	2.234230551
68.365	-0.049851759	0.000245085	0.049025351	11.0307039	2.697718024	2.234230551
68.37	-0.051119483	0.00025163	0.050311204	11.32002086	2.698378487	2.234230551
68.375	-0.051220474	0.000252295	0.050440494	11.34911123	2.699041563	2.234230551
68.38	-0.051669834	0.000254679	0.050910079	11.4547678	2.699716324	2.234230551
68.385	-0.053576137	0.000264439	0.052826742	11.88601698	2.700441793	2.234230551
68.39	-0.054833888	0.000270998	0.054114283	12.17571373	2.701201723	2.234230551
68.395	-0.054839355	0.000271239	0.054161369	12.18630809	2.701961806	2.234230551
68.4	-0.055424192	0.000274404	0.054782848	12.32614077	2.702738186	2.234230551
68.405	-0.055477553	0.000274971	0.054888083	12.34981869	2.703516063	2.234230551
68.41	-0.05219594	0.000258943	0.051653175	11.62196427	2.704204635	2.234230551
68.415	-0.045724897	0.000227063	0.045229338	10.17660108	2.704733057	2.234230551
68.42	-0.039345901	0.000195432	0.038867252	8.745131806	2.705124326	2.234230551
68.425	-0.035924047	0.000178405	0.03544716	7.975610927	2.705450497	2.234230551
68.43	-0.034992925	0.000173808	0.03452423	7.767951671	2.70575998	2.234230551
68.435	-0.034876954	0.000173328	0.034428123	7.746327621	2.706067415	2.234230551
68.44	-0.035157949	0.000174894	0.034744399	7.817489768	2.706379824	2.234230551
68.445	-0.033770278	0.000168234	0.033405463	7.516229238	2.706668058	2.234230551
68.45	-0.029411504	0.000146733	0.029093201	6.545970298	2.706886688	2.234230551
68.455	-0.025148171	0.0001256	0.024859381	5.593360754	2.707046529	2.234230551
68.46	-0.021322965	0.000106662	0.021068841	4.740489236	2.707161443	2.234230551
68.465	-0.01528366	7.65987E-05	0.015058684	3.388203877	2.70722048	2.234230551
68.47	-0.009218799	4.62453E-05	0.008999095	2.024796375	2.70724196	2.234230551
68.475	-0.005639332	2.82987E-05	0.005420318	1.219571509	2.707249998	2.234230551
68.48	-0.002248254	1.13462E-05	0.002042452	0.459551723	2.707251275	2.234230551
68.485	0.002283254	-1.13977E-05	-0.00248534	-0.559201406	2.707252593	2.234230551
68.49	0.005718599	-2.87193E-05	-0.005930621	-1.334389737	2.707260858	2.234230551
68.495	0.006758644	-3.39613E-05	-0.006972738	-1.568866086	2.707272403	2.234230551
68.5	0.009141891	-4.58382E-05	-0.009332994	-2.099923699	2.707293526	2.234230551
68.505	0.015936533	-8.00314E-05	-0.016121319	-3.627296842	2.707357715	2.234230551
68.51	0.021209642	-0.000106817	-0.02143215	-4.822233801	2.70747141	2.234230551
68.515	0.020164231	-0.000101714	-0.020400252	-4.59005662	2.707574174	2.234230551
68.52	0.019518629	-9.84023E-05	-0.019732015	-4.439703335	2.707670463	2.234230551
68.525	0.02428401	-0.000122406	-0.024520144	-5.517032366	2.707819507	2.234230551
68.53	0.029274051	-0.000147776	-0.029541382	-6.646810907	2.708036099	2.234230551
68.535	0.029874022	-0.00015102	-0.030178266	-6.790109863	2.70826166	2.234230551
68.54	0.028456686	-0.000143937	-0.028748176	-6.468339687	2.708466325	2.234230551
68.545	0.029947828	-0.000151465	-0.030268254	-6.810357253	2.708693002	2.234230551
68.55	0.033866816	-0.000171367	-0.034205633	-7.696267408	2.708982886	2.234230551
68.555	0.034734899	-0.000175962	-0.035110848	-7.899940779	2.709287821	2.234230551
68.56	0.033395652	-0.00016929	-0.033763922	-7.596882378	2.709569696	2.234230551
68.565	0.035147079	-0.000178164	-0.03554865	-7.998446265	2.709881911	2.234230551
68.57	0.037993018	-0.000192684	-0.038416593	-8.64373336	2.710246735	2.234230551
68.575	0.038090048	-0.000193351	-0.038542554	-8.672074646	2.710613425	2.234230551
68.58	0.037790152	-0.000191917	-0.038252985	-8.606921606	2.710974364	2.234230551
68.585	0.039755573	-0.000201899	-0.040235602	-9.05301045	2.711373823	2.234230551
68.59	0.04287132	-0.000217764	-0.043365834	-9.757312637	2.711838348	2.234230551
68.595	0.044620849	-0.000226792	-0.0451463	-10.15791741	2.712341561	2.234230551
68.6	0.044805324	-0.000227872	-0.045359239	-10.20582876	2.712848943	2.234230551
68.605	0.046550567	-0.000236772	-0.04711371	-10.60058465	2.713396622	2.234230551
68.61	0.050181032	-0.000255268	-0.050757645	-11.42047015	2.714033058	2.234230551
68.615	0.052026559	-0.000264837	-0.052641835	-11.84441286	2.714717169	2.234230551
68.62	0.051905957	-0.000264428	-0.052559231	-11.825827	2.715398111	2.234230551
68.625	0.052946527	-0.00026982	-0.053622847	-12.0651406	2.716106629	2.234230551
68.63	0.055718708	-0.000283996	-0.05641237	-12.69278335	2.716891282	2.234230551
68.635	0.058171594	-0.000296649	-0.058900687	-13.25265456	2.717746542	2.234230551

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
83.16040039	5.70379E-06	0.056359055
83.16650391	5.92418E-06	0.059883623
83.17260742	6.65955E-06	0.067776815
83.17871094	8.64087E-06	0.087819543
83.18481445	6.97367E-06	0.070083773
83.19091797	1.88289E-06	0.01871841
83.19702148	2.7204E-06	0.027511744
83.203125	4.68502E-06	0.048676821
83.20922852	3.88311E-06	0.041314486
83.21533203	1.58643E-06	0.017381168
83.22143555	2.36235E-06	0.026234375
83.22753906	3.6602E-06	0.040848993
83.23364258	4.96887E-06	0.056796273
83.23974609	6.58837E-06	0.077500553
83.24584961	7.46734E-06	0.091278548
83.25195313	7.88341E-06	0.101831807
83.25805664	9.57826E-06	0.12656563
83.26416016	1.19207E-05	0.15671281
83.27026367	1.22376E-05	0.162596088
83.27636719	8.53676E-06	0.115576234
83.2824707	3.28623E-06	0.046429459
83.28857422	1.0991E-06	0.016586518
83.29467773	9.73889E-07	0.015117669
83.30078125	4.82826E-06	0.075445976
83.30688477	7.29058E-06	0.116169504
83.31298828	6.17806E-06	0.099101574
83.3190918	7.5449E-06	0.12445219
83.32519531	9.52944E-06	0.168070449
83.33129883	6.61845E-06	0.12040458
83.33740234	3.38412E-06	0.061534969
83.34350586	2.78397E-06	0.051282843
83.34960938	3.79164E-06	0.068722759
83.35571289	7.11569E-06	0.126080631
83.36181641	7.23776E-06	0.129141068
83.36791992	1.11281E-05	0.197692857
83.37402344	1.33286E-05	0.23742771
83.38012695	1.02595E-05	0.184029452
83.38623047	5.88675E-06	0.099950966
83.39233398	3.26376E-06	0.051920491
83.3984375	4.15676E-06	0.064022431
83.40454102	7.91301E-06	0.118846072
83.41064453	1.22131E-05	0.181946214
83.41674805	1.45751E-05	0.214578546
83.42285156	1.42672E-05	0.199102998
83.42895508	1.12085E-05	0.148543648
83.43505859	7.12387E-06	0.091682104
83.44116211	6.51593E-06	0.08130851
83.44726563	9.11607E-06	0.111602164
83.45336914	1.12803E-05	0.13727624
83.45947266	1.20286E-05	0.142827768
83.46557617	1.1391E-05	0.131478231
83.47167969	6.87572E-06	0.077548658
83.4777832	6.35832E-06	0.069258401
83.48388672	1.26235E-05	0.135819065
83.48999023	1.1082E-05	0.121362574
83.49609375	7.39479E-06	0.081468829
83.50219727	9.82802E-06	0.108228554
83.50830078	9.91669E-06	0.108153058
83.5144043	8.59527E-06	0.091270573
83.52050781	6.48319E-06	0.069112306
83.52661133	3.38852E-06	0.037363258
83.53271484	2.82124E-06	0.031955638
83.53881836	4.41394E-06	0.05102787
83.54492188	5.86525E-06	0.067725527
83.55102539	3.39302E-06	0.038629946
83.55712891	3.52709E-06	0.040735587
83.56323242	8.05424E-06	0.095315405
83.56933594	1.04957E-05	0.126372289
83.57543945	1.06656E-05	0.132342436
83.58154297	9.32506E-06	0.118325159
83.58764648	8.50936E-06	0.108180597
83.59375	6.99753E-06	0.089957322
83.59985352	4.08002E-06	0.053655485
83.60595703	1.95674E-06	0.026790532
83.61206055	2.16146E-06	0.031861417
83.61816406	3.35664E-06	0.05289004
83.62426758	3.05238E-06	0.049589706
83.63037109	4.42666E-06	0.07375188
83.63647461	4.6543E-06	0.079365783
83.64257813	2.64456E-06	0.04736979
83.64868164	2.26328E-06	0.044515371
83.65478516	2.26238E-06	0.047427696
83.66088867	5.02649E-06	0.107522177
83.66699219	7.5028E-06	0.162645969
83.6730957	8.06893E-06	0.170420013
83.67919922	6.82941E-06	0.140540099
83.68530273	6.58904E-06	0.137080613
83.69140625	8.55292E-06	0.177365063
83.69750977	1.20646E-05	0.246112798
83.70361328	1.61505E-05	0.326717026
83.7097168	1.74177E-05	0.337742307
83.71582031	1.55302E-05	0.282771935
83.72192383	1.47108E-05	0.258707895
83.72802734	1.4713E-05	0.253601515
83.73413086	1.48732E-05	0.253891059
83.74023438	1.80452E-05	0.310473042
83.74633789	2.24031E-05	0.372512538
83.75244141	2.4E-05	0.372870316
83.75854492	2.13984E-05	0.322011533
83.76464844	1.75831E-05	0.259601162
83.77075195	1.7181E-05	0.250268812
83.77685547	1.90839E-05	0.281376588
83.78295898	2.0168E-05	0.29241637
83.7890625	1.95773E-05	0.272863453

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
68.64	0.058702322	-0.000299625	-0.059485812	-13.38430762	2.718617478	2.234230551
68.645	0.05811301	-0.000296901	-0.058935738	-13.26054102	2.719471016	2.234230551
68.65	0.058149158	-0.000297308	-0.059017901	-13.27902771	2.720325616	2.234230551
68.655	0.058845106	-0.000301075	-0.059770962	-13.44846641	2.721200794	2.234230551
68.66	0.059106515	-0.0003027	-0.060090231	-13.52030186	2.722083766	2.234230551
68.665	0.057599491	-0.000295421	-0.058620629	-13.18964161	2.722922285	2.234230551
68.67	0.054472175	-0.0002799	-0.05548948	-12.48513309	2.723672223	2.234230551
68.675	0.052955005	-0.00027245	-0.053987656	-12.14722261	2.724380968	2.234230551
68.68	0.05263168	-0.000271123	-0.053720349	-12.08707846	2.725081085	2.234230551
68.685	0.049259263	-0.000254619	-0.050396069	-11.33911559	2.725694355	2.234230551
68.69	0.045276884	-0.000235075	-0.046463576	-10.4543045	2.726212473	2.234230551
68.695	0.043346632	-0.000225759	-0.044590615	-10.03288843	2.726687356	2.234230551
68.7	0.039414241	-0.000206557	-0.040733065	-9.164939592	2.727079985	2.234230551
68.705	0.032917952	-0.000174488	-0.03429919	-7.71731765	2.727353853	2.234230551
68.71	0.025911735	-0.000139765	-0.027344352	-6.152479144	2.727523548	2.234230551
68.715	0.017899486	-9.98984E-05	-0.019373796	-4.35910402	2.727604524	2.234230551
68.72	0.00981159	-5.94974E-05	-0.011311483	-2.545083692	2.727628855	2.234230551
68.725	0.002152075	-2.11218E-05	-0.003667079	-0.825092678	2.727630025	2.234230551
68.73	-0.005060394	1.51509E-05	0.003546433	0.797947335	2.727636498	2.234230551
68.735	-0.009758606	3.88618E-05	0.008255606	1.857511273	2.727660566	2.234230551
68.74	-0.012891681	5.46501E-05	0.011388635	2.562442783	2.727702571	2.234230551
68.745	-0.016262996	7.16413E-05	0.014757969	3.320542989	2.727769417	2.234230551
68.75	-0.017970969	8.02843E-05	0.01647093	3.705959353	2.727851041	2.234230551
68.755	-0.018466383	8.27539E-05	0.016960281	3.816063336	2.727937228	2.234230551
68.76	-0.020247171	9.16509E-05	0.018722736	4.212615547	2.728040838	2.234230551
68.765	-0.022599818	0.000103449	0.021058946	4.738262918	2.728169926	2.234230551
68.77	-0.024877878	0.000114878	0.023320812	5.247182589	2.72832635	2.234230551
68.775	-0.027589172	0.000128505	0.026016463	5.853704287	2.728518727	2.234230551
68.78	-0.029833052	0.000139809	0.028251253	6.356531894	2.728743669	2.234230551
68.785	-0.031249352	0.000146933	0.029659203	6.673320623	2.728990477	2.234230551
68.79	-0.032963806	0.000155537	0.031359133	7.05580492	2.729265108	2.234230551
68.795	-0.035165956	0.000166612	0.033546156	7.547885198	2.729577659	2.234230551
68.8	-0.036888325	0.000175277	0.035256798	7.932779566	2.729921576	2.234230551
68.805	-0.038687801	0.000184296	0.037036603	8.333235588	2.730299866	2.234230551
68.81	-0.04197284	0.000200796	0.040290832	9.065437195	2.730745125	2.234230551
68.815	-0.045695915	0.000219553	0.043987694	9.897231213	2.731272878	2.234230551
68.82	-0.049126897	0.000236847	0.047393647	10.66357062	2.731882856	2.234230551
68.825	-0.053566155	0.000259442	0.051840265	11.66405973	2.732608055	2.234230551
68.83	-0.058079905	0.00028252	0.056375468	12.68448028	2.73346062	2.234230551
68.835	-0.061616336	0.000300657	0.059932703	13.48485825	2.73442017	2.234230551
68.84	-0.065504959	0.000320621	0.063845216	14.36517365	2.735504657	2.234230551
68.845	-0.068685396	0.000337042	0.067061232	15.08877713	2.73669701	2.234230551
68.85	-0.070695821	0.000347462	0.069100894	15.54770109	2.737960184	2.234230551
68.855	-0.07419088	0.000365457	0.072621375	16.33980929	2.739351344	2.234230551
68.86	-0.077883851	0.000384566	0.076357154	17.18035957	2.740884445	2.234230551
68.865	-0.079738052	0.000394272	0.078253548	17.6070483	2.742491413	2.234230551
68.87	-0.08231314	0.000407621	0.080860593	18.19363337	2.744203848	2.234230551
68.875	-0.085603235	0.000424683	0.084190896	18.94295156	2.746055914	2.234230551
68.88	-0.08731455	0.000433694	0.085948968	19.33851791	2.747982769	2.234230551
68.885	-0.088742111	0.000441214	0.087415447	19.66847547	2.749973146	2.234230551
68.89	-0.090744176	0.000451677	0.089455363	20.12745674	2.752054345	2.234230551
68.895	-0.09240171	0.000460392	0.091154021	20.50965478	2.754212268	2.234230551
68.9	-0.093828704	0.000467931	0.092622853	20.84014187	2.756437356	2.234230551
68.905	-0.094890073	0.000473605	0.093727994	21.08879856	2.758713069	2.234230551
68.91	-0.095732087	0.000478145	0.094612056	21.28771257	2.761029349	2.234230551
68.915	-0.096608747	0.00048287	0.095532273	21.49476148	2.763388245	2.234230551
68.92	-0.096660702	0.000483384	0.095629704	21.51668336	2.765749679	2.234230551
68.925	-0.096685259	0.000483722	0.095698077	21.53206729	2.768112313	2.234230551
68.93	-0.097517134	0.00048821	0.096571705	21.72863362	2.770515778	2.234230551
68.935	-0.097325416	0.000487505	0.096423298	21.69524196	2.772909802	2.234230551
68.94	-0.095901711	0.000480472	0.095003526	21.37579327	2.775234297	2.234230551
68.945	-0.094583587	0.00047396	0.093689475	21.08013195	2.777495333	2.234230551
68.95	-0.092855719	0.000465355	0.091954001	20.68965029	2.779674514	2.234230551
68.955	-0.090904477	0.00045559	0.089985865	20.24681955	2.781763071	2.234230551
68.96	-0.089053148	0.000446341	0.088122769	19.82762302	2.783767425	2.234230551
68.965	-0.086624797	0.000434147	0.085667937	19.27528575	2.785663958	2.234230551
68.97	-0.083780028	0.000419813	0.082784579	18.62653022	2.787437972	2.234230551
68.975	-0.080570648	0.000403603	0.079526331	17.89342442	2.789078673	2.234230551
68.98	-0.077579173	0.000388481	0.07648954	17.21014644	2.790599803	2.234230551
68.985	-0.075520452	0.000378159	0.074417987	16.74404697	2.792041271	2.234230551
68.99	-0.072373187	0.000362333	0.071243906	16.02987892	2.793365099	2.234444271
68.995	-0.067296239	0.000337233	0.066215079	14.89839275	2.794509708	2.235085481
69	-0.062215004	0.000312054	0.061176489	13.76470997	2.795487995	2.235722513
69.005	-0.056000487	0.000281183	0.055007214	12.37662311	2.796280605	2.236353524
69.01	-0.048170315	0.000242108	0.047210982	10.62247088	2.79686706	2.237277806
69.015	-0.040485074	0.000203638	0.039549119	8.898551738	2.797281314	2.238727721
69.02	-0.031602461	0.00015905	0.030685142	6.904156977	2.79753373	2.240153865
69.025	-0.02109815	0.000106061	0.020173068	4.538940285	2.797646233	2.241550226
69.03	-0.012588178	6.28617E-05	0.011620764	2.614671993	2.797686283	2.243117715
69.035	-0.008192343	4.03342E-05	0.007167023	1.612580076	2.797703246	2.245620892
69.04	-0.008251657	4.03413E-05	0.007181278	1.615787579	2.797720455	2.248057445
69.045	-0.012333529	6.05741E-05	0.011263562	2.534301427	2.797758901	2.250426837
69.05	-0.0164786	8.11636E-05	0.01541226	3.467758423	2.797827531	2.25273196
69.055	-0.017107734	8.43714E-05	0.016057863	3.613019239	2.797901502	2.254975802
69.06	-0.016556809	8.16421E-05	0.015506712	3.489010283	2.797970785	2.257158689
69.065	-0.018249724	9.00128E-05	0.017193781	3.868600765	2.798054962	2.259628029
69.07	-0.02183553	0.000107855	0.020783046	4.676185334	2.798175466	2.262125898
69.075	-0.024959895	0.000123519	0.023931298	5.384542125	2.798332923	2.264455415
69.08	-0.025735075	0.000127583	0.02474764	5.568218942	2.798500312	2.266619546
69.085	-0.02479601	0.000123106	0.023843644	5.364819868	2.798655708	2.26861892
69.09	-0.024543522	0.000122013	0.023622881	5.315148335	2.798807955	2.270467235
69.095	-0.024144292	0.000120253	0.023267682	5.235228488	2.79895529	2.273342252
69.1	-0.02134816	0.000106609	0.02051503	4.615881711	2.799070475	2.276445546
69.105	-0.018053428	9.04215E-05	0.0172524	3.881790004	2.79915285	2.27947045
69.11	-0.015428129	7.75592E-05	0.014662261	3.299008807	2.799213009	2.282412363
69.115	-0.011499243	5.8207E-05	0.010768802	2.422980552	2.79924643	2.285267073
69.12	-0.007486063	3.83212E-05	0.006772324	1.523773004	2.799260594	2.28802925
69.125	-0.005758567	2.97752E-05	0.005080915	1.14320579	2.799268975	2.290693653
69.13	-0.005546947	2.88316E-05	0.004894547	1.101272963	2.799276751	2.293257488
69.135	-0.004991329	2.62626E-05	0.004387143	0.987107143	2.799283048	2.295719775
69.14	-0.001949304	1.13835E-05	0.001449492	0.326135671	2.799284008	2.298079088
69.145	0.004429784	-2.07618E-05	-0.004890996	-1.100474027	2.799288968	2.30033106
69.15	0.010948386	-5.38166E-05	-0.011402268	-2.565510268	2.799319263	2.302467744
69.155	0.014222955	-7.04642E-05	-0.014678296	-3.302616589	2.799370391	2.304502281

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
83.79516602	1.73672E-05	0.238195712
83.80126953	1.54471E-05	0.206684053
83.80737305	1.36415E-05	0.17936957
83.81347656	1.14829E-05	0.153124952
83.81958008	1.09147E-05	0.145455745
83.82568359	1.19833E-05	0.157993545
83.83178711	1.31212E-05	0.170857871
83.83789063	1.31332E-05	0.164302481
83.84399414	1.22882E-05	0.150183742
83.85009766	1.21392E-05	0.150155461
83.85620117	1.41242E-05	0.176086652
83.86230469	1.57686E-05	0.196993452
83.8684082	1.4562E-05	0.180534424
83.87451172	1.13145E-05	0.136562636
83.88061523	8.92131E-06	0.107199305
83.88671875	7.93599E-06	0.098097388
83.89282227	6.95718E-06	0.088270478
83.89892578	6.16165E-06	0.080504956
83.9050293	6.97547E-06	0.094088659
83.91113281	7.95342E-06	0.108250853
83.91723633	7.44606E-06	0.103463858
83.92333984	5.26032E-06	0.07633622
83.92944336	2.40966E-06	0.036190515
83.93554688	6.86513E-07	0.010893072
83.94165039	1.28983E-06	0.021917447
83.94775391	3.88531E-06	0.067724054
83.95385742	5.87721E-06	0.104005559
83.95996094	5.55105E-06	0.100147071
83.96606445	4.42031E-06	0.082050219
83.97216797	4.22661E-06	0.0850024
83.97827148	7.8272E-06	0.169280838
83.984375	1.24654E-05	0.271259764
83.99047852	1.4941E-05	0.326950772
83.99658203	1.4805E-05	0.321680393
84.00268555	1.31587E-05	0.280934122
84.00878906	1.24545E-05	0.275369449
84.01489258	1.338E-05	0.304053879
84.02099609	1.40922E-05	0.310282492
84.02709961	1.48475E-05	0.323075758
84.03320313	1.82709E-05	0.387899062
84.03930664	2.22959E-05	0.442357641
84.04541016	2.3722E-05	0.453755639
84.05151367	2.3251E-05	0.43520582
84.05761719	2.33532E-05	0.427741007
84.0637207	2.30276E-05	0.42770178
84.06982422	2.10194E-05	0.388022894
84.07592773	1.90889E-05	0.334622912
84.08203125	1.95939E-05	0.332095632
84.08813477	2.17741E-05	0.361687077
84.09423828	2.30436E-05	0.377831444
84.1003418	2.23891E-05	0.374247655
84.10644531	2.02386E-05	0.338426284
84.11254883	1.81066E-05	0.288060073
84.11865234	1.70948E-05	0.261732611
84.12475586	1.69373E-05	0.252842544
84.13085938	1.6892E-05	0.246606356
84.13696289	1.56417E-05	0.22830394
84.14306641	1.27307E-05	0.182533443
84.14916992	1.19845E-05	0.165333756
84.15527344	1.3994E-05	0.18924849
84.16137695	1.52956E-05	0.199477571
84.16748047	1.60764E-05	0.202152579
84.17358398	1.6162E-05	0.205927459
84.1796875	1.69395E-05	0.220744315
84.18579102	1.9478E-05	0.256138997
84.19189453	1.95893E-05	0.260128372
84.19799805	1.57201E-05	0.205700653
84.20410156	1.18694E-05	0.153798022
84.21020508	1.18456E-05	0.158800603
84.21630859	1.46122E-05	0.205515438
84.22241211	1.62971E-05	0.238765157
84.22851563	1.59357E-05	0.240064456
84.23461914	1.50052E-05	0.22533964
84.24072266	1.36097E-05	0.205262306
84.24682617	1.15697E-05	0.181288396
84.25292969	1.11024E-05	0.180866798
84.2590332	1.38904E-05	0.23489501
84.26513672	1.7589E-05	0.31110181
84.27124023	1.87784E-05	0.33869188
84.27734375	1.82119E-05	0.33342706
84.28344727	1.80587E-05	0.339871012
84.28955078	1.78481E-05	0.344573237
84.2956543	1.68395E-05	0.350497602
84.30175781	1.59827E-05	0.369755548
84.30786133	1.60395E-05	0.383350953
84.31396484	1.54753E-05	0.376680336
84.32006836	1.42834E-05	0.355027501
84.32617188	1.38852E-05	0.339866167
84.33227539	1.39897E-05	0.357282289
84.33837891	1.50781E-05	0.414571242
84.34448242	1.70065E-05	0.471750639
84.35058594	1.82003E-05	0.503428088
84.35668945	1.85802E-05	0.504216011
84.36279297	1.82802E-05	0.471357743
84.36889648	1.65354E-05	0.415969016
84.375	1.41296E-05	0.35426994
84.38110352	1.35249E-05	0.332510384
84.38720703	1.61436E-05	0.39239804
84.39331055	1.91144E-05	0.463333538
84.39941406	1.87979E-05	0.433819014
84.40551758	1.53623E-05	0.333121742
84.41162109	1.15413E-05	0.24086038
84.41772461	9.51579E-06	0.191420894
84.42382813	8.80359E-06	0.175131467

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
69.16	0.016583924	-8.23769E-05	-0.017021242	-3.829779532	2.799439901	2.306440931
69.165	0.02138763	-0.00010673	-0.021807344	-4.906652497	2.799555513	2.308280791
69.17	0.026186389	-0.00013119	-0.026609916	-5.987231093	2.799728824	2.310017314
69.175	0.028372658	-0.000142333	-0.028796288	-6.479164719	2.799932283	2.311646023
69.18	0.031881485	-0.000160131	-0.032286398	-7.264439553	2.800189176	2.313164205
69.185	0.038189936	-0.000192332	-0.038594718	-8.683811473	2.800557792	2.314568197
69.19	0.042128458	-0.000212565	-0.042554419	-9.574744384	2.801006359	2.316374696
69.195	0.044286861	-0.00022362	-0.044716479	-10.06120785	2.801502066	2.319020943
69.2	0.048850858	-0.00024699	-0.049284348	-11.08897833	2.802105209	2.321541204
69.205	0.052495525	-0.000265774	-0.052952956	-11.9144151	2.802801708	2.323931217
69.21	0.053928162	-0.000273178	-0.054398165	-12.23958716	2.803536742	2.326187381
69.215	0.057293798	-0.000290455	-0.057769054	-12.99803704	2.804366385	2.328307589
69.22	0.060288247	-0.000305933	-0.060787135	-13.67710547	2.805285016	2.330288695
69.225	0.060885803	-0.000309073	-0.061399078	-13.81479264	2.806221948	2.332127909
69.23	0.063584522	-0.000322917	-0.064096847	-14.42179048	2.807243778	2.333823979
69.235	0.067016189	-0.000340659	-0.067551837	-15.19916324	2.808378881	2.33540901
69.24	0.067472561	-0.000343121	-0.06803036	-15.30683104	2.809529497	2.336895565
69.245	0.06877583	-0.000349827	-0.069334752	-15.60031929	2.810724992	2.338282904
69.25	0.072031562	-0.000366616	-0.072596439	-16.33419867	2.812036351	2.339569986
69.255	0.073404697	-0.00037379	-0.073989487	-16.6476345	2.813398183	2.340754941
69.26	0.074356075	-0.000378722	-0.074947044	-16.86308488	2.814795545	2.341836696
69.265	0.077236845	-0.000393566	-0.077827944	-17.51128739	2.816303279	2.34281441
69.27	0.079729144	-0.000406482	-0.08033327	-18.07498577	2.817909888	2.343686403
69.275	0.081259723	-0.000414442	-0.081876606	-18.42223646	2.819578774	2.344451126
69.28	0.08377841	-0.000427458	-0.084399549	-18.98989861	2.821352719	2.345112972
69.285	0.086748107	-0.00044284	-0.087379288	-19.6603397	2.823254655	2.345711708
69.29	0.088857077	-0.000453823	-0.089505891	-20.13882553	2.825250193	2.34625453
69.295	0.091039164	-0.000465166	-0.091701394	-20.63281371	2.827344944	2.346740713
69.3	0.093784187	-0.000479429	-0.094460725	-21.25366305	2.829567922	2.347169536
69.305	0.095799397	-0.000489981	-0.096501281	-21.71278828	2.83188746	2.34754018
69.31	0.09735593	-0.000498163	-0.098082895	-22.06865133	2.834282985	2.347852011
69.315	0.099492477	-0.000509335	-0.100241692	-22.55438076	2.836784807	2.348104521
69.32	0.100985548	-0.000517245	-0.101769729	-22.89818894	2.839362282	2.348297118
69.325	0.101617114	-0.000520717	-0.102440313	-23.04907044	2.841972096	2.348429389
69.33	0.102834937	-0.000527197	-0.103691662	-23.33062403	2.84464484	2.348501137
69.335	0.103556161	-0.000531174	-0.104459453	-23.50337698	2.847355205	2.34851423
69.34	0.102948769	-0.000528315	-0.103882031	-23.37345698	2.850033869	2.34851423
69.345	0.102655809	-0.000527043	-0.10362515	-23.31565884	2.852697309	2.34851423
69.35	0.102356852	-0.000525773	-0.103368875	-23.25799692	2.855345259	2.34851423
69.355	0.100837887	-0.000518254	-0.101851262	-22.9165339	2.857915201	2.34851423
69.36	0.09843546	-0.000506179	-0.099416094	-22.36862112	2.860364147	2.34851423
69.365	0.09547243	-0.000491196	-0.096396815	-21.68928337	2.862667878	2.348583722
69.37	0.092315026	-0.000475186	-0.093173576	-20.96405457	2.864821754	2.349974077
69.375	0.088980156	-0.000458248	-0.089766812	-20.19753273	2.866822824	2.351266374
69.38	0.08541146	-0.000440084	-0.086116873	-19.37629639	2.8686666	2.352456969
69.385	0.081864818	-0.000422008	-0.082488058	-18.55981306	2.870360433	2.353542415
69.39	0.07812174	-0.000402882	-0.078652261	-17.69675876	2.871902914	2.354519519
69.395	0.075180509	-0.00038781	-0.075631969	-17.01719296	2.873331434	2.355385344
69.4	0.074323099	-0.000383428	-0.074754281	-16.81971321	2.874727557	2.356137497
69.405	0.074529593	-0.00038454	-0.074978853	-16.870242	2.876131448	2.356774434
69.41	0.075744716	-0.000390848	-0.076252449	-17.15680108	2.87758149	2.357295264
69.415	0.078038558	-0.000402778	-0.07865944	-17.69837405	2.879120688	2.357699704
69.42	0.078621529	-0.000406005	-0.079310012	-17.84475272	2.880682968	2.357987976
69.425	0.077681302	-0.000401372	-0.078374627	-17.63429104	2.882208105	2.358160149
69.43	0.077421153	-0.000400229	-0.078143862	-17.58236888	2.883723044	2.358216169
69.435	0.076125983	-0.00039381	-0.076848242	-17.29085444	2.885187721	2.358538846
69.44	0.073843234	-0.00038226	-0.074520361	-16.76708129	2.886565873	2.359819262
69.445	0.073037928	-0.000378262	-0.073719754	-16.58694462	2.887914131	2.36100053
69.45	0.073132299	-0.00037892	-0.073852738	-16.61686604	2.889265874	2.362080342
69.455	0.073592063	-0.000381491	-0.074371862	-16.73366898	2.890634668	2.363056907
69.46	0.073881952	-0.000383263	-0.074729553	-16.81414945	2.892014266	2.363928775
69.465	0.072151507	-0.000374709	-0.073008477	-16.42690729	2.893329996	2.364694615
69.47	0.068580228	-0.000356685	-0.069401966	-15.61544225	2.8945187	2.365352771
69.475	0.063375434	-0.000330909	-0.064249614	-14.45616314	2.895533821	2.365901239
69.48	0.057736288	-0.000302826	-0.05864314	-13.19470648	2.896376328	2.366546747
69.485	0.054384834	-0.000286133	-0.055314086	-12.44566944	2.897123863	2.368650561
69.49	0.052558988	-0.000277144	-0.053522508	-12.04256431	2.897822047	2.370559443
69.495	0.050596676	-0.000267528	-0.051606607	-11.61148647	2.898469071	2.372270063
69.5	0.047373306	-0.000251676	-0.048450181	-10.90129083	2.89903628	2.373806269
69.505	0.039103877	-0.00021041	-0.04024389	-9.054875256	2.89942275	2.375252042
69.51	0.028120704	-0.000155141	-0.029275748	-6.587043277	2.899622611	2.376605336
69.515	0.021798019	-0.000123127	-0.022934454	-5.16025211	2.899742702	2.377861364
69.52	0.018726764	-0.000107601	-0.019862211	-4.468997486	2.899831336	2.379016635
69.525	0.014904861	-8.8301E-05	-0.016045874	-3.610321723	2.899887484	2.38006875
69.53	0.011841095	-7.27861E-05	-0.012980228	-2.920551255	2.899922921	2.381015443
69.535	0.009949057	-6.3226E-05	-0.011092169	-2.49573812	2.899947938	2.381854795
69.54	0.008266524	-5.47698E-05	-0.009422765	-2.120122176	2.899965209	2.382585369
69.545	0.00571322	-4.196E-05	-0.006894983	-1.551371232	2.899973459	2.383205962
69.55	0.000787539	-1.70606E-05	-0.001985292	-0.446690589	2.899973616	2.383715232
69.555	-0.003934108	6.94083E-06	0.002742658	0.617098005	2.899977527	2.384111412
69.56	-0.006009818	1.75199E-05	0.004825142	1.085656926	2.899986656	2.384392966
69.565	-0.007850529	2.68307E-05	0.006657214	1.497873106	2.900002232	2.38455918
69.57	-0.010979309	4.2669E-05	0.009772157	2.198735382	2.900032699	2.384609624
69.575	-0.014774231	6.19268E-05	0.013556966	3.050317382	2.900087867	2.385612329
69.58	-0.0177846	7.72468E-05	0.0165658	3.727304937	2.900167807	2.388700362
69.585	-0.019237794	8.46132E-05	0.018011915	4.052680974	2.900261345	2.391637416
69.59	-0.022707994	0.000102187	0.021460159	4.828535795	2.900391671	2.394420564
69.595	-0.028686441	0.000132701	0.027441745	6.174392645	2.900599655	2.397045993
69.6	-0.032012163	0.00014979	0.030788661	6.927448762	2.900858659	2.399508919
69.605	-0.034103201	0.000160485	0.032882205	7.398496234	2.901152604	2.40180591
69.61	-0.038503433	0.000183018	0.037290104	8.390273499	2.901527296	2.403934323
69.615	-0.041229229	0.000197092	0.040041198	9.009269465	2.901956918	2.405890821
69.62	-0.041639489	0.000199237	0.04046039	9.103587715	2.902395132	2.407673045
69.625	-0.044407803	0.000213364	0.04322022	9.724549603	2.902893551	2.409279875
69.63	-0.048799244	0.000235911	0.047621912	10.71493026	2.903495421	2.410709303
69.635	-0.052227563	0.00025358	0.051068612	11.49043759	2.904184827	2.411958604
69.64	-0.055185018	0.000268839	0.054043289	12.15973992	2.904954521	2.413089185
69.645	-0.057868035	0.000282703	0.056744715	12.76756092	2.905800878	2.41416147
69.65	-0.060300847	0.000295285	0.059195066	13.31888982	2.906719893	2.415259672
69.655	-0.062861408	0.000308531	0.061773382	13.89901096	2.907718614	2.417971273
69.66	-0.065092724	0.000320112	0.064026616	14.40598853	2.908789494	2.420570101
69.665	-0.066753233	0.00032877	0.065710391	14.78483786	2.909915707	2.423054097
69.67	-0.06858652	0.000338301	0.067563546	15.20179789	2.91110463	2.425421535
69.675	-0.070984731	0.000350761	0.069985092	15.74664569	2.91237815	2.427670642

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
84.42993164	8.00396E-06	0.157913188
84.43603516	9.81287E-06	0.180501979
84.44213867	1.20552E-05	0.207336593
84.44824219	1.00672E-05	0.166203536
84.4543457	6.20348E-06	0.09898498
84.46044922	3.21064E-06	0.051626565
84.46655273	2.05838E-06	0.033271239
84.47265625	3.9574E-06	0.06130699
84.47875977	6.7875E-06	0.102006009
84.48486328	8.46972E-06	0.124718519
84.4909668	7.41423E-06	0.107244822
84.49707031	5.3605E-06	0.078789869
84.50317383	4.75655E-06	0.071234079
84.50927734	5.40054E-06	0.081344432
84.51538086	7.3981E-06	0.112489049
84.52148438	9.79958E-06	0.146692232
84.52758789	1.17523E-05	0.171820257
84.53369141	1.27018E-05	0.187518831
84.53979492	1.14971E-05	0.174058072
84.54589844	9.32279E-06	0.144478184
84.55200195	9.82168E-06	0.154905177
84.55810547	1.35516E-05	0.210684149
84.56420898	1.65821E-05	0.252174494
84.5703125	1.63778E-05	0.252469533
84.57641602	1.39279E-05	0.222180383
84.58251953	1.20375E-05	0.199823206
84.58862305	1.17888E-05	0.203132798
84.59472656	1.28612E-05	0.221647154
84.60083008	1.38658E-05	0.238708406
84.60693359	1.42274E-05	0.254756317
84.61303711	1.49049E-05	0.279443684
84.61914063	1.64179E-05	0.327979228
84.62524414	1.75061E-05	0.381795508
84.63134766	1.61152E-05	0.369183808
84.63745117	1.37903E-05	0.327761181
84.64355469	1.47094E-05	0.369233964
84.6496582	1.68717E-05	0.440440362
84.65576172	1.80144E-05	0.505837451
84.66186523	1.87975E-05	0.609613737
84.66796875	2.00084E-05	0.722708103
84.67407227	2.21112E-05	0.804309739
84.68017578	2.34587E-05	0.833535791
84.6862793	2.30829E-05	0.785757957
84.69238281	2.10904E-05	0.702075024
84.69848633	1.86647E-05	0.642619352
84.70458984	1.80763E-05	0.618845999
84.71069336	1.93262E-05	0.629026009
84.71679688	2.02761E-05	0.63002522
84.72290039	2.01659E-05	0.567261091
84.72900391	2.0658E-05	0.527541778
84.73510742	2.10508E-05	0.511727306
84.74121094	1.99532E-05	0.462953756
84.74731445	1.88844E-05	0.424981435
84.75341797	1.89596E-05	0.421699122
84.75952148	1.97251E-05	0.420844991
84.765625	2.19766E-05	0.441464747
84.77172852	2.37441E-05	0.453159888
84.77783203	2.17868E-05	0.401344905
84.78393555	1.76671E-05	0.325818796
84.79003906	1.56721E-05	0.294436349
84.79614258	1.79737E-05	0.331583609
84.80224609	2.17568E-05	0.387373136
84.80834961	2.28173E-05	0.393379777
84.81445313	2.12083E-05	0.353793741
84.82055664	2.10518E-05	0.352727743
84.82666016	2.2186E-05	0.381474376
84.83276367	2.04677E-05	0.3488079
84.83886719	1.68943E-05	0.283445501
84.8449707	1.53899E-05	0.254158093
84.85107422	1.67247E-05	0.269484098
84.85717773	1.85792E-05	0.302363202
84.86328125	1.96494E-05	0.327465501
84.86938477	1.89219E-05	0.316469168
84.87548828	1.58981E-05	0.269261163
84.8815918	1.266E-05	0.212533742
84.88769531	1.12021E-05	0.180796458
84.89379883	1.11532E-05	0.180520856
84.89990234	1.03216E-05	0.173645875
84.90600586	7.18185E-06	0.12522699
84.91210938	4.05426E-06	0.073784434
84.91821289	3.45052E-06	0.063677247
84.92431641	4.66798E-06	0.084989823
84.93041992	6.15676E-06	0.115727649
84.93652344	6.69489E-06	0.133967802
84.94262695	7.0109E-06	0.150112454
84.94873047	8.08044E-06	0.189936443
84.95483398	9.39094E-06	0.232948528
84.9609375	9.00659E-06	0.228267007
84.96704102	7.47782E-06	0.202480404
84.97314453	7.19467E-06	0.204432423
84.97924805	7.81093E-06	0.232646408
84.98535156	9.10798E-06	0.307910299
84.99145508	9.04016E-06	0.337254782
84.99755859	8.32138E-06	0.31817573
85.00366211	8.21936E-06	0.317697479
85.00976563	7.79002E-06	0.292480131
85.01586914	6.92323E-06	0.26098617
85.02197266	6.80825E-06	0.275367158
85.02807617	7.95156E-06	0.335357893
85.03417969	8.87984E-06	0.369866566
85.0402832	8.59213E-06	0.347438877
85.04638672	7.54026E-06	0.281343871
85.05249023	8.16821E-06	0.27707078
85.05859375	1.09165E-05	0.356646603

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
69.68	-0.071994808	0.00035617	0.071035842	15.98306447	2.913688171	2.429799505
69.685	-0.070687105	0.000349646	0.069718631	15.68669206	2.914951034	2.431807071
69.69	-0.070934683	0.000350986	0.069989437	15.74762333	2.916222759	2.433693427
69.695	-0.07369359	0.000365263	0.072801983	16.38044619	2.917595332	2.435457933
69.7	-0.074453794	0.000369388	0.073602222	16.56049989	2.918996369	2.437098822
69.705	-0.07362966	0.000365326	0.072781977	16.37594494	2.920366561	2.43861526
69.71	-0.074218847	0.000368484	0.073419604	16.51941095	2.921758769	2.440007264
69.715	-0.074209152	0.000368619	0.073444583	16.52503126	2.923150614	2.441274389
69.72	-0.073030675	0.000362725	0.072254454	16.25725207	2.924498604	2.442416493
69.725	-0.072599061	0.000360624	0.071830453	16.1618519	2.925830707	2.443434026
69.73	-0.07222753	0.00035884	0.071470406	16.08084136	2.927149211	2.444345972
69.735	-0.072023661	0.000357898	0.071280388	16.03808736	2.928460283	2.445198753
69.74	-0.072170523	0.00035878	0.071458486	16.07815924	2.929776706	2.446373511
69.745	-0.070950475	0.000352659	0.07022348	15.80028307	2.931048997	2.448179938
69.75	-0.070005552	0.000347868	0.069257275	15.58288689	2.932287625	2.44987615
69.755	-0.071224123	0.000354178	0.070531263	15.86953427	2.93356975	2.451462275
69.76	-0.07184516	0.000357504	0.071202603	16.02058568	2.93487433	2.452937468
69.765	-0.070878334	0.000352666	0.07022572	15.80078711	2.936144036	2.454301155
69.77	-0.07060696	0.000351335	0.069957071	15.74034104	2.937404037	2.455553559
69.775	-0.071600463	0.000356494	0.070998651	15.9746965	2.938699746	2.456694635
69.78	-0.072902415	0.00036328	0.072367973	16.28279386	2.940043005	2.457723675
69.785	-0.073098312	0.000364431	0.072600049	16.33501108	2.941393493	2.458639848
69.79	-0.072319094	0.000360533	0.071813052	16.15793666	2.942715342	2.459442953
69.795	-0.073289807	0.000365553	0.072826534	16.38597004	2.944072915	2.46013324
69.8	-0.075736521	0.00037822	0.075317551	16.94644897	2.945522643	2.460710109
69.805	-0.076020444	0.000379881	0.07563021	17.01679716	2.946983261	2.461172316
69.81	-0.07432903	0.000371348	0.073907642	16.62921946	2.948379606	2.46273578
69.815	-0.073863977	0.000369016	0.073437128	16.52335388	2.949758534	2.46414382
69.82	-0.075438623	0.000377143	0.075077745	16.8924927	2.95119688	2.465380498
69.825	-0.078267722	0.000391761	0.077945101	17.53764764	2.952745131	2.466444359
69.83	-0.080885369	0.000405387	0.08058804	18.132309	2.954398675	2.467334221
69.835	-0.081610338	0.000409375	0.081361314	18.30629555	2.956081993	2.468049172
69.84	-0.08021913	0.000402494	0.079971914	17.9936806	2.95770841	2.468588568
69.845	-0.079114033	0.000397009	0.078865012	17.7446276	2.959290324	2.468953934
69.85	-0.079953139	0.000401532	0.079778293	17.95011585	2.960905973	2.46918627
69.855	-0.079286999	0.000398473	0.079160603	17.81113562	2.962494812	2.469297617
69.86	-0.074531578	0.000374904	0.074407946	16.7417878	2.963898778	2.469307962
69.865	-0.068567249	0.000345546	0.068497984	15.4120463	2.965087032	2.469307962
69.87	-0.059900056	0.000302674	0.059884565	13.47402704	2.965993872	2.469307962
69.875	-0.047444614	0.000240545	0.047435768	10.67304787	2.96656279	2.469307962
69.88	-0.040974101	0.000207932	0.040916124	9.206127959	2.966987111	2.469638565
69.885	-0.042591899	0.000215898	0.042524458	9.568002989	2.967445601	2.470345923
69.89	-0.043032205	0.000218187	0.042986145	9.671882669	2.96791362	2.470948573
69.895	-0.041379039	0.000209984	0.041330147	9.299283179	2.968346369	2.471446069
69.9	-0.041105728	0.000208684	0.041067758	9.240245452	2.968773421	2.471837632
69.905	-0.040357437	0.000205089	0.040348124	9.078327944	2.969185066	2.472786707
69.91	-0.037170529	0.000189313	0.037198414	8.369643226	2.969534266	2.474725996
69.915	-0.032529224	0.000166117	0.032571373	7.328559007	2.969801704	2.476446511
69.92	-0.030031742	0.000153578	0.030072112	6.766225206	2.970029652	2.477981288
69.925	-0.02962632	0.000151614	0.029680773	6.678173879	2.970251488	2.479398903
69.93	-0.026535043	0.000136231	0.026616937	5.988810881	2.970429445	2.480697441
69.935	-0.023141834	0.000119176	0.023222472	5.225056198	2.970564799	2.481874592
69.94	-0.023068929	0.000118826	0.023155712	5.210035253	2.970699302	2.482928188
69.945	-0.021183647	0.00010948	0.021293928	4.791133773	2.970812719	2.483856955
69.95	-0.017020271	8.85612E-05	0.017135755	3.855544853	2.970885935	2.484659415
69.955	-0.015564912	8.12027E-05	0.015673965	3.526642227	2.970947166	2.485333767
69.96	-0.014620778	7.64955E-05	0.01473911	3.316299703	2.971001194	2.485878978
69.965	-0.012233684	6.45022E-05	0.012358092	2.780570677	2.97103902	2.48629438
69.97	-0.011427019	6.04255E-05	0.011549019	2.598529277	2.971072022	2.486579234
69.975	-0.011108349	5.88859E-05	0.011243512	2.529790167	2.971103209	2.486733329
69.98	-0.008505108	4.58681E-05	0.008661117	1.948751257	2.971121492	2.486761379
69.985	-0.005502875	3.07713E-05	0.005668083	1.275318577	2.971129145	2.486761379
69.99	-0.003635805	2.13895E-05	0.003809059	0.85703838	2.971132486	2.488377066
69.995	-0.000724279	6.78604E-06	0.000916829	0.206286585	2.971132619	2.48987871
70	0.003283186	-1.34833E-05	-0.003094595	-0.696283902	2.971135343	2.491262543
70.005	0.00581596	-2.63421E-05	-0.00563768	-1.268478047	2.971143892	2.492526053
70.01	0.008137189	-3.80852E-05	-0.007958915	-1.790755806	2.971160627	2.493667211
70.015	0.011636537	-5.58126E-05	-0.011460922	-2.578707525	2.97119485	2.494684213
70.02	0.013830906	-6.69835E-05	-0.013666399	-3.074939857	2.971243198	2.495575201
70.025	0.016154198	-7.87429E-05	-0.015986961	-3.597066178	2.971309153	2.496338743
70.03	0.020475855	-0.000100732	-0.020323328	-4.572748911	2.971415117	2.496973514
70.035	0.022804856	-0.000112705	-0.022682702	-5.103607926	2.971546558	2.497477959
70.04	0.023790382	-0.000117777	-0.02368198	-5.328445566	2.971689605	2.497851143
70.045	0.027223751	-0.000135269	-0.027126128	-6.103378856	2.97187692	2.498092605
70.05	0.030134475	-0.000150206	-0.030065589	-6.764757438	2.972106431	2.498201544
70.055	0.031696905	-0.000158265	-0.031650562	-7.121376528	2.972360358	2.498441927
70.06	0.034602573	-0.000173144	-0.034575808	-7.779556764	2.972662975	2.499807117
70.065	0.036746914	-0.000184217	-0.03675161	-8.269112282	2.97300426	2.501097911
70.07	0.037808339	-0.000189755	-0.037839494	-8.513886184	2.973365546	2.502312954
70.075	0.039853396	-0.00020029	-0.039908213	-8.979347958	2.973766973	2.503451195
70.08	0.041141117	-0.000207016	-0.04122865	-9.276446306	2.974194761	2.504511481
70.085	0.041920052	-0.000211121	-0.042034321	-9.457722147	2.9746389	2.505492873
70.09	0.043703974	-0.000220344	-0.043843969	-9.864893096	2.975121645	2.506394599
70.095	0.044582833	-0.000225012	-0.044759572	-10.07090369	2.975624001	2.507215762
70.1	0.044697435	-0.000225769	-0.044908137	-10.10433091	2.976128943	2.507955726
70.105	0.045189773	-0.000228443	-0.045432575	-10.22232934	2.976645069	2.508614114
70.11	0.045071983	-0.000228021	-0.045345793	-10.2028034	2.977158509	2.509190574
70.115	0.045111252	-0.000228371	-0.04541653	-10.21871936	2.977672843	2.509684932
70.12	0.045489754	-0.000230474	-0.045830719	-10.31191175	2.978195845	2.510097042
70.125	0.044613509	-0.000226215	-0.044970831	-10.1184369	2.978698892	2.510426778
70.13	0.043180511	-0.000219094	-0.043533374	-9.795009148	2.979170142	2.510674374
70.135	0.041670349	-0.000211572	-0.042015945	-9.453587709	2.979609006	2.510840311
70.14	0.039686112	-0.000201624	-0.040010273	-9.002311484	2.98000707	2.510925179
70.145	0.037649954	-0.000191393	-0.037948918	-8.53850664	2.980365336	2.510937445
70.15	0.035279757	-0.000179449	-0.035543969	-7.997392921	2.980679913	2.510937445
70.155	0.033037198	-0.000168125	-0.0332653	-7.484692485	2.980955769	2.510937445
70.16	0.030880865	-0.000157243	-0.031076987	-6.992322138	2.98119679	2.510937445
70.165	0.027957935	-0.00014244	-0.028102041	-6.32295924	2.981394344	2.510937445
70.17	0.025843011	-0.000131694	-0.025943982	-5.837396059	2.98156314	2.510937445
70.175	0.024324685	-0.000124009	-0.024401602	-5.490360392	2.981712684	2.510937445
70.18	0.021592363	-0.000110143	-0.021619772	-4.864448779	2.98183052	2.510937445
70.185	0.019746139	-0.000100714	-0.019729254	-4.439082221	2.981929066	2.510937445
70.19	0.019296697	-9.84173E-05	-0.019268967	-4.335517628	2.982023178	2.510937445
70.195	0.01796552	-9.16703E-05	-0.017916922	-4.031307426	2.982104752	2.510937445

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
85.06469727	1.34629E-05	0.435066846
85.07080078	1.58213E-05	0.494317936
85.0769043	1.85186E-05	0.570213635
85.08300781	1.88221E-05	0.54869318
85.08911133	1.6075E-05	0.422945905
85.09521484	1.29501E-05	0.325665798
85.10131836	1.13121E-05	0.275018067
85.10742188	1.11536E-05	0.259578533
85.11352539	1.18129E-05	0.278149171
85.11962891	1.24837E-05	0.290413357
85.12573242	1.15623E-05	0.252916061
85.13183594	1.01891E-05	0.215266273
85.13793945	1.15994E-05	0.236381953
85.14404297	1.50692E-05	0.301091672
85.15014648	1.86289E-05	0.379059664
85.15625	2.04414E-05	0.407863825
85.16235352	1.9821E-05	0.378562636
85.16845703	1.8849E-05	0.349291455
85.17456055	1.87461E-05	0.335830176
85.18066406	1.8377E-05	0.327638806
85.18676758	1.61671E-05	0.294269235
85.19287109	1.2247E-05	0.221911858
85.19897461	9.38377E-06	0.16862839
85.20507813	8.82271E-06	0.158584613
85.21118164	8.97701E-06	0.15873669
85.21728516	8.73963E-06	0.15489139
85.22338867	1.03664E-05	0.18991903
85.22949219	1.11441E-05	0.209830459
85.2355957	8.31782E-06	0.163401915
85.24169922	5.19067E-06	0.105740664
85.24780273	5.08425E-06	0.101433623
85.25390625	7.23822E-06	0.144981935
85.26000977	8.15222E-06	0.172289173
85.26611328	6.7946E-06	0.14973354
85.2722168	3.68261E-06	0.085682398
85.27832031	1.52157E-06	0.036658868
85.28442383	1.83349E-06	0.043593526
85.29052734	2.14094E-06	0.052752859
85.29663086	2.83352E-06	0.074070918
85.30273438	4.07769E-06	0.111764633
85.30883789	4.67091E-06	0.142007976
85.31494141	4.09493E-06	0.137123552
85.32104492	3.62444E-06	0.127326858
85.32714844	4.10161E-06	0.155438401
85.33325195	2.2651E-06	0.090081384
85.33935547	2.97409E-06	0.120181245
85.34545898	7.94028E-06	0.354452066
85.3515625	8.4569E-06	0.434962546
85.35766602	4.01855E-06	0.215485214
85.36376953	3.70874E-06	0.200965473
85.36987305	7.51821E-06	0.385400445
85.37597656	7.38655E-06	0.332653489
85.38208008	5.63722E-06	0.247245726
85.38818359	7.34722E-06	0.327288781
85.39428711	8.17697E-06	0.349735629
85.40039063	7.00337E-06	0.293636765
85.40649414	5.86198E-06	0.229918543
85.41259766	5.90488E-06	0.203816371
85.41870117	7.77373E-06	0.249751359
85.42480469	1.03506E-05	0.320746685
85.4309082	1.41766E-05	0.423071502
85.43701172	1.69461E-05	0.498923634
85.44311523	1.5375E-05	0.43658807
85.44921875	1.08792E-05	0.284593607
85.45532227	8.54E-06	0.211102126
85.46142578	1.05349E-05	0.249166274
85.4675293	1.37281E-05	0.311856983
85.47363281	1.37505E-05	0.314926915
85.47973633	1.21279E-05	0.278056957
85.48583984	1.11477E-05	0.243034459
85.49194336	9.45895E-06	0.198867712
85.49804688	8.08551E-06	0.164998008
85.50415039	7.57468E-06	0.151845852
85.51025391	7.96735E-06	0.164748936
85.51635742	9.64135E-06	0.203529759
85.52246094	9.13672E-06	0.19167055
85.52856445	5.892E-06	0.124044948
85.53466797	4.14297E-06	0.085056775
85.54077148	5.25326E-06	0.106279314
85.546875	9.05064E-06	0.189307193
85.55297852	1.14669E-05	0.243992457
85.55908203	1.06019E-05	0.227002387
85.56518555	7.39064E-06	0.160696963
85.57128906	3.57636E-06	0.076223999
85.57739258	2.54338E-06	0.053465497
85.58349609	1.91307E-06	0.041250076
85.58959961	4.78113E-06	0.106185252
85.59570313	8.07182E-06	0.187092746
85.60180664	7.65441E-06	0.185604475
85.60791016	6.2897E-06	0.152438969
85.61401367	5.60052E-06	0.137418453
85.62011719	3.00511E-06	0.078158832
85.6262207	3.0669E-06	0.085171165
85.63232422	8.26647E-06	0.252480561
85.63842773	1.32547E-05	0.447028844
85.64453125	1.25513E-05	0.432670143
85.65063477	6.41502E-06	0.230455068
85.65673828	5.56181E-06	0.219776043
85.6628418	4.70076E-06	0.200836088
85.66894531	6.44312E-06	0.313571939
85.67504883	1.20243E-05	0.685807053
85.68115234	1.25732E-05	0.764885625
85.68725586	9.12505E-06	0.611987972
85.69335938	5.94832E-06	0.419287723

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
70.2	0.016550636	-8.44725E-05	-0.01647504	-3.706883982	2.982173984	2.510937445
70.205	0.015425861	-7.87674E-05	-0.015332545	-3.449822614	2.982234126	2.510937445
70.21	0.013604225	-6.95233E-05	-0.013481997	-3.033449226	2.982280902	2.510937445
70.215	0.011808784	-6.03951E-05	-0.01165547	-2.622480684	2.982316146	2.510937445
70.22	0.009819132	-5.02865E-05	-0.009633701	-2.167582819	2.982340514	2.510937445
70.225	0.007617869	-3.90804E-05	-0.007393543	-1.6635471	2.982355181	2.510937445
70.23	0.005913912	-3.04092E-05	-0.005660954	-1.273714545	2.98236402	2.510937445
70.235	0.002932471	-1.52757E-05	-0.002638814	-0.593733125	2.982366194	2.510937445
70.24	-0.001525898	7.13031E-06	0.001831754	0.412144746	2.982366782	2.510937445
70.245	-0.005005041	2.47073E-05	0.005335613	1.200512868	2.982373114	2.510937445
70.25	-0.007565033	3.77002E-05	0.007923862	1.78286906	2.982387578	2.510937445
70.255	-0.009025357	4.52212E-05	0.009421409	2.119817036	2.982408165	2.510937445
70.26	-0.008306762	4.1812E-05	0.008732952	1.964914163	2.982425605	2.510937445
70.265	-0.006661987	3.37039E-05	0.007096363	1.596681588	2.982436822	2.510937445
70.27	-0.004927056	2.5116E-05	0.005363983	1.206896159	2.982442958	2.510937445
70.275	-0.00298082	1.54382E-05	0.003412904	0.767903436	2.982445204	2.510937445
70.28	-0.001383566	7.48831E-06	0.001811066	0.40748984	2.982445687	2.510937445
70.285	5.37846E-05	3.48025E-07	0.000373004	0.083925843	2.982445688	2.510937445
70.29	0.001885108	-8.75985E-06	-0.001460463	-0.328604187	2.982446586	2.510937445
70.295	0.004726628	-2.29339E-05	-0.004311896	-0.970176497	2.982452233	2.510937445
70.3	0.008724052	-4.28696E-05	-0.008318687	-1.871704657	2.982471469	2.510937445
70.305	0.012620247	-6.23052E-05	-0.012220874	-2.749696569	2.982511723	2.510937445
70.31	0.016045415	-7.94263E-05	-0.015655152	-3.522409217	2.982576792	2.510937445
70.315	0.019145622	-9.49629E-05	-0.01876902	-4.223029539	2.982669436	2.510937445
70.32	0.021301181	-0.000105817	-0.020942949	-4.712163527	2.982784115	2.510937445
70.325	0.023161999	-0.000115193	-0.022820051	-5.134511531	2.982919705	2.510937445
70.33	0.025417613	-0.00012655	-0.025092536	-5.64582065	2.98308299	2.510937445
70.335	0.027586363	-0.000137514	-0.02728509	-6.139145155	2.983275327	2.510937445
70.34	0.029016941	-0.000144847	-0.028750884	-6.468948793	2.983488131	2.510937445
70.345	0.028738449	-0.000143683	-0.028514632	-6.415792307	2.98369687	2.510937445
70.35	0.027677506	-0.00013858	-0.02748442	-6.183994555	2.983890481	2.510937445
70.355	0.02712668	-0.000136031	-0.02696986	-6.068218457	2.984076462	2.510937445
70.36	0.0246885	-0.000124126	-0.024568368	-5.527882746	2.984230513	2.510937445
70.365	0.019964017	-0.000100834	-0.019874904	-4.471853327	2.984331246	2.510937445
70.37	0.01621984	-8.22988E-05	-0.016144587	-3.63253199	2.984397738	2.510937445
70.375	0.013448156	-6.85935E-05	-0.013388798	-3.012479611	2.984443447	2.510937445
70.38	0.010714504	-5.50656E-05	-0.010670696	-2.400906638	2.984472462	2.510937445
70.385	0.008275653	-4.29951E-05	-0.008247047	-1.855585544	2.984489771	2.510937445
70.39	0.005333478	-2.8409E-05	-0.005320314	-1.197070684	2.984496961	2.510937445
70.395	0.003112497	-1.73577E-05	-0.00310431	-0.698469662	2.984499409	2.510937445
70.4	0.002265401	-1.31628E-05	-0.002263462	-0.509279007	2.984500706	2.510937445
70.405	8.07779E-05	-2.35601E-06	-9.8099E-05	-0.022072281	2.984500708	2.510937445
70.41	-0.002465773	1.03158E-05	0.002439487	0.548884538	2.984502244	2.510937445
70.415	-0.003184424	1.3898E-05	0.003156549	0.710223464	2.984504807	2.510937445
70.42	-0.00504797	2.31031E-05	0.004998612	1.124687759	2.984511248	2.510937445
70.425	-0.008713386	4.13266E-05	0.008642981	1.944670748	2.984530437	2.510937445
70.43	-0.010616803	5.08656E-05	0.010544955	2.372614785	2.984558925	2.510937445
70.435	-0.011266124	5.41208E-05	0.011192798	2.518379611	2.984591004	2.510937445
70.44	-0.013265533	6.40646E-05	0.013171196	2.963519017	2.98463548	2.510937445
70.445	-0.015328229	7.43863E-05	0.015223859	3.425368381	2.984694863	2.510937445
70.45	-0.015623968	7.59341E-05	0.015530881	3.494448305	2.984756559	2.510937445
70.455	-0.015548011	7.55679E-05	0.01545693	3.477809313	2.984817657	2.510937445
70.46	-0.016818822	8.18663E-05	0.01671082	3.75993456	2.98488915	2.510937445
70.465	-0.018971685	9.25655E-05	0.018836879	4.238297878	2.984980118	2.510937445
70.47	-0.021852577	0.000106881	0.021679996	4.877999121	2.985100811	2.510937445
70.475	-0.026446257	0.00013007	0.026281782	5.913401058	2.985277579	2.510937445
70.48	-0.031482938	0.000155645	0.031351565	7.05410217	2.98552809	2.510937445
70.485	-0.033639083	0.000166777	0.03355662	7.550239568	2.985814089	2.510937445
70.49	-0.03287451	0.000163108	0.032815617	7.383513751	2.986087235	2.510937445
70.495	-0.032764958	0.000162639	0.032721167	7.362262475	2.986358563	2.510937445
70.5	-0.035332387	0.000175686	0.035320592	7.947133136	2.986674079	2.510937445
70.505	-0.03843204	0.000191527	0.03845548	8.652483045	2.987047383	2.510937445
70.51	-0.038921168	0.000194256	0.038992436	8.773297994	2.98743025	2.510937445
70.515	-0.037380217	0.000186672	0.037461275	8.428786763	2.9877834	2.510937445
70.52	-0.037167583	0.000185719	0.037269179	8.385565381	2.988132544	2.510937445
70.525	-0.038482203	0.000192538	0.038645713	8.695285335	2.988506824	2.510937445
70.53	-0.037599216	0.000188348	0.037799698	8.504931963	2.988864124	2.510937445
70.535	-0.033970337	0.000170225	0.034143543	7.682297194	2.989155783	2.510937445
70.54	-0.032068205	0.000160721	0.032228201	7.25134519	2.989415695	2.510937445
70.545	-0.031463006	0.000157859	0.0316516	7.121610027	2.989665888	2.510937445
70.55	-0.026908878	0.000135322	0.027114409	6.100742073	2.989848895	2.510937445
70.555	-0.02152573	0.000108601	0.021742422	4.892045045	2.989966004	2.510937445
70.56	-0.019274639	9.74568E-05	0.019504223	4.388450271	2.990059901	2.510937445
70.565	-0.014741175	7.5013E-05	0.0150006	3.375134933	2.990114822	2.510937445
70.57	-0.007931664	4.10278E-05	0.008190719	1.842911786	2.990130722	2.510937445
70.575	-0.004136174	2.19759E-05	0.004378107	0.985074085	2.990135046	2.510937445
70.58	-0.000732801	4.93406E-06	0.000970678	0.218402633	2.990135182	2.510937445
70.585	0.003445418	-1.60953E-05	-0.003230253	-0.726806945	2.990138182	2.510937445
70.59	0.004380401	-2.09455E-05	-0.004198572	-0.944678679	2.990143032	2.510937445
70.595	0.003893289	-1.85825E-05	-0.003721369	-0.837307919	2.990146863	2.510937445
70.6	0.004677165	-2.25653E-05	-0.004521905	-1.017428634	2.990152392	2.510937445
70.605	0.004442239	-2.14761E-05	-0.004300304	-0.967568445	2.990157379	2.510937445
70.61	0.003468706	-1.6618E-05	-0.003319471	-0.746880935	2.99016042	2.510937445
70.615	0.004434751	-2.14307E-05	-0.004291292	-0.965540663	2.990165391	2.510937445
70.62	0.006239625	-3.05021E-05	-0.006105871	-1.373820904	2.990175231	2.510937445
70.625	0.006979075	-3.42513E-05	-0.0068539	-1.5421275	2.990187541	2.510937445
70.63	0.008401219	-4.13778E-05	-0.008275403	-1.861965711	2.99020538	2.510937445
70.635	0.011199709	-5.54481E-05	-0.011080608	-2.493136827	2.990237082	2.510937445
70.64	0.012421808	-6.16916E-05	-0.012324797	-2.773079282	2.99027608	2.510937445
70.645	0.012545404	-6.23809E-05	-0.012462149	-2.803983559	2.990315858	2.510937445
70.65	0.014270369	-7.10766E-05	-0.014194384	-3.193736419	2.990367327	2.510937445
70.655	0.015607834	-7.79009E-05	-0.015553345	-3.499502658	2.990428896	2.510937445
70.66	0.015610383	-7.80269E-05	-0.015578318	-3.505121451	2.990490485	2.510937445
70.665	0.016089545	-8.05296E-05	-0.016076706	-3.617258931	2.990555913	2.510937445
70.67	0.015593018	-7.81769E-05	-0.015601459	-3.510328383	2.990617365	2.510937445
70.675	0.014229803	-7.14336E-05	-0.014240163	-3.204036658	2.990668542	2.510937445
70.68	0.013967775	-7.0193E-05	-0.013989802	-3.147705485	2.990717852	2.510937445
70.685	0.012582345	-6.33673E-05	-0.012612705	-2.837858552	2.990757864	2.510937445
70.69	0.010021215	-5.05843E-05	-0.01003539	-2.257962817	2.990783246	2.510937445
70.695	0.009087544	-4.59082E-05	-0.009093106	-2.045948802	2.990804118	2.510937445
70.7	0.008151694	-4.12584E-05	-0.008156379	-1.835185177	2.990820913	2.510937445
70.705	0.006637674	-3.36814E-05	-0.00663053	-1.491869219	2.990832048	2.510937445
70.71	0.006062271	-3.07918E-05	-0.006048807	-1.36098168	2.990841337	2.510937445
70.715	0.005102258	-2.59952E-05	-0.005083366	-1.143757284	2.990847916	2.510937445

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
85.69946289	3.2623E-06	0.216784645
85.70556641	1.01168E-06	0.069466757
85.71166992	2.73944E-06	0.199622921
85.71777344	6.33725E-06	0.45660483
85.72387695	9.60373E-06	0.673025248
85.72998047	1.06928E-05	0.68243061
85.73608398	8.82402E-06	0.465095466
85.7421875	6.10564E-06	0.28096469
85.74829102	5.44131E-06	0.23546235
85.75439453	6.70899E-06	0.271847813
85.76049805	9.83627E-06	0.382882226
85.76660156	1.12027E-05	0.41731348
85.77270508	8.88837E-06	0.292157819
85.77880859	4.31522E-06	0.130959744
85.78491211	2.03597E-06	0.059777176
85.79101563	4.14932E-06	0.115150629
85.79711914	7.63014E-06	0.211108962
85.80322266	8.74933E-06	0.246110264
85.80932617	7.58373E-06	0.204877902
85.81542969	7.31615E-06	0.193430641
85.8215332	7.07477E-06	0.18110437
85.82763672	6.25937E-06	0.153174423
85.83374023	7.52576E-06	0.188092773
85.83984375	9.73729E-06	0.247393185
85.84594727	1.02487E-05	0.254425972
85.85205078	9.05023E-06	0.221825704
85.8581543	7.93158E-06	0.185130371
85.86425781	8.09148E-06	0.181147466
85.87036133	8.5573E-06	0.196636376
85.87646484	8.80815E-06	0.207127348
85.88256836	8.41197E-06	0.196533625
85.88867188	7.90088E-06	0.183528008
85.89477539	8.87122E-06	0.200089842
85.90087891	1.00706E-05	0.22450383
85.90698242	9.43852E-06	0.217366032
85.91308594	6.34174E-06	0.148636872
85.91918945	3.57241E-06	0.085390226
85.92529297	5.80115E-06	0.144356993
85.93139648	9.16085E-06	0.227708555
85.9375	9.88699E-06	0.247661898
85.94360352	8.84231E-06	0.23316391
85.94970703	8.41585E-06	0.231511136
85.95581055	6.63626E-06	0.196912556
85.96191406	3.66007E-06	0.119510823
85.96801758	1.46236E-06	0.048756055
85.97412109	1.48764E-06	0.051492717
85.98022461	2.66983E-06	0.100279813
85.98632813	3.72812E-06	0.151442956
85.99243164	3.51948E-06	0.1650673
85.99853516	1.84019E-06	0.100069395
86.00463867	1.60305E-06	0.090469615
86.01074219	4.20002E-06	0.255358021
86.0168457	6.58894E-06	0.438798052
86.02294922	8.24345E-06	0.575530996
86.02905273	8.28564E-06	0.662213883
86.03515625	6.40568E-06	0.644343993
86.04125977	4.6415E-06	0.518517091
86.04736328	6.10163E-06	0.686593182
86.0534668	8.30854E-06	0.927335536
86.05957031	9.87382E-06	0.879569264
86.06567383	1.27593E-05	0.913634088
86.07177734	1.48083E-05	0.990477234
86.07788086	1.35457E-05	0.822194801
86.08398438	9.94712E-06	0.55577114
86.09008789	7.11864E-06	0.397526322
86.09619141	7.39868E-06	0.362688987
86.10229492	9.58114E-06	0.396638297
86.10839844	1.20683E-05	0.473324874
86.11450195	1.46549E-05	0.551028729
86.12060547	1.70564E-05	0.618405354
86.12670898	1.74841E-05	0.634846967
86.1328125	1.49272E-05	0.510393874
86.13891602	1.18854E-05	0.380584083
86.14501953	1.17411E-05	0.363913254
86.15112305	1.54304E-05	0.453603203
86.15722656	1.92276E-05	0.558516127
86.16333008	1.94781E-05	0.575607753
86.16943359	1.71147E-05	0.489987103
86.17553711	1.56554E-05	0.435229693
86.18164063	1.65536E-05	0.445914673
86.18774414	1.83774E-05	0.472523236
86.19384766	1.95723E-05	0.505370886
86.19995117	1.97792E-05	0.521822286
86.20605469	1.88005E-05	0.491329943
86.2121582	1.73046E-05	0.447530391
86.21826172	1.68082E-05	0.419123539
86.22436523	1.68169E-05	0.402169596
86.23046875	1.54517E-05	0.375996108
86.23657227	1.36129E-05	0.343970541
86.24267578	1.30894E-05	0.336179913
86.2487793	1.2827E-05	0.335035066
86.25488281	1.13934E-05	0.297088172
86.26098633	9.78795E-06	0.255106837
86.26708984	1.05126E-05	0.285373402
86.27319336	1.10164E-05	0.312062549
86.27929688	9.1966E-06	0.272662021
86.28540039	6.50251E-06	0.206700074
86.29150391	4.62199E-06	0.14974058
86.29760742	3.3975E-06	0.110183438
86.30371094	2.41929E-06	0.081523065
86.30981445	2.45038E-06	0.085797283
86.31591797	2.59747E-06	0.098727575
86.32202148	3.42462E-06	0.146275114
86.328125	3.89445E-06	0.168384595

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
70.72	0.004201339	-2.14644E-05	-0.004171684	-0.938628829	2.990852377	2.510937445
70.725	0.003919497	-2.00537E-05	-0.003887865	-0.874769576	2.99085626	2.510937445
70.73	0.002434154	-1.26238E-05	-0.002393436	-0.538523022	2.990857758	2.510937445
70.735	0.001284615	-6.82423E-06	-0.001227351	-0.276154052	2.990858175	2.510937445
70.74	0.000849511	-4.63197E-06	-0.000786663	-0.176999202	2.990858357	2.510937445
70.745	-0.001162246	5.46082E-06	0.001241522	0.279342527	2.990858699	2.510937445
70.75	-0.002269457	1.10993E-05	0.002374123	0.534177577	2.99086	2.510937445
70.755	-0.001875528	9.17083E-06	0.001984659	0.446548248	2.990860889	2.510937445
70.76	-0.00354827	1.75615E-05	0.003671774	0.826149112	2.990864071	2.510937445
70.765	-0.005274238	2.63074E-05	0.005427304	1.22114331	2.990871102	2.510937445
70.77	-0.005147484	2.57634E-05	0.005317394	1.196413601	2.990877799	2.510937445
70.775	-0.006209849	3.11344E-05	0.006395878	1.43907246	2.990887545	2.510937445
70.78	-0.007780772	3.91154E-05	0.007996787	1.799277119	2.990902846	2.510937445
70.785	-0.008030361	4.04947E-05	0.008273399	1.861514772	2.990919145	2.510937445
70.79	-0.008604961	4.34903E-05	0.008874084	1.996668996	2.990937859	2.510937445
70.795	-0.008861322	4.49427E-05	0.0091649	2.062102566	2.990957705	2.510937445
70.8	-0.007428163	3.79375E-05	0.007750524	1.743867864	2.990971651	2.510937445
70.805	-0.005627218	2.90562E-05	0.005958422	1.340644924	2.990979654	2.510937445
70.81	-0.003559156	1.88303E-05	0.003896355	0.876679893	2.990982855	2.510937445
70.815	-0.0011617	6.92654E-06	0.001497632	0.336967258	2.990983196	2.510937445
70.82	0.000617062	-1.89004E-06	-0.000277894	-0.06252613	2.990983293	2.510937445
70.825	0.002974191	-1.35845E-05	-0.002631575	-0.592104387	2.990985528	2.510937445
70.83	0.006145438	-2.93953E-05	-0.005811308	-1.307544362	2.990995074	2.510937445
70.835	0.008346331	-4.03742E-05	-0.008017658	-1.803973087	2.99101268	2.510937445
70.84	0.010777329	-5.24805E-05	-0.010449102	-2.351047899	2.991042036	2.510937445
70.845	0.01422192	-6.97018E-05	-0.013905192	-3.128668246	2.991093156	2.510937445
70.85	0.016625231	-8.17515E-05	-0.016319954	-3.671989716	2.991163013	2.510937445
70.855	0.018827085	-9.27781E-05	-0.018514503	-4.165763079	2.9912526	2.510937445
70.86	0.021400834	-0.000105712	-0.021087233	-4.744627487	2.991368354	2.510937445
70.865	0.022183839	-0.000109703	-0.02188081	-4.923182163	2.991492734	2.510937445
70.87	0.022767027	-0.000112636	-0.022463991	-5.054398087	2.991623739	2.510937445
70.875	0.024369587	-0.000120698	-0.024066483	-5.414958583	2.991773836	2.510937445
70.88	0.02453808	-0.0001216	-0.024243811	-5.454857552	2.991926016	2.510937445
70.885	0.025049178	-0.000124155	-0.02475331	-5.56949485	2.992084601	2.510937445
70.89	0.027049069	-0.000134217	-0.02675225	-6.019256183	2.99226952	2.510937445
70.895	0.026576479	-0.000131957	-0.026292409	-5.915792114	2.992448033	2.510937445
70.9	0.024976815	-0.000123952	-0.024676562	-5.552226423	2.992605703	2.510937445
70.905	0.025411957	-0.000126103	-0.025111096	-5.649996517	2.992768915	2.510937445
70.91	0.025434561	-0.00012622	-0.025134657	-5.655297892	2.992932418	2.510937445
70.915	0.025781344	-0.000127895	-0.025472956	-5.73141517	2.993100409	2.510937445
70.92	0.029005652	-0.00014399	-0.028692941	-6.455911744	2.993313048	2.510937445
70.925	0.032283804	-0.000160456	-0.031960707	-7.191159182	2.993576465	2.510937445
70.93	0.034439434	-0.000171335	-0.034118455	-7.676652461	2.993876235	2.510937445
70.935	0.035980172	-0.000179175	-0.035672939	-8.026411256	2.994203427	2.510937445
70.94	0.03528219	-0.000175795	-0.034990256	-7.872807568	2.994518048	2.510937445
70.945	0.035208567	-0.000175417	-0.034914099	-7.85567217	2.994831356	2.510937445
70.95	0.03921334	-0.000195586	-0.038924804	-8.758080885	2.995219993	2.510937445
70.955	0.043115909	-0.000215502	-0.042868367	-9.645382517	2.995689834	2.510937445
70.96	0.042923952	-0.000214785	-0.042715374	-9.610959146	2.996155501	2.510937445
70.965	0.041102604	-0.00020573	-0.040887505	-9.19968873	2.996582488	2.510937445
70.97	0.041192756	-0.000206268	-0.040996495	-9.224211306	2.99701135	2.510937445
70.975	0.042817667	-0.000214628	-0.04268402	-9.603904409	2.997474713	2.510937445
70.98	0.04272906	-0.000214406	-0.042639033	-9.593782353	2.997936161	2.510937445
70.985	0.040538784	-0.000203516	-0.040440772	-9.099173802	2.998351514	2.510937445
70.99	0.039826008	-0.000200019	-0.039735407	-8.940466678	2.99875239	2.510937445
70.995	0.040556184	-0.000203886	-0.040516348	-9.116178363	2.999168099	2.510937445
71	0.038629715	-0.000194395	-0.038601251	-8.685281485	2.999545254	2.510937445
71.005	0.035427467	-0.000178348	-0.035367471	-7.957681083	2.99986247	2.510937445
71.01	0.035527396	-0.000178948	-0.03548953	-7.985144274	3.000181479	2.510937445
71.015	0.035428658	-0.000178694	-0.035438191	-7.973592875	3.000498717	2.510937445
71.02	0.031222212	-0.000157866	-0.031244318	-7.029971597	3.000745096	2.510937445
71.025	0.028381989	-0.00014384	-0.028423435	-6.395272943	3.000948688	2.510937445
71.03	0.027336645	-0.000138836	-0.027417579	-6.168955233	3.00113756	2.510937445
71.035	0.021450347	-0.000109749	-0.021576264	-4.8546594	3.00125385	2.510937445
71.04	0.013891441	-7.20295E-05	-0.014014273	-3.153211456	3.001302622	2.510937445
71.045	0.011333566	-5.9098E-05	-0.011425021	-2.57062977	3.001335087	2.510937445
71.05	0.013216668	-6.83734E-05	-0.013297644	-2.991969808	3.001379236	2.510937445
71.055	0.019343492	-9.87098E-05	-0.019413837	-4.368113302	3.001473804	2.510937445
71.06	0.028536357	-0.000144613	-0.028647739	-6.445741196	3.001679617	2.510937445
71.065	0.032447233	-0.000164591	-0.032659245	-7.348330174	3.001945709	2.510937445
71.07	0.026716241	-0.000136569	-0.027005584	-6.076256379	3.002126105	2.510937445
71.075	0.020038608	-0.00010352	-0.020350718	-4.578911465	3.002227592	2.510937445
71.08	0.019892174	-0.000102853	-0.020219168	-4.5493129	3.002327601	2.510937445
71.085	0.020541144	-0.000106332	-0.020921393	-4.707313419	3.002434242	2.510937445
71.09	0.017386711	-9.0934E-05	-0.017819692	-4.009430746	3.002510645	2.510937445
71.095	0.013747301	-7.30873E-05	-0.014233624	-3.202565313	3.002558411	2.510937445
71.1	0.007930387	-4.43425E-05	-0.008472517	-1.906316371	3.002574306	2.510937445
71.105	-0.001554957	2.99307E-06	0.000985114	0.22165076	3.002574917	2.510937445
71.11	-0.00881528	3.94538E-05	0.008255844	1.857565002	3.002594557	2.510937445
71.115	-0.012796404	5.94857E-05	0.012245364	2.755206991	3.002635943	2.510937445
71.12	-0.016416846	7.76833E-05	0.015866456	3.569952645	3.00270406	2.510937445
71.125	-0.01931525	9.2263E-05	0.01876556	4.222251006	3.002798352	2.510937445
71.13	-0.021977909	0.000105645	0.021424887	4.820599642	3.002920434	2.510937445
71.135	-0.0240196	0.000115915	0.023464745	5.279567526	3.00306625	2.510937445
71.14	-0.025550533	0.000123551	0.024980821	5.620684734	3.003231247	2.510937445
71.145	-0.030328938	0.00014753	0.0297383	6.691117555	3.00346373	2.510937445
71.15	-0.035761637	0.000175031	0.035188798	7.917479445	3.003786959	2.510937445
71.155	-0.036771758	0.000180235	0.036219476	8.149382098	3.004128706	2.510937445
71.16	-0.037964216	0.000186201	0.037400829	8.41518653	3.004492977	2.510937445
71.165	-0.043028535	0.000211774	0.042459243	9.553329576	3.004960916	2.510937445
71.17	-0.047648515	0.000235255	0.047098278	10.59711261	3.005534735	2.510937445
71.175	-0.049907842	0.000246789	0.049375463	11.10947914	3.00616426	2.510937445
71.18	-0.052367882	0.000259281	0.051840433	11.66409732	3.006857376	2.510937445
71.185	-0.056563472	0.000280594	0.056043131	12.60970448	3.007666003	2.510937445
71.19	-0.060703445	0.000301737	0.060208704	13.54695848	3.008597331	2.510937445
71.195	-0.062763173	0.000312338	0.062296061	14.01661371	3.009592933	2.510937445
71.2	-0.065038473	0.000323972	0.064585727	14.5317886	3.010662028	2.510937445
71.205	-0.06899044	0.000344174	0.068559111	15.42579996	3.011864996	2.510937445
71.21	-0.071842889	0.000358878	0.071449096	16.07604666	3.013169494	2.510937445
71.215	-0.073415275	0.000367056	0.073055648	16.43752076	3.014531719	2.510937445
71.22	-0.075384544	0.000377243	0.075056199	16.88764474	3.015968003	2.510937445
71.225	-0.07730589	0.000387206	0.077012015	17.32770327	3.017478435	2.510937445
71.23	-0.078892842	0.000395487	0.078637113	17.69335044	3.019051516	2.510937445
71.235	-0.079486922	0.00039874	0.079275236	17.83692815	3.020648378	2.510937445

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
86.33422852	3.40959E-06	0.150483168
86.34033203	3.41018E-06	0.16687974
86.34643555	3.99324E-06	0.213676611
86.35253906	4.95023E-06	0.308362565
86.35864258	4.11369E-06	0.327469626
86.36474609	1.22027E-06	0.110995584
86.37084961	2.19153E-06	0.241229526
86.37695313	3.59484E-06	0.52113621
86.38305664	5.48233E-06	0.858157093
86.38916016	6.88626E-06	1.119735848
86.39526367	5.66875E-06	0.981927266
86.40136719	3.67873E-06	0.572653126
86.4074707	4.20672E-06	0.527872206
86.41357422	6.51842E-06	0.762341897
86.41967773	8.66077E-06	0.801675776
86.42578125	1.18337E-05	0.80387709
86.43188477	1.50494E-05	0.910238895
86.43798828	1.65493E-05	0.915146832
86.4440918	1.67693E-05	0.861129386
86.45019531	1.65468E-05	0.855069071
86.45629883	1.65874E-05	0.775874437
86.46240234	1.70983E-05	0.712072688
86.46850586	1.8932E-05	0.761116324
86.47460938	2.0964E-05	0.793253811
86.48071289	2.03085E-05	0.747777712
86.48681641	1.70539E-05	0.631847652
86.49291992	1.3773E-05	0.476898081
86.49902344	1.32849E-05	0.437590855
86.50512695	1.52215E-05	0.489395834
86.51123047	1.65517E-05	0.49820378
86.51733398	1.74349E-05	0.506781673
86.5234375	1.87486E-05	0.551633576
86.52954102	1.8809E-05	0.553333064
86.53564453	1.7848E-05	0.521452613
86.54174805	1.6829E-05	0.480119721
86.54785156	1.61524E-05	0.441325056
86.55395508	1.63243E-05	0.451024652
86.56005859	1.7875E-05	0.518492612
86.56616211	1.98085E-05	0.577937869
86.57226563	1.957E-05	0.577262904
86.57836914	1.76437E-05	0.518759831
86.58447266	1.59994E-05	0.449145736
86.59057617	1.35044E-05	0.386889024
86.59667969	1.12319E-05	0.336635363
86.6027832	1.10785E-05	0.328824853
86.60888672	1.16543E-05	0.354648543
86.61499023	1.15072E-05	0.354302085
86.62109375	1.06497E-05	0.319968606
86.62719727	9.99819E-06	0.310058779
86.63330078	1.07528E-05	0.342715995
86.6394043	1.26006E-05	0.417109238
86.64550781	1.36313E-05	0.500278827
86.65161133	1.18255E-05	0.446932911
86.65771484	8.83697E-06	0.336180304
86.66381836	7.89193E-06	0.322775512
86.66992188	8.60342E-06	0.372111287
86.67602539	9.08681E-06	0.441491684
86.68212891	7.94074E-06	0.455793255
86.68823242	4.81302E-06	0.289265022
86.69433594	2.29874E-06	0.148640975
86.70043945	2.29609E-06	0.170613856
86.70654297	4.43256E-06	0.377931121
86.71264648	6.86763E-06	0.797870828
86.71875	8.20067E-06	1.401314296
86.72485352	8.36318E-06	1.6255065
86.73095703	8.05451E-06	2.347299895
86.73706055	9.30602E-06	5.977103307
86.74316406	1.26995E-05	6.531024495
86.74926758	1.61788E-05	3.816994779
86.75537109	1.82533E-05	3.085394536
86.76147461	1.84584E-05	2.56939513
86.76757813	1.72367E-05	1.956825064
86.77368164	1.54272E-05	1.607460523
86.77978516	1.40848E-05	1.269039768
86.78588867	1.42303E-05	0.975063872
86.79199219	1.59297E-05	0.924406216
86.7980957	1.80248E-05	0.959384866
86.80419922	1.89096E-05	0.940333287
86.81030273	1.83725E-05	0.896546087
86.81640625	1.8568E-05	0.852260482
86.82250977	1.86743E-05	0.764295334
86.82861328	1.6602E-05	0.651485955
86.8347168	1.37182E-05	0.523508942
86.84082031	1.20339E-05	0.441668456
86.84692383	1.26642E-05	0.479569557
86.85302734	1.49958E-05	0.561155164
86.85913086	1.71928E-05	0.611165413
86.86523438	1.74183E-05	0.628064576
86.87133789	1.47506E-05	0.508439981
86.87744141	1.07667E-05	0.352697876
86.88354492	8.69512E-06	0.297522045
86.88964844	1.04035E-05	0.356014657
86.89575195	1.39741E-05	0.466230559
86.90185547	1.50574E-05	0.494092638
86.90795898	1.20785E-05	0.366726193
86.9140625	8.33228E-06	0.249947721
86.92016602	5.99042E-06	0.188638193
86.92626953	5.91351E-06	0.184902824
86.93237305	6.25601E-06	0.196906245
86.93847656	5.34691E-06	0.167628103
86.94458008	4.97882E-06	0.151223609
86.95068359	5.70873E-06	0.18073394
86.95678711	5.93217E-06	0.196698758
86.96289063	4.54978E-06	0.152950801

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
71.24	-0.079344965	0.00039821	0.079168277	17.81286242	3.022239541	2.510937445
71.245	-0.080394709	0.000403733	0.080254772	18.0573238	3.023873085	2.510937445
71.25	-0.080632039	0.000405194	0.080535254	18.12043209	3.025516288	2.510937445
71.255	-0.078551706	0.000394819	0.07844096	17.64921602	3.027075794	2.510937445
71.26	-0.078022518	0.000392254	0.07792346	17.5327785	3.028614359	2.510937445
71.265	-0.078670416	0.000395751	0.078629783	17.6917011	3.030178583	2.510937445
71.27	-0.076585674	0.000385373	0.076535452	17.22047675	3.031661002	2.510937445
71.275	-0.074313048	0.000373924	0.074227629	16.70121653	3.033056747	2.510937445
71.28	-0.074929802	0.000377177	0.074884525	16.84901819	3.034475756	2.510937445
71.285	-0.074724372	0.000376357	0.074718774	16.8117242	3.035886994	2.510937445
71.29	-0.071802121	0.000361677	0.071760523	16.14611768	3.037190012	2.510937445
71.295	-0.070237825	0.000353817	0.070178139	15.7900812	3.038436873	2.510937445
71.3	-0.069975585	0.000352646	0.069942508	15.73706425	3.039674441	2.510937445
71.305	-0.067169614	0.000338561	0.06710895	15.09951381	3.040814748	2.510937445
71.31	-0.06422204	0.000323643	0.064110127	14.42477869	3.041857171	2.510937445
71.315	-0.063854722	0.000321853	0.063750469	14.34385562	3.042887704	2.510937445
71.32	-0.062391313	0.000314558	0.062285168	14.01416287	3.043871544	2.510937445
71.325	-0.05977209	0.000301307	0.059624645	13.41554521	3.044774512	2.510937445
71.33	-0.05979474	0.000301455	0.059656841	13.42278915	3.045678166	2.510937445
71.335	-0.06025553	0.000303929	0.060156305	13.53516866	3.0465958	2.510937445
71.34	-0.058761328	0.000296455	0.058651009	13.19647704	3.047468489	2.510937445
71.345	-0.058290348	0.000294129	0.058184803	13.09158067	3.048327243	2.510937445
71.35	-0.058837466	0.000297048	0.058774321	13.22422226	3.049202195	2.510937445
71.355	-0.057312478	0.000289465	0.057248641	12.88094426	3.050032379	2.510937445
71.36	-0.055369547	0.000279679	0.055286418	12.43944412	3.050807229	2.510937445
71.365	-0.055305199	0.000279465	0.055244284	12.42996393	3.051580279	2.510937445
71.37	-0.054034644	0.000273207	0.053988958	12.14751554	3.052318218	2.510937445
71.375	-0.05007358	0.000253417	0.050024653	11.255547	3.052951932	2.510937445
71.38	-0.04686779	0.000237486	0.046836262	10.53815902	3.053507101	2.510937445
71.385	-0.044238488	0.000224472	0.044233349	9.95250347	3.054001726	2.510937445
71.39	-0.039903435	0.0002029	0.039922411	8.98254254	3.054404162	2.510937445
71.395	-0.03578965	0.000182341	0.035817892	8.059025657	3.054727898	2.510937445
71.4	-0.031690156	0.000161851	0.031731202	7.139520482	3.054981717	2.510937445
71.405	-0.025968334	0.000133122	0.026007461	5.851678752	3.055152154	2.510937445
71.41	-0.02222106	0.000114161	0.022233717	5.002586281	3.055276952	2.510937445
71.415	-0.022210148	0.000114003	0.022206658	4.996498044	3.055401627	2.510937445
71.42	-0.022745262	0.000116691	0.022749486	5.1186343	3.055532381	2.510937445
71.425	-0.022515555	0.000115583	0.022525644	5.068270012	3.055660509	2.510937445
71.43	-0.021307609	0.000109589	0.021324365	4.797982035	3.055775257	2.510937445
71.435	-0.018880474	9.74586E-05	0.018912292	4.255265727	3.055865352	2.510937445
71.44	-0.016310991	8.45846E-05	0.016353794	3.679603678	3.055932593	2.510937445
71.445	-0.013469386	7.03318E-05	0.013522957	3.042665226	3.055978447	2.510937445
71.45	-0.010688333	5.63448E-05	0.010746606	2.417986424	3.05600732	2.510937445
71.455	-0.009110745	4.84062E-05	0.009171578	2.06360502	3.056028299	2.510937445
71.46	-0.007081811	3.8238E-05	0.007154982	1.609871013	3.056040974	2.511164396
71.465	-0.004142185	2.34611E-05	0.004225922	0.950832554	3.056045311	2.511523541
71.47	-0.002016882	1.27546E-05	0.002104828	0.473586398	3.056046339	2.511763129
71.475	0.000377864	7.16368E-07	-0.000278937	-0.062760918	3.056046375	2.511882543
71.48	0.003546379	-1.5249E-05	-0.003438478	-0.773657469	3.056049554	2.511897036
71.485	0.005887297	-2.70908E-05	-0.005780619	-1.300639253	3.056058314	2.511897036
71.49	0.008012503	-3.78434E-05	-0.007906326	-1.778923295	3.05607454	2.511897036
71.495	0.010104874	-4.84671E-05	-0.010005617	-2.251263754	3.056100347	2.511897036
71.5	0.010751844	-5.18462E-05	-0.010673133	-2.401455037	3.056129564	2.511897036
71.505	0.010622569	-5.1284E-05	-0.010559585	-2.375906519	3.056158083	2.511897036
71.51	0.01085282	-5.24992E-05	-0.01080213	-2.43047921	3.056187852	2.511897036
71.515	0.011600319	-5.63051E-05	-0.011553844	-2.599614794	3.056221863	2.511897036
71.52	0.012969422	-6.3251E-05	-0.012925448	-2.908225844	3.056264375	2.511897036
71.525	0.013982483	-6.84431E-05	-0.013950454	-3.138852192	3.056313789	2.511897036
71.53	0.013959366	-6.84205E-05	-0.013943903	-3.137378077	3.056363039	2.511897036
71.535	0.013894124	-6.81513E-05	-0.013889544	-3.125147364	3.05641183	2.511897036
71.54	0.014365562	-7.05679E-05	-0.014369869	-3.233220595	3.056463988	2.511897036
71.545	0.015139773	-7.45085E-05	-0.015147607	-3.408211531	3.056521919	2.511897036
71.55	0.016084478	-7.93115E-05	-0.016095386	-3.621461797	3.056587306	2.511897036
71.555	0.017075934	-8.43583E-05	-0.017091087	-3.84549447	3.056661002	2.511897036
71.56	0.017932924	-8.87384E-05	-0.017955057	-4.039887813	3.056742281	2.511897036
71.565	0.018474865	-9.15354E-05	-0.018506696	-4.164006497	3.056828547	2.511897036
71.57	0.018988737	-9.4182E-05	-0.019028609	-4.281437025	3.056919678	2.511897036
71.575	0.019616683	-9.74046E-05	-0.019664038	-4.424408495	3.057016937	2.511897036
71.58	0.020012602	-9.94554E-05	-0.02006836	-4.515381099	3.057118161	2.511897036
71.585	0.020947848	-0.000104198	-0.021003355	-4.725754885	3.057229066	2.511897036
71.59	0.022648358	-0.00011282	-0.022702382	-5.108036019	3.05735871	2.511897036
71.595	0.023552422	-0.000117471	-0.023618732	-5.314214721	3.057498909	2.511897036
71.6	0.024225898	-0.000120933	-0.024300901	-5.467702634	3.057647242	2.511897036
71.605	0.025992335	-0.000129906	-0.026067901	-5.865277718	3.057817994	2.511897036
71.61	0.027058014	-0.000135416	-0.027152872	-6.10939619	3.058003035	2.511897036
71.615	0.026763483	-0.000134071	-0.026881154	-6.048259707	3.058184069	2.511897036
71.62	0.027143001	-0.000136075	-0.02728262	-6.138589493	3.058370274	2.512441121
71.625	0.028262863	-0.000141833	-0.028415839	-6.393563822	3.058572161	2.51311962
71.63	0.028734797	-0.000144368	-0.028914891	-6.505850518	3.058780847	2.51374456
71.635	0.028469658	-0.000143196	-0.028678016	-6.452553512	3.058985699	2.514315616
71.64	0.028133909	-0.000141656	-0.028367089	-6.38259513	3.059185748	2.514832693
71.645	0.02792938	-0.000140784	-0.028191094	-6.342996198	3.059382898	2.515295763
71.65	0.027297322	-0.000137778	-0.027584191	-6.206443086	3.059571227	2.515704809
71.655	0.026261815	-0.000132743	-0.026568048	-5.977810867	3.059745538	2.516059952
71.66	0.024826355	-0.000125715	-0.025150213	-5.658797965	3.059901315	2.516361462
71.665	0.021945517	-0.000111418	-0.022268178	-5.010339942	3.060023036	2.516609805
71.67	0.018646485	-9.49689E-05	-0.018955184	-4.264916483	3.060110912	2.516805846
71.675	0.0155294	-7.94361E-05	-0.015829701	-3.561682774	3.060171864	2.516950616
71.68	0.010479617	-5.44175E-05	-0.010801157	-2.430260256	3.06019962	2.517045219
71.685	0.005043126	-2.7314E-05	-0.005361039	-1.206233804	3.060206048	2.51709125
71.69	0.002150998	-1.28193E-05	-0.002454786	-0.552326852	3.060207218	2.5170966
71.695	0.000697747	-5.51471E-06	-0.000990996	-0.222974005	3.060207341	2.5170966
71.7	9.99682E-05	-2.47562E-06	-0.000382137	-0.085980779	3.060207343	2.5170966
71.705	0.000604493	-4.96763E-06	-0.000885396	-0.199214198	3.060207436	2.5170966
71.71	0.000556054	-4.74579E-06	-0.000840565	-0.189127112	3.060207514	2.5170966
71.715	0.00013564	-2.65111E-06	-0.00041757	-0.093953307	3.060207518	2.5170966
71.72	0.000748289	-5.71007E-06	-0.001035311	-0.232944894	3.06020766	2.5170966
71.725	0.001623574	-1.01342E-05	-0.001928436	-0.433898177	3.060208326	2.5170966
71.73	0.001402919	-9.1383E-06	-0.001727253	-0.388631994	3.060208824	2.5170966
71.735	-0.000108264	-1.70497E-06	-0.000227756	-0.051245143	3.060208827	2.5170966
71.74	-0.001858354	6.93745E-06	0.001503128	0.338203732	3.060209699	2.5170966
71.745	-0.003939727	1.72021E-05	0.003557957	0.800540351	3.060213622	2.5170966
71.75	-0.008193277	3.83318E-05	0.007784626	1.751540743	3.060230589	2.5170966
71.755	-0.01373831	6.60647E-05	0.013325716	2.998286143	3.060278291	2.517378496

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
86.96899414	1.81595E-06	0.063969096
86.97509766	2.10759E-06	0.075584194
86.98120117	3.63928E-06	0.132950876
86.98730469	4.62598E-06	0.180653857
86.9934082	6.66974E-06	0.270513891
86.99951172	9.67549E-06	0.420591842
87.00561523	9.91772E-06	0.497186717
87.01171875	6.99127E-06	0.368779125
87.01782227	3.51421E-06	0.186793807
87.02392578	2.5162E-06	0.143726359
87.0300293	3.79287E-06	0.232769194
87.03613281	5.82904E-06	0.409723878
87.04223633	8.0214E-06	0.694141877
87.04833984	9.13965E-06	0.822084917
87.05444336	8.0897E-06	0.753668869
87.06054688	6.11577E-06	0.672040936
87.06665039	4.99268E-06	0.637175548
87.07275391	6.18453E-06	1.030200646
87.07885742	8.81041E-06	2.603446185
87.08496094	1.0621E-05	3.737568984
87.09106445	1.22032E-05	2.86050327
87.09716797	1.21932E-05	2.264618528
87.10327148	9.8442E-06	1.525274004
87.109375	7.77701E-06	0.869528691
87.11547852	8.57065E-06	0.774514907
87.12158203	1.15701E-05	0.927364755
87.12768555	1.36341E-05	0.985984541
87.13378906	1.29894E-05	0.955273995
87.13989258	9.77234E-06	0.711193525
87.14599609	7.76354E-06	0.482823489
87.15209961	9.0468E-06	0.515150821
87.15820313	9.7521E-06	0.518170669
87.16430664	9.89562E-06	0.49899202
87.17041016	1.03806E-05	0.530578353
87.17651367	1.09844E-05	0.523873966
87.18261719	1.13647E-05	0.492862503
87.1887207	1.08353E-05	0.459535698
87.19482422	9.53246E-06	0.386028352
87.20092773	7.97671E-06	0.312876706
87.20703125	7.29482E-06	0.287372105
87.21313477	7.72912E-06	0.289942152
87.21923828	7.21912E-06	0.260289238
87.2253418	4.90599E-06	0.174054887
87.23144531	2.70023E-06	0.089981468
87.23754883	3.80274E-06	0.12319326
87.24365234	5.4402E-06	0.181624241
87.24975586	5.99152E-06	0.201278859
87.25585938	5.69476E-06	0.191478073
87.26196289	5.61776E-06	0.188642316
87.26806641	5.53552E-06	0.179867235
87.27416992	5.19935E-06	0.170927706
87.28027344	3.47992E-06	0.121827372
87.28637695	8.73764E-07	0.03163066
87.29248047	3.80631E-06	0.141291558
87.29858398	5.51159E-06	0.206142009
87.3046875	4.82472E-06	0.176969347
87.31079102	4.0155E-06	0.152670737
87.31689453	3.72557E-06	0.147916273
87.32299805	5.63072E-06	0.225454992
87.32910156	8.18419E-06	0.346245802
87.33520508	8.30426E-06	0.358182941
87.34130859	6.16307E-06	0.256948547
87.34741211	3.50319E-06	0.152076245
87.35351563	2.22109E-06	0.100696497
87.35961914	2.34577E-06	0.111717216
87.36572266	3.52953E-06	0.193444983
87.37182617	4.52234E-06	0.268152673
87.37792969	5.92037E-06	0.361463603
87.3840332	8.39141E-06	0.580374462
87.39013672	9.98544E-06	0.774183149
87.39624023	9.35991E-06	0.907099224
87.40234375	8.1004E-06	1.226039957
87.40844727	8.67844E-06	1.664807659
87.41455078	1.08541E-05	2.571328048
87.4206543	1.28922E-05	6.11314403
87.42675781	1.31299E-05	12.05181847
87.43286133	1.20261E-05	5.389470704
87.43896484	1.07165E-05	3.227748399
87.44506836	9.21813E-06	2.230705478
87.45117188	8.93328E-06	1.427420713
87.45727539	1.03437E-05	1.410285819
87.46337891	1.13836E-05	1.491689057
87.46948242	1.0244E-05	0.996697805
87.47558594	7.15678E-06	0.570081314
87.48168945	4.97722E-06	0.355441204
87.48779297	4.91878E-06	0.309915997
87.49389648	5.41242E-06	0.326779482
87.5	5.82766E-06	0.340839227
87.50610352	6.70375E-06	0.339111486
87.51220703	7.83782E-06	0.356809985
87.51831055	8.92222E-06	0.385316208
87.52441406	9.86287E-06	0.40603758
87.53051758	1.04621E-05	0.429007132
87.53662109	9.83128E-06	0.394855701
87.54272461	8.31286E-06	0.310388467
87.54882813	7.31133E-06	0.264599159
87.55493164	7.30577E-06	0.255787671
87.56103516	7.86099E-06	0.263366897
87.56713867	7.75136E-06	0.265187491
87.57324219	6.35658E-06	0.221259688
87.5793457	3.41011E-06	0.117658812
87.58544922	8.81041E-07	0.030757269
87.59155273	3.91398E-06	0.131734158
87.59765625	5.81764E-06	0.190094779

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
71.76	-0.018477547	8.98567E-05	0.018073715	4.066585923	3.060364582	2.517756007
71.765	-0.02294424	0.000112334	0.022554518	5.074766486	3.060497635	2.51810158
71.77	-0.026867376	0.000132159	0.026502975	5.963169398	3.060680078	2.518416531
71.775	-0.028927025	0.000142654	0.028591789	6.433152421	3.060891564	2.518701974
71.78	-0.029687028	0.000146591	0.029375063	6.609389175	3.06111431	2.518958517
71.785	-0.030320025	0.000149845	0.030022374	6.75503423	3.061346656	2.519186389
71.79	-0.032129313	0.000158982	0.031839463	7.163879284	3.061607559	2.519385798
71.795	-0.03486777	0.000172839	0.034593945	7.783637587	3.061914832	2.51955728
71.8	-0.036028539	0.000178826	0.035783538	8.051296098	3.062242904	2.51970159
71.805	-0.036031234	0.000178952	0.035808652	8.056946734	3.062571025	2.519819102
71.81	-0.037014758	0.00018398	0.036807441	8.281674172	3.062917304	2.519909902
71.815	-0.038054996	0.000189328	0.037869507	8.520639111	3.063283319	2.519974279
71.82	-0.038478787	0.000191586	0.038317832	8.621512198	3.063657532	2.520012563
71.825	-0.038783735	0.000193251	0.038648428	8.69589622	3.064037699	2.520024945
71.83	-0.038465483	0.000191791	0.038353515	8.629540938	3.064411654	2.520024945
71.835	-0.03791873	0.000189167	0.037823772	8.510348737	3.064775052	2.520024945
71.84	-0.037408002	0.000186734	0.037332451	8.399801384	3.065128728	2.520024945
71.845	-0.036220985	0.000180906	0.036156347	8.135178102	3.065460314	2.520024945
71.85	-0.034717329	0.000173476	0.034657638	7.797968627	3.065764941	2.520024945
71.855	-0.032578244	0.00016286	0.032517395	7.316413862	3.066033186	2.520024945
71.86	-0.029348432	0.000146728	0.02926786	6.585268413	3.06625088	2.520024945
71.865	-0.026468884	0.000132288	0.026361629	5.931366433	3.06642795	2.520024945
71.87	-0.024867201	0.000124241	0.024743223	5.567225264	3.06658424	2.520024945
71.875	-0.024010995	0.00011995	0.02388052	5.373117025	3.066729952	2.520024945
71.88	-0.023165343	0.000115728	0.023031674	5.182126713	3.066865581	2.520024945
71.885	-0.021994398	0.000109864	0.021853256	4.916982501	3.066987846	2.520024945
71.89	-0.021190243	0.000105817	0.02104017	4.73403818	3.067101333	2.520024945
71.895	-0.021178265	0.000105749	0.021026944	4.731062313	3.067214693	2.520024945
71.9	-0.021319565	0.000106467	0.021171953	4.763689403	3.067329569	2.520024945
71.905	-0.02154284	0.000107597	0.021400144	4.815032399	3.067446865	2.520024945
71.91	-0.022175535	0.000110791	0.022045019	4.960129316	3.067571152	2.520024945
71.915	-0.022764512	0.000113791	0.022650563	5.096376704	3.067702128	2.520024945
71.92	-0.022730301	0.000113672	0.022626475	5.090956862	3.067832711	2.520024945
71.925	-0.022421482	0.000112157	0.022320507	5.022114154	3.067959769	2.520024945
71.93	-0.022428261	0.000112222	0.022333686	5.025079294	3.068086905	2.520024945
71.935	-0.022253653	0.000111392	0.022165977	4.987344828	3.068212069	2.520024945
71.94	-0.021673641	0.000108515	0.021585162	4.856661389	3.068330793	2.520024945
71.945	-0.021418239	0.000107262	0.021332235	4.799752948	3.068446736	2.520024945
71.95	-0.020901509	0.000104722	0.020820224	4.684550343	3.068557152	2.520024945
71.955	-0.019328204	9.68658E-05	0.019242505	4.32956365	3.068651571	2.520024945
71.96	-0.017739416	8.88907E-05	0.017641516	3.969341018	3.068731105	2.520024945
71.965	-0.016845565	8.43963E-05	0.016739559	3.766400716	3.068802826	2.520024945
71.97	-0.016050194	8.04128E-05	0.015940325	3.586573137	3.068867934	2.520024945
71.975	-0.014688705	7.35927E-05	0.014572314	3.278770544	3.068922465	2.520024945
71.98	-0.012976306	6.4984E-05	0.012846197	2.890394406	3.068965023	2.520024945
71.985	-0.01192746	5.96889E-05	0.011784862	2.651593886	3.069000979	2.520024945
71.99	-0.011034878	5.52046E-05	0.01088626	2.449408612	3.069031755	2.520024945
71.995	-0.009358354	4.67768E-05	0.009197969	2.069542931	3.06905389	2.520024945
72	-0.008151604	4.0676E-05	0.007976265	1.794659603	3.069070684	2.520024945
72.005	-0.007455682	3.71647E-05	0.007273294	1.636491049	3.069084733	2.520024945
72.01	-0.005998689	2.9837E-05	0.00580663	1.306491747	3.069093828	2.520024945
72.015	-0.00482862	2.39218E-05	0.004623062	1.040188868	3.069099721	2.520024945
72.02	-0.004025186	1.98714E-05	0.003812816	0.857883501	3.069103816	2.520024945
72.025	-0.002224691	1.08143E-05	0.002001589	0.450357464	3.069105066	2.520024945
72.03	-0.000595633	2.56966E-06	0.000353512	0.079540097	3.069105156	2.520024945
72.035	0.00012556	-1.11654E-06	-0.000383139	-0.086206354	3.06910516	2.520024945
72.04	0.000955937	-5.34639E-06	-0.001228276	-0.27636221	3.069105391	2.520024945
72.045	0.00128136	-7.06628E-06	-0.001571868	-0.353670358	3.069105806	2.520024945
72.05	0.000564862	-3.53978E-06	-0.000859726	-0.193438421	3.069105887	2.520024945
72.055	-9.35412E-05	-2.71892E-07	-0.000200003	-0.045000595	3.069105889	2.520024945
72.06	-0.000424395	1.34526E-06	0.000126408	0.028441704	3.069105934	2.520024945
72.065	-0.001415544	6.2631E-06	0.001118795	0.251728885	3.069106441	2.520024945
72.07	-0.003348908	1.59428E-05	0.003071114	0.691000723	3.069109275	2.520024945
72.075	-0.004898225	2.37445E-05	0.004643777	1.044849779	3.069115339	2.520024945
72.08	-0.005579188	2.71885E-05	0.005337756	1.200995199	3.069123206	2.520024945
72.085	-0.006346088	3.10669E-05	0.006119106	1.376798738	3.069133385	2.520024945
72.09	-0.00625067	3.06425E-05	0.006032937	1.35741083	3.06914326	2.520024945
72.095	-0.004933515	2.40435E-05	0.004700676	1.057652206	3.069149411	2.520024945
72.1	-0.004352132	2.10921E-05	0.004105033	0.923632501	3.069154199	2.520024945
72.105	-0.004194366	2.02729E-05	0.003939719	0.886436879	3.069158645	2.520024945
72.11	-0.004226233	2.03736E-05	0.003960196	0.891044108	3.069163159	2.520024945
72.115	-0.006220333	3.03247E-05	0.00596905	1.343036269	3.069172938	2.520024945
72.12	-0.008823536	4.34172E-05	0.008606046	1.936360265	3.069192616	2.520024945
72.125	-0.01019879	5.03807E-05	0.010007467	2.251680111	3.069218905	2.520024945
72.13	-0.011288916	5.59169E-05	0.011121263	2.502284281	3.069251114	2.520024945
72.135	-0.011690334	5.80253E-05	0.011545338	2.597701162	3.069285654	2.520024945
72.14	-0.010894852	5.41079E-05	0.010754274	2.419711727	3.069315654	2.520024945
72.145	-0.010286814	5.10965E-05	0.010146347	2.282928078	3.069342399	2.520024945
72.15	-0.010255758	5.09884E-05	0.010124532	2.278019809	3.069368982	2.520024945
72.155	-0.01028141	5.11922E-05	0.010165694	2.287281125	3.069395699	2.520024945
72.16	-0.009532046	4.75331E-05	0.009427151	2.121108882	3.069418663	2.520024945
72.165	-0.007407158	3.69521E-05	0.007292701	1.640857672	3.06943253	2.520024945
72.17	-0.00512317	2.55217E-05	0.004988573	1.122428962	3.069439164	2.520024945
72.175	-0.003518567	1.74846E-05	0.003369417	0.758118932	3.069442293	2.520024945
72.18	-0.002157222	1.06648E-05	0.001996118	0.449126535	3.069443469	2.520024945
72.185	-0.001200215	5.87293E-06	0.001031509	0.232089593	3.069443833	2.520024945
72.19	-0.000288295	1.32391E-06	0.000116027	0.026106169	3.069443854	2.520024945
72.195	0.001053733	-5.39382E-06	-0.001235474	-0.277981633	3.069444134	2.520024945
72.2	0.00210674	-1.06812E-05	-0.002293949	-0.516138473	3.069445256	2.520024945
72.205	0.002708895	-1.37016E-05	-0.002897184	-0.651866359	3.069447111	2.520024945
72.21	0.003070551	-1.55113E-05	-0.00325857	-0.733178197	3.069449494	2.520024945
72.215	0.003200288	-1.61436E-05	-0.00338484	-0.761588964	3.069452082	2.520024945
72.22	0.003674102	-1.84903E-05	-0.003853406	-0.867016366	3.069455494	2.520024945
72.225	0.004167305	-2.09518E-05	-0.004344838	-0.97758854	3.069459883	2.520024945
72.23	0.00384426	-1.93096E-05	-0.004013179	-0.90296533	3.069463618	2.520024945
72.235	0.003636661	-1.82039E-05	-0.003789917	-0.852731214	3.069466961	2.520024945
72.24	0.004508282	-2.25131E-05	-0.004656511	-1.047715005	3.069472098	2.520024945
72.245	0.005464022	-2.72804E-05	-0.005608075	-1.261816821	3.069479643	2.520024945
72.25	0.005557904	-2.7727E-05	-0.005696629	-1.281741586	3.069487451	2.520024945
72.255	0.005491378	-2.73473E-05	-0.005619947	-1.264488031	3.069495072	2.520024945
72.26	0.005545824	-2.75751E-05	-0.005665954	-1.274839623	3.069502846	2.520024945
72.265	0.004821598	-2.38891E-05	-0.004921643	-1.107369725	3.069508721	2.520024945
72.27	0.004107327	-2.02098E-05	-0.004178911	-0.94025493	3.069512985	2.520024945
72.275	0.004537828	-2.22712E-05	-0.004595217	-1.033923934	3.069518189	2.520024945

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
87.60375977	6.8683E-06	0.231637197
87.60986328	9.0105E-06	0.308458344
87.6159668	1.19741E-05	0.41318632
87.62207031	1.37168E-05	0.471442231
87.62817383	1.29896E-05	0.423909269
87.63427734	1.29712E-05	0.419535139
87.64038086	1.46874E-05	0.490689092
87.64648438	1.42719E-05	0.480821816
87.65258789	1.17224E-05	0.401802855
87.65869141	9.62224E-06	0.336363938
87.66479492	8.58411E-06	0.303262474
87.67089844	8.15477E-06	0.303252876
87.67700195	8.74556E-06	0.343377716
87.68310547	9.76576E-06	0.398344863
87.68920898	1.10375E-05	0.491575038
87.6953125	1.26621E-05	0.607345839
87.70141602	1.37735E-05	0.674443386
87.70751953	1.37246E-05	0.713095668
87.71362305	1.21828E-05	0.667886943
87.71972656	1.07341E-05	0.636918719
87.72583008	1.13046E-05	0.797782726
87.73193359	1.28678E-05	0.968129717
87.73803711	1.29512E-05	1.004442352
87.74414063	1.03469E-05	0.960344393
87.75024414	6.72356E-06	0.719483245
87.75634766	3.82329E-06	0.49471074
87.76245117	2.22908E-06	0.47221827
87.76855469	3.88595E-06	1.071470672
87.7746582	5.60625E-06	1.905333139
87.78076172	6.84274E-06	5.242404542
87.78686523	8.66292E-06	5.343304238
87.79296875	9.14858E-06	2.351270139
87.79907227	7.42505E-06	1.19006447
87.80517578	5.63934E-06	0.772831311
87.8112793	4.49613E-06	0.493931577
87.81738281	4.62489E-06	0.434678309
87.82348633	4.09636E-06	0.380702188
87.82958984	1.88135E-06	0.145161562
87.83569336	4.68331E-06	0.302119414
87.84179688	7.52324E-06	0.460542381
87.84790039	8.17637E-06	0.463796913
87.85400391	7.14849E-06	0.397617336
87.86010742	6.12084E-06	0.34611762
87.86621094	6.67524E-06	0.342192978
87.87231445	8.24081E-06	0.398818768
87.87841797	9.22062E-06	0.435986044
87.88452148	8.64397E-06	0.381012375
87.890625	6.94338E-06	0.304915344
87.89672852	5.93086E-06	0.259639181
87.90283203	6.11283E-06	0.250343972
87.90893555	4.95582E-06	0.198110153
87.91503906	4.85447E-06	0.185068628
87.92114258	7.6289E-06	0.271984211
87.92724609	8.50631E-06	0.303613659
87.93334961	6.9099E-06	0.246974933
87.93945313	4.06847E-06	0.143645828
87.94555664	2.11012E-06	0.074749692
87.95166016	2.85422E-06	0.096663703
87.95776367	4.80562E-06	0.158134824
87.96386719	5.40414E-06	0.184453003
87.9699707	4.26816E-06	0.148671864
87.97607422	3.52384E-06	0.124722127
87.98217773	6.68203E-06	0.243185817
87.98828125	7.528E-06	0.267977897
87.99438477	4.5349E-06	0.161827661
88.00048828	1.55282E-06	0.057828737
88.0065918	2.19295E-06	0.082591779
88.01269531	2.44886E-06	0.095588223
88.01879883	6.89024E-06	0.276754897
88.02490234	9.85315E-06	0.383545732
88.03100586	7.69032E-06	0.30832772
88.03710938	3.66345E-06	0.154246599
88.04321289	3.22558E-06	0.137364979
88.04931641	4.23441E-06	0.199161739
88.05541992	4.70911E-06	0.246421268
88.06152344	5.21943E-06	0.275706304
88.06762695	6.96688E-06	0.387632367
88.07373047	9.53383E-06	0.554908173
88.07983398	1.01767E-05	0.635018339
88.0859375	7.8055E-06	0.61908516
88.09204102	4.68951E-06	0.460304415
88.09814453	4.4467E-06	0.458324681
88.10424805	6.13074E-06	0.720603945
88.11035156	8.26491E-06	1.094261764
88.11645508	7.68594E-06	1.089267175
88.12255859	5.17619E-06	0.912262314
88.12866211	6.76855E-06	1.463410167
88.13476563	7.77212E-06	1.362211108
88.14086914	6.0613E-06	0.952565717
88.14697266	5.14338E-06	0.826448133
88.15307617	6.81091E-06	0.856784927
88.15917969	8.63786E-06	0.887494898
88.1652832	8.07902E-06	0.766018815
88.17138672	5.71369E-06	0.470236798
88.17749023	3.65378E-06	0.279573588
88.18359375	2.98398E-06	0.222058266
88.18969727	2.79495E-06	0.177033608
88.19580078	2.38526E-06	0.135032257
88.2019043	1.48656E-06	0.079672075
88.20800781	1.59186E-06	0.077605246
88.21411133	3.53093E-06	0.169696506
88.22021484	5.13516E-06	0.245779563
88.22631836	4.93676E-06	0.211324408
88.23242188	3.38485E-06	0.138478987

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
72.28	0.004674513	-2.28809E-05	-0.004718301	-1.061617673	3.069523712	2.520024945
72.285	0.004508985	-2.19383E-05	-0.004527945	-1.018787562	3.069528851	2.520024945
72.29	0.005870203	-2.86526E-05	-0.005881932	-1.323434686	3.06953756	2.520024945
72.295	0.007452847	-3.65316E-05	-0.007454033	-1.677157444	3.069551598	2.520024945
72.3	0.008077304	-3.95963E-05	-0.008065376	-1.814709589	3.069568088	2.520024945
72.305	0.009546603	-4.68805E-05	-0.009518089	-2.141569991	3.069591122	2.520024945
72.31	0.011732753	-5.7803E-05	-0.011695509	-2.631489561	3.069625914	2.520024945
72.315	0.01320349	-6.51548E-05	-0.01316049	-2.961110183	3.069669975	2.520024945
72.32	0.014698917	-7.26186E-05	-0.014647291	-3.295640485	3.069724581	2.520024945
72.325	0.016893974	-8.36123E-05	-0.016836349	-3.788178421	3.069796715	2.520024945
72.33	0.018993738	-9.41621E-05	-0.018935996	-4.26059918	3.069887895	2.520024945
72.335	0.020381884	-0.000101148	-0.020325749	-4.57329362	3.069992889	2.520024945
72.34	0.021842233	-0.000108483	-0.021784597	-4.90153426	3.070113467	2.520024945
72.345	0.0239293	-0.000118988	-0.023873139	-5.371456238	3.07025819	2.520024945
72.35	0.025217072	-0.000125518	-0.025170862	-5.663443907	3.070418908	2.520024945
72.355	0.025661369	-0.000127785	-0.025621133	-5.764754957	3.07058534	2.520024945
72.36	0.027033076	-0.000134691	-0.026993101	-6.07344764	3.07077004	2.520024945
72.365	0.028375813	-0.000141494	-0.028344148	-6.37743336	3.070973543	2.520024945
72.37	0.028773883	-0.000143543	-0.028750982	-6.468970958	3.071182797	2.520024945
72.375	0.030030742	-0.000149877	-0.029998878	-6.749747628	3.07141073	2.520024945
72.38	0.031731267	-0.000158477	-0.031690568	-7.13037784	3.071665209	2.520024945
72.385	0.032543337	-0.000162626	-0.032506575	-7.313979364	3.071932879	2.520024945
72.39	0.033976237	-0.000169873	-0.033931486	-7.634584358	3.072224639	2.520024945
72.395	0.036096914	-0.000180612	-0.036042258	-8.10950802	3.072553958	2.520024945
72.4	0.037315207	-0.000186854	-0.037268574	-8.385429092	3.072905881	2.520024945
72.405	0.038233192	-0.000191576	-0.03819629	-8.594165312	3.073275332	2.520024945
72.41	0.039238035	-0.000196755	-0.039213302	-8.822992883	3.073664458	2.520024945
72.415	0.039304818	-0.000197252	-0.039307871	-8.844271081	3.07405491	2.520024945
72.42	0.03819692	-0.000191834	-0.038213986	-8.598146951	3.074423661	2.520024945
72.425	0.036015755	-0.000180993	-0.036026383	-8.105936135	3.0747515	2.520024945
72.43	0.033095806	-0.000166373	-0.033078736	-7.442715542	3.075028335	2.520024945
72.435	0.0312721	-0.000157137	-0.031218053	-7.02406196	3.075275502	2.520024945
72.44	0.033379086	-0.000167561	-0.033322412	-7.497542627	3.075557097	2.520024945
72.445	0.040129292	-0.000201056	-0.040057898	-9.013027008	3.075964101	2.520024945
72.45	0.048034902	-0.000241445	-0.047981753	-10.79589445	3.076547264	2.520024945
72.455	0.05530252	-0.000278739	-0.05528663	-12.43949166	3.077320239	2.520024945
72.46	0.063479917	-0.000320852	-0.063522525	-14.29256814	3.07833871	2.520024945
72.465	0.069962321	-0.000354577	-0.070108638	-15.77444351	3.079575809	2.520024945
72.47	0.068454194	-0.000347481	-0.06865946	-15.44837845	3.080760148	2.520024945
72.475	0.060974214	-0.000310742	-0.061254079	-13.78216775	3.081699803	2.520024945
72.48	0.05684724	-0.000290386	-0.057157884	-12.8605239	3.082516563	2.520024945
72.485	0.055686422	-0.000284829	-0.05604051	-12.60911479	3.083300308	2.520024945
72.49	0.053202953	-0.000272709	-0.053604654	-12.06104707	3.084015705	2.520024945
72.495	0.0529045	-0.000271414	-0.053346232	-12.00290214	3.084723099	2.520024945
72.5	0.052869858	-0.000271595	-0.05338262	-12.01108956	3.085429566	2.520024945
72.505	0.047579472	-0.000245634	-0.048168556	-10.83792518	3.086001723	2.520024945
72.51	0.041281464	-0.00021447	-0.041920939	-9.432211267	3.086432435	2.520024945
72.515	0.034687045	-0.000181794	-0.035380451	-7.960601492	3.08673653	2.520024945
72.52	0.025038448	-0.000133681	-0.02576853	-5.797919306	3.08689498	2.520024945
72.525	0.017513633	-9.59897E-05	-0.018253633	-4.107067475	3.086972502	2.520024945
72.53	0.010329559	-6.00315E-05	-0.011096116	-2.496626034	3.08699947	2.520024945
72.535	-0.001707197	5.44316E-07	0.000936051	0.210611427	3.087000207	2.520024945
72.54	-0.010951583	4.74718E-05	0.010235746	2.303042916	3.08703052	2.520024945
72.545	-0.012842727	5.73187E-05	0.012184771	2.741573424	3.087072206	2.520024945
72.55	-0.011394347	5.01653E-05	0.010740444	2.416599862	3.087105019	2.520024945
72.555	-0.008686683	3.64884E-05	0.007981117	1.795751425	3.087124091	2.520024945
72.56	-0.009822426	4.20523E-05	0.00910492	2.048607041	3.087148475	2.520024945
72.565	-0.016172215	7.37915E-05	0.015443501	3.474787655	3.087214577	2.520024945
72.57	-0.020487536	9.57415E-05	0.019782279	4.451012877	3.087320663	2.520024945
72.575	-0.021721432	0.000102108	0.021039889	4.733975079	3.087439911	2.520024945
72.58	-0.020746973	9.7248E-05	0.020058616	4.513188508	3.0875487	2.520024945
72.585	-0.019907188	9.289E-05	0.019179022	4.315280037	3.08764886	2.520024945
72.59	-0.025731945	0.000122077	0.024982821	5.621134621	3.087816209	2.520024945
72.595	-0.030964029	0.000148803	0.030254538	6.807271122	3.08805853	2.520024945
72.6	-0.028037207	0.000134346	0.027336457	6.150702807	3.088257206	2.520024945
72.605	-0.02813852	0.000134718	0.027412773	6.167873888	3.08845732	2.520024945
72.61	-0.033946129	0.000163884	0.033226856	7.476042622	3.088748564	2.520024945
72.615	-0.035448222	0.000171704	0.034767289	7.822639928	3.089066152	2.520024945
72.62	-0.034125737	0.000165065	0.03342683	7.521036767	3.089360486	2.520024945
72.625	-0.034859461	0.000168792	0.034179328	7.690348689	3.089667612	2.520024945
72.63	-0.0369152	0.00017927	0.036257414	8.157918255	3.090012031	2.520024945
72.635	-0.038701312	0.000188449	0.038064378	8.564485118	3.090390584	2.520024945
72.64	-0.038445878	0.000187278	0.037824055	8.510412431	3.090764157	2.520024945
72.645	-0.037890103	0.000184502	0.037263489	8.384284975	3.091127008	2.520024945
72.65	-0.039106796	0.000190723	0.038512007	8.66520166	3.091513535	2.520024945
72.655	-0.039968769	0.000195191	0.039391281	8.863038129	3.09191729	2.520024945
72.66	-0.04050783	0.00019801	0.039945959	8.987840761	3.092332009	2.520024945
72.665	-0.040907446	0.000200143	0.04036565	9.082271274	3.092754951	2.520024945
72.67	-0.040252524	0.000196892	0.039709087	8.934544573	3.093164458	2.520024945
72.675	-0.041246692	0.000201967	0.040724399	9.162989781	3.093594444	2.520024945
72.68	-0.042861982	0.000210285	0.042360646	9.531145312	3.094058767	2.520024945
72.685	-0.041984472	0.000205951	0.041485437	9.334223242	3.094504273	2.520024945
72.69	-0.042136766	0.000206748	0.041646412	9.370442626	3.094953017	2.520024945
72.695	-0.044263424	0.000217622	0.043803292	9.855740751	3.0954482	2.520024945
72.7	-0.044877884	0.000220879	0.044443538	9.999796091	3.095957227	2.520024945
72.705	-0.04490146	0.000221086	0.044484181	10.00894078	3.096466789	2.520024945
72.71	-0.046168619	0.000227586	0.04576178	10.29640042	3.097005517	2.520024945
72.715	-0.04830249	0.000238526	0.047911333	10.78004982	3.097595195	2.520024945
72.72	-0.049724968	0.000245912	0.049361998	11.10644944	3.098220116	2.520024945
72.725	-0.049677745	0.000245805	0.049339741	11.10144167	3.09884385	2.520024945
72.73	-0.051524332	0.000255255	0.051196569	11.5192281	3.099514816	2.520024945
72.735	-0.054770951	0.000271923	0.054467564	12.25520191	3.100273003	2.520024945
72.74	-0.054770171	0.000272156	0.054501694	12.26288121	3.101031169	2.520024945
72.745	-0.054856779	0.000272714	0.054614408	12.28824187	3.101791734	2.520024945
72.75	-0.057799908	0.000287815	0.057584159	12.9564358	3.102636099	2.520024945
72.755	-0.058973084	0.000294031	0.058802765	13.23062204	3.103515089	2.520024945
72.76	-0.058824291	0.000293482	0.058691874	13.20567159	3.104389648	2.520024945
72.765	-0.059977146	0.000299529	0.059880291	13.47306555	3.105298823	2.520024945
72.77	-0.061012234	0.000305019	0.060956147	13.71513311	3.10623965	2.520024945
72.775	-0.061819885	0.00030938	0.061810557	13.90737525	3.107205551	2.520024945
72.78	-0.06140399	0.000307567	0.061441434	13.82432265	3.108158498	2.520024945
72.785	-0.059800644	0.000299679	0.059849105	13.46604858	3.10906233	2.520024945
72.79	-0.059577008	0.000298797	0.059671115	13.42600089	3.109959415	2.520024945
72.795	-0.057465453	0.000288418	0.057577491	12.95493538	3.110794036	2.520024945

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
88.23852539	2.29125E-06	0.092743026
88.24462891	4.43319E-06	0.16804182
88.25073242	5.1756E-06	0.196731294
88.25683594	1.9051E-06	0.074140934
88.26293945	3.07226E-06	0.115748483
88.26904297	6.34713E-06	0.241289473
88.27514648	7.89859E-06	0.297259247
88.28125	8.4186E-06	0.303786145
88.28735352	8.677E-06	0.323113275
88.29345703	8.73444E-06	0.33247981
88.29956055	8.70924E-06	0.323360751
88.30566406	9.71574E-06	0.362912966
88.31176758	9.89354E-06	0.361006596
88.31787109	8.8128E-06	0.310719683
88.32397461	7.32128E-06	0.266257535
88.33007813	6.50226E-06	0.243723554
88.33618164	7.60445E-06	0.283371279
88.34228516	9.6249E-06	0.359820516
88.34838867	1.1047E-05	0.412362576
88.35449219	1.22361E-05	0.46087562
88.3605957	1.33587E-05	0.516800257
88.36669922	1.35916E-05	0.531702758
88.37280273	1.22715E-05	0.503151766
88.37890625	1.02655E-05	0.456536281
88.38500977	9.98296E-06	0.457074237
88.39111328	1.17077E-05	0.561871089
88.3972168	1.3634E-05	0.705960793
88.40332031	1.46127E-05	0.786208191
88.40942383	1.47747E-05	0.919589604
88.41552734	1.38867E-05	1.077346086
88.42163086	1.22298E-05	1.003608544
88.42773438	1.20857E-05	1.096295406
88.43383789	1.35657E-05	1.433797516
88.43994141	1.41343E-05	1.60624572
88.44604492	1.32554E-05	2.075756298
88.45214844	1.2332E-05	2.792120549
88.45825195	1.07224E-05	2.184604808
88.46435547	8.11441E-06	1.797668547
88.47045898	5.97713E-06	1.408220685
88.4765625	5.33578E-06	0.940311625
88.48266602	5.26609E-06	0.761558673
88.48876953	4.95807E-06	0.69170573
88.49487305	5.07714E-06	0.57046022
88.50097656	6.22618E-06	0.566869829
88.50708008	6.83259E-06	0.596740178
88.51318359	6.20897E-06	0.460214686
88.51928711	5.65625E-06	0.354005855
88.52539063	5.44566E-06	0.322323452
88.53149414	4.38891E-06	0.234601828
88.53759766	1.98253E-06	0.100032813
88.54370117	1.1579E-06	0.059142768
88.54980469	3.79709E-06	0.178695271
88.5559082	4.62845E-06	0.202566926
88.56201172	2.54731E-06	0.109093192
88.56811523	1.40001E-06	0.056900512
88.57421875	4.64791E-06	0.188403468
88.58032227	6.68338E-06	0.279806248
88.58642578	6.67763E-06	0.265295121
88.5925293	5.61327E-06	0.212202902
88.59863281	4.04482E-06	0.152206088
88.60473633	1.80897E-06	0.066095873
88.61083984	6.32116E-07	0.022874826
88.61694336	1.90784E-06	0.07054799
88.62304688	4.34385E-06	0.156410066
88.62915039	6.0685E-06	0.213011593
88.63525391	6.30802E-06	0.218765475
88.64135742	5.14622E-06	0.16914919
88.64746094	3.64903E-06	0.117862442
88.65356445	4.58055E-06	0.152421347
88.65966797	6.90188E-06	0.230825682
88.66577148	7.7882E-06	0.263013052
88.671875	7.21971E-06	0.240328532
88.67797852	6.88477E-06	0.222785415
88.68408203	7.56623E-06	0.254883469
88.69018555	8.74488E-06	0.306012308
88.69628906	9.73256E-06	0.350551291
88.70239258	9.74022E-06	0.379609754
88.70849609	8.53013E-06	0.339217929
88.71459961	8.57406E-06	0.347850169
88.72070313	1.07584E-05	0.476938105
88.72680664	1.26076E-05	0.571201414
88.73291016	1.23875E-05	0.586232152
88.73901367	1.10413E-05	0.590130315
88.74511719	1.0865E-05	0.60067859
88.7512207	1.17156E-05	0.668364016
88.75732422	1.19916E-05	0.73420736
88.76342773	1.18355E-05	0.745984524
88.76953125	1.24101E-05	0.86205614
88.77563477	1.23251E-05	1.004081525
88.78173828	1.15085E-05	1.016975463
88.7878418	1.18621E-05	1.132027008
88.79394531	1.34712E-05	1.458715461
88.80004883	1.4527E-05	1.74105498
88.80615234	1.28127E-05	1.655811962
88.81225586	9.31936E-06	1.42442746
88.81835938	7.06016E-06	1.100066149
88.82446289	5.67937E-06	0.754177268
88.83056641	5.0734E-06	0.619683213
88.83666992	6.19682E-06	0.636139695
88.84277344	7.84522E-06	0.666516442
88.84887695	8.9125E-06	0.712939384
88.85498047	1.01795E-05	0.742480579
88.86108398	1.14763E-05	0.747006633
88.8671875	1.09653E-05	0.699170773

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
72.8	-0.052785808	0.000265418	0.052942832	11.91213724	3.111498259	2.520024945
72.805	-0.05085666	0.000256007	0.051048366	11.48588239	3.112151949	2.520024945
72.81	-0.048611124	0.00024511	0.048855934	10.99258509	3.112749187	2.520024945
72.815	-0.045168468	0.000228207	0.045457748	10.22799328	3.113264827	2.520024945
72.82	-0.044475665	0.00022499	0.044811384	10.08256143	3.11376477	2.520024945
72.825	-0.041328643	0.00020971	0.041742812	9.392132779	3.114196466	2.520024945
72.83	-0.033465905	0.000170835	0.033946303	7.637918278	3.114479528	2.520024945
72.835	-0.023872682	0.000123152	0.0244038	5.490855033	3.114623566	2.520024945
72.84	-0.010816255	5.78675E-05	0.011373561	2.559051157	3.114653135	2.520024945
72.845	0.001258723	-2.96744E-06	-0.000733924	-0.165132812	3.114653535	2.520024945
72.85	0.006224318	-2.82174E-05	-0.00574971	-1.293684814	3.114663327	2.520024945
72.855	0.007545946	-3.49967E-05	-0.007095435	-1.596472965	3.114677718	2.520024945
72.86	0.008687468	-4.07528E-05	-0.008237765	-1.853497171	3.114696793	2.520024945
72.865	0.012077602	-5.77602E-05	-0.011611282	-2.61253838	3.11473366	2.520024945
72.87	0.018535354	-9.03547E-05	-0.018069777	-4.06569978	3.114820492	2.520024945
72.875	0.023099225	-0.000113522	-0.022654885	-5.097349237	3.114955348	2.520024945
72.88	0.026460654	-0.000130552	-0.026022545	-5.855072547	3.115132309	2.520024945
72.885	0.031608374	-0.00015669	-0.031186583	-7.016981284	3.11538482	2.520024945
72.89	0.034675287	-0.000172378	-0.034283451	-7.713776401	3.11568871	2.520024945
72.895	0.036695084	-0.000182681	-0.036316277	-8.171162234	3.116029033	2.520024945
72.9	0.040476268	-0.000201929	-0.040111457	-9.025077901	3.116443106	2.520024945
72.905	0.042587904	-0.000212777	-0.042249119	-9.506051759	3.11690151	2.520024945
72.91	0.043990413	-0.000219975	-0.043666978	-9.825070125	3.117390604	2.520024945
72.915	0.046149114	-0.000231035	-0.045844922	-10.31510742	3.117928877	2.520024945
72.92	0.046246974	-0.000231664	-0.045963707	-10.34183403	3.118469435	2.520024945
72.925	0.046758728	-0.000234302	-0.046487977	-10.45979488	3.119022023	2.520024945
72.93	0.048900388	-0.000245243	-0.04864114	-10.9442564	3.119626389	2.520024945
72.935	0.049148899	-0.000246632	-0.048910609	-11.00488694	3.120236915	2.520024945
72.94	0.049177498	-0.000246836	-0.048951848	-11.01416571	3.12084815	2.520024945
72.945	0.050638414	-0.000254306	-0.050424005	-11.34540122	3.121496242	2.520024945
72.95	0.051764319	-0.000260112	-0.051565917	-11.60233133	3.122173473	2.520024945
72.955	0.052932763	-0.000266148	-0.052752744	-11.86936733	3.122881622	2.520024945
72.96	0.053416464	-0.000268759	-0.053265918	-11.98483166	3.123602773	2.520024945
72.965	0.052364227	-0.000263565	-0.052217247	-11.74888053	3.124295793	2.520024945
72.97	0.051604931	-0.00025981	-0.051459258	-11.57833297	3.12496886	2.520024945
72.975	0.051454373	-0.000259139	-0.051323707	-11.54783406	3.125638005	2.520024945
72.98	0.051871266	-0.000261347	-0.051769787	-11.64820217	3.126318037	2.520024945
72.985	0.052656821	-0.000265473	-0.052602647	-11.83559561	3.127018823	2.520024945
72.99	0.052200074	-0.00026334	-0.05217189	-11.73867521	3.127707504	2.520024945
72.995	0.050996575	-0.00025741	-0.050974838	-11.46933854	3.128364796	2.520024945
73	0.048889595	-0.000246905	-0.048855917	-10.99258135	3.128968896	2.520024945
73.005	0.045846555	-0.000231584	-0.045768064	-10.2978145	3.129500134	2.520024945
73.01	0.045256871	-0.00022864	-0.045175373	-10.16445882	3.130017794	2.520024945
73.015	0.045466382	-0.000229841	-0.045417927	-10.21903357	3.130540259	2.520024945
73.02	0.043243537	-0.000218723	-0.043178066	-9.715064752	3.131012885	2.520024945
73.025	0.04145566	-0.000209724	-0.041367051	-9.307586584	3.131447239	2.520024945
73.03	0.040820766	-0.000206564	-0.040731362	-9.164556505	3.131868391	2.520024945
73.035	0.040586362	-0.000205419	-0.040501124	-9.112752833	3.132284719	2.520024945
73.04	0.041831689	-0.000211784	-0.041786388	-9.401937295	3.132726988	2.520024945
73.045	0.042855671	-0.000217073	-0.042853729	-9.642088983	3.133191175	2.520024945
73.05	0.043743799	-0.000221646	-0.043776304	-9.849668496	3.1336748	2.520272857
73.055	0.045818327	-0.000232243	-0.045913306	-10.33049392	3.134205384	2.520467151
73.06	0.047676263	-0.000241779	-0.047834939	-10.76286123	3.134779871	2.520591666
73.065	0.050030966	-0.00025383	-0.050261852	-11.30891676	3.135412507	2.520646928
73.07	0.052493381	-0.000266472	-0.052805866	-11.88131986	3.136108949	2.520648865
73.075	0.053765039	-0.000273082	-0.054115676	-12.17602701	3.136839543	2.520648865
73.08	0.05600675	-0.000284597	-0.056378286	-12.68511437	3.13763233	2.520774703
73.085	0.05804371	-0.000295143	-0.058449616	-13.15116357	3.138483833	2.52127028
73.09	0.058223167	-0.000296265	-0.058669959	-13.20074082	3.13934061	2.52171062
73.095	0.059031814	-0.000300543	-0.059509966	-13.38974238	3.140221351	2.522094499
73.1	0.059340191	-0.00030232	-0.059856424	-13.46769549	3.141111317	2.522420977
73.105	0.058274204	-0.000297086	-0.058799617	-13.22991379	3.141969597	2.522689198
73.11	0.058476341	-0.000298221	-0.059028864	-13.28149451	3.142833841	2.522898243
73.115	0.059738455	-0.000304714	-0.060328732	-13.57396465	3.143735794	2.523047711
73.12	0.063452695	-0.000323713	-0.064056565	-14.41272713	3.144753391	2.523137834
73.125	0.069631034	-0.00035553	-0.070293446	-15.81602529	3.145978802	2.523169809
73.13	0.071690948	-0.000366512	-0.072437332	-16.2983996	3.147277788	2.523169809
73.135	0.069738082	-0.000356951	-0.07050705	-15.86408615	3.148506969	2.523169809
73.14	0.068548829	-0.000351288	-0.069364508	-15.60701432	3.149694585	2.523169809
73.145	0.066215342	-0.000339897	-0.067067425	-15.09017053	3.150802721	2.523169809
73.15	0.060387152	-0.000311599	-0.061368004	-13.80780101	3.151724369	2.523169809
73.155	0.043436404	-0.00022799	-0.044579958	-10.03049066	3.152201221	2.523169809
73.16	0.008740372	-5.44861E-05	-0.009958273	-2.240611496	3.152220529	2.523169809
73.165	-0.024398171	0.000113512	0.023313763	5.245596649	3.152370979	2.523169809
73.17	-0.034505513	0.000165922	0.033645973	7.570343886	3.1526719	2.523169809
73.175	-0.026465819	0.000126794	0.02575467	5.794800837	3.15284893	2.523169809
73.18	-0.015290922	7.13357E-05	0.014601397	3.285314416	3.152908024	2.523169809
73.185	-0.016528941	7.71038E-05	0.015775539	3.549496184	3.152977074	2.523169809
73.19	-0.0328846	0.000158426	0.032141137	7.231755814	3.153250388	2.523169809
73.195	-0.039642378	0.000193284	0.0390317	8.782132462	3.153647575	2.523169809
73.2	-0.030234806	0.000146936	0.029686384	6.679436343	3.153878617	2.523169809
73.205	-0.031407995	0.000152504	0.030815633	6.933517532	3.154127936	2.523169809
73.21	-0.044238612	0.000216951	0.04368527	9.829185802	3.154622564	2.523169809
73.215	-0.046585523	0.00022946	0.046125962	10.37834139	3.155171066	2.523169809
73.22	-0.041957225	0.000206742	0.041542683	9.347103773	3.155615994	2.523169809
73.225	-0.044682661	0.000220288	0.044276897	9.96230172	3.156120601	2.523169809
73.23	-0.050546562	0.00025013	0.050201799	11.29540481	3.156766344	2.523169809
73.235	-0.05048833	0.000250275	0.050205166	11.2961623	3.157410599	2.523169809
73.24	-0.047061005	0.00023307	0.046733917	10.51513142	3.157970354	2.523169809
73.245	-0.047706727	0.000236504	0.047427844	10.67126483	3.158545576	2.523169809
73.25	-0.050106639	0.000249047	0.049958804	11.24073099	3.159180127	2.523169809
73.255	-0.047306865	0.000235452	0.047214486	10.62325946	3.159745746	2.523169809
73.26	-0.043635739	0.000217425	0.043580611	9.805637479	3.160226985	2.523169809
73.265	-0.044301923	0.000220915	0.044285457	9.964227818	3.16072303	2.523169809
73.27	-0.043647687	0.000218023	0.043701338	9.832801141	3.161204532	2.523169809
73.275	-0.038796208	0.000194259	0.03891703	8.756331842	3.161584944	2.523169809
73.28	-0.033118858	0.00016624	0.033284533	7.489019853	3.161862166	2.523169809
73.285	-0.02794294	0.000140642	0.028145977	6.332844714	3.162059508	2.523169809
73.29	-0.021969698	0.000111015	0.022206984	4.996571385	3.162181498	2.523169809
73.295	-0.01545488	7.85518E-05	0.015709393	3.53461352	3.162241866	2.523169809
73.3	-0.011094666	5.67742E-05	0.011356223	2.555150099	3.162272976	2.523169809
73.305	-0.007164378	3.71952E-05	0.007446333	1.6754249	3.162285949	2.523169809
73.31	-0.000680494	4.73665E-06	0.000972187	0.218742009	3.162286066	2.523169809
73.315	0.004237505	-2.00255E-05	-0.003960427	-0.891096136	3.162290604	2.523169809

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
88.87329102	9.38898E-06	0.551624893
88.87939453	9.21994E-06	0.483263397
88.88549805	9.68234E-06	0.486872268
88.89160156	1.18729E-05	0.550883105
88.89770508	1.49947E-05	0.663250001
88.90380859	1.45818E-05	0.66937853
88.90991211	1.06004E-05	0.462367467
88.91601563	7.03598E-06	0.286239223
88.92211914	6.21443E-06	0.248736088
88.92822266	7.283E-06	0.27481814
88.93432617	8.27135E-06	0.303557503
88.94042969	7.79488E-06	0.288304687
88.9465332	5.46306E-06	0.191699736
88.95263672	2.98295E-06	0.101678153
88.95874023	4.87475E-06	0.16625204
88.96484375	6.97404E-06	0.230163245
88.97094727	8.57006E-06	0.282041811
88.97705078	1.03182E-05	0.346143323
88.9831543	1.15393E-05	0.383889236
88.98925781	1.20383E-05	0.403869324
88.99536133	1.26173E-05	0.429216641
89.00146484	1.41425E-05	0.477549781
89.00756836	1.61213E-05	0.555249974
89.01367188	1.71727E-05	0.607597075
89.01977539	1.67252E-05	0.599933817
89.02587891	1.41107E-05	0.525466007
89.03198242	1.09667E-05	0.410621611
89.03808594	1.06692E-05	0.390479809
89.04418945	1.28424E-05	0.487860605
89.05029297	1.46411E-05	0.577121528
89.05639648	1.34338E-05	0.537644899
89.0625	1.0806E-05	0.457290996
89.06860352	1.01107E-05	0.436042906
89.07470703	1.00137E-05	0.438306928
89.08081055	9.94134E-06	0.473372332
89.08691406	1.04736E-05	0.512064024
89.09301758	1.1521E-05	0.584308034
89.09912109	1.23966E-05	0.724113936
89.10522461	1.19678E-05	0.742745298
89.11132813	1.03365E-05	0.679313067
89.11743164	8.4801E-06	0.649354042
89.12353516	7.07433E-06	0.566195335
89.12963867	6.80092E-06	0.596254062
89.13574219	7.87235E-06	0.873222559
89.1418457	9.11353E-06	1.147884552
89.14794922	9.55551E-06	1.283933345
89.15405273	8.60962E-06	1.291244549
89.16015625	5.94689E-06	0.883195425
89.16625977	3.04308E-06	0.396313755
89.17236328	3.17288E-06	0.392084498
89.1784668	5.54053E-06	0.65198582
89.18457031	9.19286E-06	0.912273626
89.19067383	1.2548E-05	1.172152278
89.19677734	1.37753E-05	1.1729559
89.20288086	1.27198E-05	0.907037593
89.20898438	1.1356E-05	0.760156077
89.21508789	1.1283E-05	0.690168447
89.22119141	1.14229E-05	0.617866752
89.22729492	1.0558E-05	0.554819231
89.23339844	8.52021E-06	0.424472452
89.23950195	5.89549E-06	0.26972073
89.24560547	3.90994E-06	0.172127708
89.25170898	2.91309E-06	0.120678765
89.2578125	2.32221E-06	0.092405295
89.26391602	2.98993E-06	0.12120698
89.27001953	4.50655E-06	0.176990593
89.27612305	5.24522E-06	0.196871354
89.28222656	4.15987E-06	0.157030369
89.28833008	2.07403E-06	0.075653625
89.29443359	7.77028E-07	0.027740923
89.30053711	3.26759E-06	0.122216905
89.30664063	5.71576E-06	0.209990322
89.31274414	5.7585E-06	0.206292356
89.31884766	3.06982E-06	0.112719065
89.32495117	1.86387E-06	0.065047286
89.33105469	3.05114E-06	0.103872177
89.3371582	4.91417E-06	0.17380097
89.34326172	6.23423E-06	0.215340001
89.34936523	4.75388E-06	0.16639112
89.35546875	2.82106E-06	0.101637827
89.36157227	2.37455E-06	0.080886298
89.36767578	2.15867E-06	0.074375334
89.3737793	2.97218E-06	0.107922039
89.37988281	2.37846E-06	0.087469736
89.38598633	4.34849E-06	0.171920189
89.39208984	6.9252E-06	0.283026305
89.39819336	6.69723E-06	0.265055973
89.40429688	4.91628E-06	0.205156889
89.41040039	3.60221E-06	0.159178499
89.41650391	4.10788E-06	0.188606248
89.42260742	6.57219E-06	0.331496057
89.42871094	9.75891E-06	0.523244801
89.43481445	1.20414E-05	0.676097336
89.44091797	1.22603E-05	0.749866784
89.44702148	1.12942E-05	0.727167585
89.453125	1.07387E-05	0.743278945
89.45922852	1.0214E-05	0.805484245
89.46533203	1.0921E-05	0.954582905
89.47143555	1.38598E-05	1.317718687
89.47753906	1.63738E-05	1.774749024
89.48364258	1.69024E-05	1.929450454
89.48974609	1.5736E-05	1.747638679
89.49584961	1.39978E-05	1.7401843
89.50195313	1.39039E-05	1.802766949

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
73.32	0.006595803	-3.1907E-05	-0.006325296	-1.423191544	3.1623016	2.523169809
73.325	0.00992837	-4.86663E-05	-0.009658901	-2.173252715	3.162326513	2.523169809
73.33	0.012143925	-5.98667E-05	-0.011885394	-2.674213706	3.162363786	2.523169809
73.335	0.013611744	-6.7262E-05	-0.013354912	-3.004855264	3.162410614	2.523169809
73.34	0.016520354	-8.19302E-05	-0.016268176	-3.660339702	3.162479593	2.523169809
73.345	0.01693639	-8.41453E-05	-0.016703608	-3.758311753	3.162552089	2.523169809
73.35	0.016449494	-8.17183E-05	-0.016213553	-3.648049412	3.162620477	2.523169809
73.355	0.018570392	-9.24071E-05	-0.018347882	-4.128273378	3.162707638	2.523169809
73.36	0.01853974	-9.23716E-05	-0.018332032	-4.124707202	3.16279451	2.523313434
73.365	0.017515601	-8.72273E-05	-0.017293485	-3.891034202	3.16287205	2.523547757
73.37	0.019833113	-9.88733E-05	-0.019630991	-4.416972938	3.162971467	2.523695842
73.375	0.020654361	-0.000103125	-0.020472958	-4.60641551	3.163079287	2.523757109
73.38	0.019560206	-9.76701E-05	-0.019371551	-4.358599062	3.163175986	2.523757109
73.385	0.021108984	-0.000105456	-0.020936856	-4.710792682	3.163288604	2.523757109
73.39	0.02233879	-0.000111741	-0.022183374	-4.991259224	3.163414728	2.523757109
73.395	0.021842583	-0.00010932	-0.021694302	-4.881217917	3.16353531	2.523757109
73.4	0.022904504	-0.000114684	-0.02276686	-5.122543463	3.163667902	2.523757109
73.405	0.024184768	-0.000121217	-0.024062029	-5.413956512	3.163815731	2.523757109
73.41	0.024119564	-0.000120995	-0.024016162	-5.403636509	3.163962764	2.523757109
73.415	0.024454255	-0.000122753	-0.024366334	-5.482425148	3.164113906	2.523757109
73.42	0.024583028	-0.00012351	-0.024514818	-5.515834129	3.164266644	2.523757109
73.425	0.023440374	-0.000117867	-0.023375292	-5.259440772	3.164405513	2.523757109
73.43	0.022993064	-0.000115665	-0.022930957	-5.159465299	3.164539132	2.523757109
73.435	0.023267214	-0.000117124	-0.02322553	-5.22574431	3.164675957	2.523757109
73.44	0.021819387	-0.000109946	-0.021776889	-4.899800124	3.164796284	2.523757109
73.445	0.020203469	-0.000101841	-0.020142125	-4.531978064	3.164899447	2.523757109
73.45	0.020371765	-0.000102689	-0.020313373	-4.570509033	3.165004337	2.523757109
73.455	0.020384535	-0.000102767	-0.020329186	-4.574066791	3.165109359	2.523757109
73.46	0.021592079	-0.000108793	-0.021545921	-4.847832228	3.165227191	2.523757109
73.465	0.024891006	-0.000125407	-0.024892307	-5.600769099	3.16538378	2.523757109
73.47	0.02640953	-0.000133167	-0.026430041	-5.946759124	3.165560057	2.523757109
73.475	0.027426506	-0.000138382	-0.027462958	-6.17916556	3.165750173	2.523757109
73.48	0.02785165	-0.000140729	-0.027923425	-6.282770597	3.165946228	2.523757109
73.485	0.022564217	-0.000114593	-0.022650546	-5.09637279	3.166074909	2.523757109
73.49	0.016377104	-8.37844E-05	-0.016446035	-3.700357821	3.166142697	2.523757109
73.495	0.01546234	-7.90355E-05	-0.015491357	-3.485555381	3.166203123	2.523757109
73.5	0.019821622	-0.000100483	-0.019819205	-4.459321135	3.166302424	2.523757109
73.505	0.029790774	-0.000150157	-0.029794661	-6.703798624	3.16652673	2.523757109
73.51	0.034395986	-0.000173832	-0.034479483	-7.757883598	3.166825744	2.523757109
73.515	0.028415837	-0.0001444	-0.028541737	-6.421890794	3.167029822	2.523757109
73.52	0.029374655	-0.000148992	-0.029471145	-6.631007549	3.167247905	2.523757109
73.525	0.039009062	-0.000197396	-0.039137572	-8.80595364	3.167632503	2.523757109
73.53	0.042278893	-0.000214447	-0.042505281	-9.563688278	3.168084279	2.523757109
73.535	0.038768687	-0.000197414	-0.039067546	-8.790197836	3.168464151	2.523757109
73.54	0.02781382	-0.000143425	-0.02819543	-6.343971763	3.168659674	2.523757109
73.545	0.011702668	-6.30636E-05	-0.012071781	-2.716150645	3.168694288	2.523757109
73.55	0.009301832	-5.05951E-05	-0.009588278	-2.157362494	3.168716156	2.523757109
73.555	0.019985203	-0.000103619	-0.020272784	-4.561376295	3.168817103	2.523757109
73.56	0.018901381	-9.88159E-05	-0.019295853	-4.34156682	3.168907397	2.523757109
73.565	0.002503065	-1.73286E-05	-0.002924126	-0.657928378	3.168908981	2.523757109
73.57	-0.00512611	2.14327E-05	0.004813286	1.082989356	3.168915622	2.523757109
73.575	0.007225837	-3.95187E-05	-0.007471113	-1.681000485	3.168928819	2.523757109
73.58	0.016533925	-8.63125E-05	-0.016872905	-3.796403658	3.168997911	2.523757109
73.585	0.005096073	-2.99897E-05	-0.005519775	-1.241949452	3.169004474	2.523757109
73.59	-0.005465841	2.28957E-05	0.005105053	1.148637003	3.169012025	2.523757109
73.595	0.000255635	-5.22601E-06	-0.000568604	-0.127935875	3.169012042	2.523757109
73.6	0.005285938	-3.03827E-05	-0.005635397	-1.267964263	3.169019103	2.523757109
73.605	0.003021644	-1.93183E-05	-0.003401744	-0.765392376	3.169021411	2.523757109
73.61	-7.77173E-05	-4.01572E-06	-0.000315442	-0.070974392	3.169021413	2.523757109
73.615	-0.00481503	1.94927E-05	0.004420109	0.994524485	3.169027272	2.523857314
73.62	-0.005808147	2.45549E-05	0.005430096	1.221771633	3.169035798	2.523941528
73.625	-0.002690248	8.97848E-06	0.002286657	0.514497871	3.169037628	2.523952481
73.63	-0.008134867	3.58485E-05	0.00768742	1.729669608	3.169054353	2.523952481
73.635	-0.016752236	7.92838E-05	0.016335984	3.675596326	3.169125282	2.523952481
73.64	-0.014524941	6.84977E-05	0.014155183	3.184916171	3.169178603	2.523952481
73.645	-0.012426793	5.79023E-05	0.012018517	2.704166237	3.169217633	2.523952481
73.65	-0.021720585	0.00010422	0.021293533	4.791044939	3.169336872	2.523952481
73.655	-0.026604699	0.000129156	0.026245737	5.905290823	3.169515765	2.523952481
73.66	-0.021352722	0.000103232	0.021015177	4.728414877	3.169630999	2.523952481
73.665	-0.024330065	0.000117779	0.023951707	5.389134022	3.16978061	2.523952481
73.67	-0.032774488	0.000160355	0.032434246	7.29770532	3.170052096	2.523952481
73.675	-0.030027557	0.00014706	0.029749514	6.693640539	3.170279981	2.523952481
73.68	-0.027238484	0.000133135	0.026941356	6.061805112	3.170467499	2.523952481
73.685	-0.033216278	0.00016283	0.03292493	7.408109323	3.170746353	2.523952481
73.69	-0.032805959	0.000161057	0.032544536	7.322520505	3.171018361	2.523952481
73.695	-0.029005762	0.000142191	0.028739121	6.466302177	3.171231001	2.523952481
73.7	-0.032915429	0.000161541	0.032644323	7.344972696	3.171504827	2.523952481
73.705	-0.033593373	0.000165117	0.033363418	7.506769074	3.171790049	2.523952481
73.71	-0.029682314	0.000145745	0.029454986	6.627371759	3.172012724	2.523952481
73.715	-0.031852048	0.000156418	0.031609685	7.112179119	3.172269143	2.523952481
73.72	-0.033880442	0.000166622	0.033668036	7.575308144	3.172559261	2.523952481
73.725	-0.030845841	0.00015168	0.030651964	6.896691906	3.172799736	2.523952481
73.73	-0.029637461	0.000145636	0.029432983	6.622421224	3.173021738	2.523952481
73.735	-0.031015393	0.000152468	0.030812481	6.932808145	3.173264864	2.523952481
73.74	-0.031639503	0.00015566	0.031456689	7.077755104	3.173517872	2.523952481
73.745	-0.0294345	0.00014484	0.029272377	6.586284923	3.173736844	2.523952481
73.75	-0.026234836	0.000128962	0.026072752	5.866369184	3.173910798	2.523952481
73.755	-0.026842046	0.000131933	0.026673191	6.00146799	3.174092897	2.523952481
73.76	-0.026658293	0.00013116	0.026516992	5.96632319	3.174272511	2.523952481
73.765	-0.021119914	0.000103738	0.020996088	4.724119724	3.174385246	2.523952481
73.77	-0.016251583	7.94427E-05	0.016112861	3.625393621	3.174451999	2.523952481
73.775	-0.012246671	5.94205E-05	0.012093275	2.720986801	3.174489905	2.523952481
73.78	-0.007081575	3.34578E-05	0.006887203	1.549620744	3.17450258	2.523952481
73.785	-0.006966473	3.25478E-05	0.006711384	1.510061366	3.174514846	2.523952481
73.79	-0.012080358	5.76769E-05	0.011780304	2.650568448	3.174551729	2.523952481
73.795	-0.018651894	9.02288E-05	0.018334715	4.125310824	3.174639656	2.523952481
73.8	-0.025141963	0.000122655	0.024851953	5.591689322	3.174799419	2.523952481
73.805	-0.023816968	0.000116395	0.023583984	5.306396497	3.174942785	2.523952481
73.81	-0.016634495	8.0724E-05	0.016393859	3.688618178	3.175012721	2.523952481
73.815	-0.017261228	8.35667E-05	0.016970773	3.818423887	3.175088025	2.523952481
73.82	-0.022363125	0.00010883	0.022065492	4.964735604	3.175214423	2.523952481
73.825	-0.024137151	0.000117659	0.02384396	5.364891101	3.17536167	2.523952481
73.83	-0.027849889	0.000136125	0.027555945	6.200087543	3.175557701	2.523952481
73.835	-0.030220326	0.000148107	0.029959673	6.740926441	3.175788521	2.523952481

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
89.50805664	1.60227E-05	1.696176765
89.51416016	1.78679E-05	1.751920736
89.52026367	1.7211E-05	1.556345327
89.52636719	1.52225E-05	1.157922015
89.5324707	1.41324E-05	0.980890574
89.53857422	1.28723E-05	0.810509629
89.54467773	1.13649E-05	0.636899706
89.55078125	1.11837E-05	0.609388538
89.55688477	1.19497E-05	0.626794396
89.56298828	1.24748E-05	0.598595873
89.5690918	1.11555E-05	0.517105082
89.57519531	8.11805E-06	0.364796961
89.58129883	6.18826E-06	0.265451754
89.58740234	6.32931E-06	0.274304993
89.59350586	7.70085E-06	0.328121369
89.59960938	7.4089E-06	0.294649536
89.60571289	4.82209E-06	0.188206926
89.61181641	2.93821E-06	0.11164938
89.61791992	2.53013E-06	0.092537942
89.62402344	2.58983E-06	0.096381887
89.63012695	4.2114E-06	0.154286286
89.63623047	5.8685E-06	0.204003855
89.64233398	6.23112E-06	0.215657465
89.6484375	5.61822E-06	0.191940403
89.65454102	5.25296E-06	0.176171516
89.66064453	5.63227E-06	0.190877613
89.66674805	6.23543E-06	0.208261748
89.67285156	6.85019E-06	0.229046762
89.67895508	7.80038E-06	0.268124465
89.68505859	8.45172E-06	0.284272151
89.69116211	8.32143E-06	0.280420002
89.69726563	8.74176E-06	0.308684139
89.70336914	1.10602E-05	0.395310147
89.70947266	1.25392E-05	0.460629143
89.71557617	1.22072E-05	0.466140176
89.72167969	1.19252E-05	0.451731796
89.7277832	1.27108E-05	0.4991709
89.73388672	1.44805E-05	0.605542418
89.73999023	1.56001E-05	0.667513857
89.74609375	1.47938E-05	0.675674596
89.75219727	1.3615E-05	0.657066299
89.75830078	1.34112E-05	0.647575327
89.7644043	1.49346E-05	0.77803203
89.77050781	1.56816E-05	0.882511067
89.77661133	1.36718E-05	0.793879361
89.78271484	1.17195E-05	0.767098097
89.78881836	1.23781E-05	0.875236838
89.79492188	1.45684E-05	1.044258846
89.80102539	1.55172E-05	1.295677164
89.80712891	1.34652E-05	1.258236424
89.81323242	1.02378E-05	0.969809946
89.81933594	8.90131E-06	0.997386302
89.82543945	9.68469E-06	1.276139289
89.83154297	1.16938E-05	1.468595455
89.83764648	1.26372E-05	1.491976099
89.84375	1.20117E-05	1.315799017
89.84985352	1.11813E-05	1.03348167
89.85595703	1.06291E-05	0.89507089
89.86206055	1.12555E-05	0.955779504
89.86816406	1.25819E-05	0.97579552
89.87426758	1.36616E-05	0.962200135
89.88037109	1.53252E-05	1.021445413
89.88647461	1.71528E-05	1.01976972
89.89257813	1.72791E-05	0.961934921
89.89868164	1.4938E-05	0.799320076
89.90478516	1.18689E-05	0.581181817
89.91088867	1.10222E-05	0.517833106
89.91699219	1.22917E-05	0.571144953
89.9230957	1.35561E-05	0.597165493
89.92919922	1.33979E-05	0.564526298
89.93530273	1.16542E-05	0.468438296
89.94140625	1.03199E-05	0.393747482
89.94750977	1.02565E-05	0.392329399
89.95361328	1.01196E-05	0.390182036
89.9597168	9.45505E-06	0.348676864
89.96582031	9.67675E-06	0.346643953
89.97192383	1.1129E-05	0.392372231
89.97802734	1.20437E-05	0.414769959
89.98413086	1.13876E-05	0.397359374
89.99023438	9.99783E-06	0.348100389
89.99633789	1.00989E-05	0.340947684
90.00244141	1.18345E-05	0.407430857
90.00854492	1.23892E-05	0.4288476
90.01464844	1.11035E-05	0.378199666
90.02075195	9.89952E-06	0.35102812
90.02685547	9.6861E-06	0.346482287
90.03295898	9.98592E-06	0.354133429
90.0390625	1.11513E-05	0.414292098
90.04516602	1.25906E-05	0.464781617
90.05126953	1.40188E-05	0.514396604
90.05737305	1.5111E-05	0.590311495
90.06347656	1.39417E-05	0.551030345
90.06958008	1.14862E-05	0.458097855
90.07568359	1.05821E-05	0.441439504
90.08178711	1.16663E-05	0.48077962
90.08789063	1.40672E-05	0.597541178
90.09399414	1.62344E-05	0.757917377
90.10009766	1.58446E-05	0.776497305
90.10620117	1.25664E-05	0.661993952
90.11230469	8.773E-06	0.504830591
90.1184082	7.45519E-06	0.436414204
90.12451172	8.16889E-06	0.515404939
90.13061523	8.8045E-06	0.639944453
90.13671875	9.51584E-06	0.743859066

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
73.84	-0.02709423	0.000132616	0.026832803	6.037380764	3.175974058	2.523952481
73.845	-0.027573446	0.000134898	0.027294351	6.141229053	3.176166215	2.523952481
73.85	-0.031396197	0.00015386	0.031113261	7.000483712	3.176415348	2.523952481
73.855	-0.033307715	0.000163385	0.033022565	7.430077232	3.17669574	2.52410731
73.86	-0.03702408	0.00018207	0.036736685	8.265754103	3.177042193	2.524354687
73.865	-0.039367898	0.000194106	0.039119723	8.801937664	3.177433899	2.524529757
73.87	-0.038454024	0.000189581	0.038206039	8.59635885	3.17780763	2.52463294
73.875	-0.041868873	0.000206862	0.041644014	9.369903103	3.178250686	2.524664287
73.88	-0.045777576	0.00022688	0.045602589	10.26058247	3.178780327	2.524664287
73.885	-0.044334333	0.000219805	0.044174107	9.939174116	3.179277098	2.524664287
73.89	-0.044228507	0.000219339	0.04408046	9.918103503	3.1797715	2.524664287
73.895	-0.046147483	0.000229187	0.046058628	10.36319134	3.180309735	2.524664287
73.9	-0.047340996	0.000235357	0.047277949	10.63753859	3.180876171	2.524664287
73.905	-0.050984654	0.00025394	0.050948508	11.4634144	3.181533155	2.524664287
73.91	-0.053725212	0.000268126	0.053732734	12.08986516	3.182262667	2.524664287
73.915	-0.053279123	0.000266157	0.05333496	12.00036607	3.182980114	2.524664287
73.92	-0.053788839	0.000269008	0.053905578	12.12875497	3.183711355	2.524664287
73.925	-0.050871	0.000254849	0.051047693	11.48573101	3.184365413	2.524664287
73.93	-0.044137446	0.000221566	0.044340132	9.976529622	3.184857782	2.524664287
73.935	-0.045301075	0.000227303	0.045500633	10.23764236	3.185376454	2.524664287
73.94	-0.050803162	0.00025488	0.051060678	11.48865246	3.186028769	2.524664287
73.945	-0.048169607	0.000242259	0.048513047	10.91543561	3.186615207	2.524664287
73.95	-0.043980839	0.000221675	0.044362641	9.981594204	3.187104088	2.524664287
73.955	-0.045511368	0.000229531	0.045948823	10.33848528	3.187627586	2.524664287
73.96	-0.042379106	0.000214527	0.042923158	9.657710569	3.188081507	2.524664287
73.965	-0.031040373	0.000158489	0.031662883	7.124148629	3.188325024	2.524664287
73.97	-0.020259234	0.000104859	0.020916891	4.706300436	3.188428758	2.524664287
73.975	-0.008994142	4.86375E-05	0.009681303	2.178293072	3.188449204	2.524664287
73.98	0.004666135	-2.0023E-05	-0.004000659	-0.900148207	3.188454706	2.524664287
73.985	0.009447401	-4.44535E-05	-0.008858793	-1.993228381	3.188477264	2.524664287
73.99	0.003684326	-1.59727E-05	-0.003112741	-0.700366654	3.188480695	2.524664287
73.995	0.004317701	-1.8761E-05	-0.00367838	-0.827635537	3.188485407	2.524664287
74	0.015950564	-7.67942E-05	-0.015281947	-3.438438049	3.188549709	2.524664287
74.005	0.023295444	-0.000114084	-0.02267701	-5.102327292	3.188686866	2.524664287
74.01	0.02139911	-0.000104656	-0.020773455	-4.674027445	3.188802602	2.524664287
74.015	0.022094757	-0.000108004	-0.02145	-4.826249945	3.188925985	2.524664287
74.02	0.02922193	-0.000143809	-0.028563352	-6.426754144	3.189141806	2.524664287
74.025	0.034468192	-0.000170473	-0.033837356	-7.613405056	3.189442077	2.524664287
74.03	0.035955156	-0.000178113	-0.035347443	-7.953174649	3.189768813	2.524664287
74.035	0.036876643	-0.000182826	-0.036278702	-8.162708049	3.190112513	2.524664287
74.04	0.037622914	-0.0001866	-0.03702443	-8.330496701	3.190470264	2.524664287
74.045	0.040587713	-0.000201554	-0.039977644	-8.994969935	3.19088662	2.524664287
74.05	0.045296839	-0.000225513	-0.044705619	-10.05876428	3.191405195	2.524664287
74.055	0.045517109	-0.00022681	-0.044946483	-10.11295876	3.191928826	2.524664287
74.06	0.043450715	-0.000216328	-0.042830934	-9.636960127	3.192405992	2.524664287
74.065	0.046122347	-0.000229803	-0.04555095	-10.24896371	3.192943641	2.524664287
74.07	0.04939349	-0.000246513	-0.048845849	-10.99031599	3.193560258	2.524664287
74.075	0.047714461	-0.000238126	-0.047152558	-10.60932553	3.194135666	2.524664287
74.08	0.04621136	-0.000230446	-0.045602829	-10.26063643	3.194675392	2.524664287
74.085	0.048929598	-0.000244184	-0.048375971	-10.88459352	3.195280481	2.524664287
74.09	0.050792853	-0.00025375	-0.050271787	-11.31115199	3.195932531	2.524664287
74.095	0.048638247	-0.000242902	-0.04808186	-10.81841861	3.196530436	2.524664287
74.1	0.047754709	-0.000238334	-0.047160453	-10.61110189	3.197106815	2.524664287
74.105	0.050788278	-0.00025368	-0.050257771	-11.30799855	3.197758748	2.524664287
74.11	0.052623653	-0.000263097	-0.052112942	-11.72541206	3.198458651	2.524664287
74.115	0.051345105	-0.000256697	-0.050820695	-11.43465648	3.199124958	2.524664287
74.12	0.049939718	-0.000249563	-0.049381057	-11.11073774	3.199755288	2.524664287
74.125	0.04974019	-0.0002485	-0.049166738	-11.062516	3.200380591	2.524664287
74.13	0.051618518	-0.000257986	-0.051081719	-11.49338686	3.201054013	2.524664287
74.135	0.053442645	-0.00026729	-0.052938707	-11.91120915	3.201775871	2.524664287
74.14	0.052499199	-0.000262532	-0.051977919	-11.69503166	3.202472467	2.524664287
74.145	0.053519776	-0.000267611	-0.053001879	-11.92542289	3.20319641	2.524664287
74.15	0.058149105	-0.00029113	-0.05763074	-12.96691645	3.204051009	2.524664287
74.155	0.060790957	-0.000304669	-0.060293254	-13.56598215	3.204985024	2.524664287
74.16	0.062231983	-0.000312052	-0.061744588	-13.89253224	3.205963845	2.524664287
74.165	0.065214675	-0.000327291	-0.064738959	-14.56626568	3.207038741	2.524664287
74.17	0.067048141	-0.000336741	-0.066594903	-14.98385314	3.208174927	2.524664287
74.175	0.06839735	-0.000343685	-0.067958231	-15.29060193	3.2093573	2.524664287
74.18	0.071026394	-0.000357171	-0.070605028	-15.88613121	3.210632315	2.524664287
74.185	0.071953759	-0.000362066	-0.071565209	-16.10217193	3.211940843	2.524664287
74.19	0.071787743	-0.000361324	-0.071415537	-16.06849587	3.213243339	2.524664287
74.195	0.073751576	-0.000371402	-0.073391291	-16.51304047	3.214618073	2.524664287
74.2	0.074817563	-0.000377023	-0.074487323	-16.75964758	3.216032834	2.524664287
74.205	0.072381517	-0.000364785	-0.072016897	-16.2038019	3.217356966	2.524664287
74.21	0.071374084	-0.000359628	-0.07097675	-15.96976866	3.218644495	2.524664287
74.215	0.075309659	-0.00037938	-0.074946937	-16.86306084	3.220077927	2.524664287
74.22	0.079904301	-0.000403111	-0.079571898	-17.90367707	3.221691603	2.524664287
74.225	0.08235397	-0.0004159	-0.082062564	-18.46407696	3.223405738	2.524664287
74.23	0.083726359	-0.000423172	-0.083478461	-18.78265372	3.225177479	2.524664287
74.235	0.082739356	-0.000418332	-0.082501041	-18.56273434	3.226907695	2.524664287
74.24	0.080936589	-0.000409171	-0.080652139	-18.1467312	3.228563334	2.524664287
74.245	0.083429479	-0.000422015	-0.083244935	-18.73011042	3.230322533	2.524664287
74.25	0.087125343	-0.000441165	-0.086979669	-19.57042553	3.232241047	2.524664287
74.255	0.086200998	-0.000436708	-0.08607556	-19.36700099	3.234119068	2.524664287
74.26	0.084520034	-0.000428239	-0.084366452	-18.98245172	3.235924559	2.524664287
74.265	0.085852374	-0.00043518	-0.085767836	-19.29776304	3.23778742	2.524664287
74.27	0.087417264	-0.000443408	-0.087415995	-19.6685989	3.239718812	2.524664287
74.275	0.086612749	-0.000439553	-0.086637488	-19.49343469	3.241614817	2.524664287
74.28	0.083739856	-0.000425016	-0.083703989	-18.8333976	3.24338713	2.524664287
74.285	0.083414164	-0.000423383	-0.083375412	-18.7594677	3.245145683	2.524664287
74.29	0.087544395	-0.000444329	-0.087595154	-19.70890958	3.247082696	2.524664287
74.295	0.08922094	-0.000452975	-0.089276517	-20.08721628	3.249094611	2.524664287
74.3	0.088562325	-0.000449907	-0.088656994	-19.94782356	3.251076932	2.524664287
74.305	0.09252326	-0.000470257	-0.092635614	-20.84301304	3.253240536	2.524664287
74.31	0.097058331	-0.000494067	-0.097260343	-21.88357723	3.255621438	2.524664287
74.315	0.097016516	-0.000494445	-0.097313441	-21.89552433	3.258000289	2.524664287
74.32	0.093449105	-0.000477125	-0.093818426	-21.10914591	3.26020741	2.524664287
74.325	0.084760498	-0.000434634	-0.085260392	-19.18358826	3.262023189	2.524664287
74.33	0.068994866	-0.000356658	-0.069607414	-15.66166815	3.26322631	2.524664287
74.335	0.047886847	-0.00025131	-0.048554696	-10.92480652	3.263805884	2.524664287
74.34	0.027364537	-0.000147993	-0.028005926	-6.301333447	3.263995141	2.524664287
74.345	0.013577979	-7.80217E-05	-0.014141314	-3.181795643	3.264041737	2.524664287
74.35	0.006081855	-3.96278E-05	-0.006550983	-1.47397128	3.264051085	2.524664287
74.355	0.006583452	-4.16175E-05	-0.006979574	-1.570404103	3.264062039	2.524664287

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
90.14282227	9.49004E-06	0.825162469
90.14892578	7.50658E-06	0.779112133
90.1550293	4.36065E-06	0.486859701
90.16113281	1.78558E-06	0.215576305
90.16723633	2.23619E-06	0.292100029
90.17333984	4.12678E-06	0.472258892
90.17944336	4.63706E-06	0.491856813
90.18554688	2.36509E-06	0.262520255
90.19165039	2.1553E-06	0.217074214
90.19775391	2.93454E-06	0.265369409
90.20385742	1.34276E-06	0.115850813
90.20996094	3.36581E-06	0.245465759
90.21606445	2.95041E-06	0.186636635
90.22216797	4.50761E-07	0.027682813
90.22827148	2.6093E-06	0.150090669
90.234375	2.70782E-06	0.145903087
90.24047852	1.77024E-06	0.093222022
90.24658203	2.70714E-06	0.131345204
90.25268555	4.11793E-06	0.187833408
90.25878906	4.87334E-06	0.217560938
90.26489258	5.70606E-06	0.238751233
90.27099609	7.24628E-06	0.297984409
90.27709961	8.61921E-06	0.35805777
90.28320313	9.22668E-06	0.360967231
90.28930664	9.51224E-06	0.361260124
90.29541016	1.00101E-05	0.376397681
90.30151367	1.01004E-05	0.365489374
90.30761719	9.6153E-06	0.354792864
90.3137207	9.67888E-06	0.366605796
90.31982422	1.12041E-05	0.41309336
90.32592773	1.28574E-05	0.474073538
90.33203125	1.37161E-05	0.503456183
90.33813477	1.39797E-05	0.507704204
90.34423828	1.41955E-05	0.537601923
90.3503418	1.54947E-05	0.595661798
90.35644531	1.77772E-05	0.661554634
90.36254883	1.92917E-05	0.722364702
90.36865234	2.00653E-05	0.751235209
90.37475586	2.08681E-05	0.764038558
90.38085938	2.06597E-05	0.77420803
90.38696289	1.83602E-05	0.712974321
90.39306641	1.53611E-05	0.609940355
90.39916992	1.49465E-05	0.622944748
90.40527344	1.66072E-05	0.699348943
90.41137695	1.73547E-05	0.729481084
90.41748047	1.61525E-05	0.728957842
90.42358398	1.42353E-05	0.672932975
90.4296875	1.31426E-05	0.643301756
90.43579102	1.26761E-05	0.694836915
90.44189453	1.25058E-05	0.70850051
90.44799805	1.30825E-05	0.753896033
90.45410156	1.34884E-05	0.877521852
90.46020508	1.24033E-05	0.858554118
90.46630859	1.05003E-05	0.782036495
90.47241211	9.27049E-06	0.81774947
90.47851563	8.72572E-06	0.82190338
90.48461914	8.46632E-06	0.860976295
90.49072266	8.77727E-06	1.02838788
90.49682617	9.30409E-06	1.09791144
90.50292969	8.86829E-06	1.006251508
90.5090332	7.86498E-06	0.922970037
90.51513672	9.00885E-06	1.036894852
90.52124023	1.06626E-05	1.111014347
90.52734375	1.08947E-05	1.096289064
90.53344727	1.06683E-05	0.933636732
90.53955078	1.06338E-05	0.776879372
90.5456543	9.91819E-06	0.70412804
90.55175781	8.59694E-06	0.588074126
90.55786133	7.02584E-06	0.431869848
90.56396484	5.52681E-06	0.321225297
90.57006836	5.30802E-06	0.285810492
90.57617188	5.8203E-06	0.287958349
90.58227539	5.60688E-06	0.272270784
90.58837891	5.08052E-06	0.239234396
90.59448242	7.0413E-06	0.313542328
90.60058594	9.17047E-06	0.403351449
90.60668945	9.302E-06	0.394767835
90.61279297	8.30952E-06	0.33345058
90.61889648	7.10425E-06	0.282150057
90.625	5.17158E-06	0.199624881
90.63110352	3.26486E-06	0.122716713
90.63720703	2.17339E-06	0.083941792
90.64331055	2.24845E-06	0.085114633
90.64941406	3.19311E-06	0.116541717
90.65551758	2.90546E-06	0.106300688
90.66162109	1.02264E-06	0.036292271
90.66772461	1.35577E-06	0.048254795
90.67382813	2.16117E-06	0.080165943
90.67993164	3.01438E-06	0.108954869
90.68603516	4.90752E-06	0.178034834
90.69213867	6.25498E-06	0.234655269
90.69824219	6.06158E-06	0.223208411
90.7043457	4.85581E-06	0.186082041
90.71044922	4.48128E-06	0.181762444
90.71655273	4.73935E-06	0.188096869
90.72265625	4.64827E-06	0.188533901
90.72875977	4.52479E-06	0.189917255
90.73486328	4.60898E-06	0.192310228
90.7409668	3.71859E-06	0.162320832
90.74707031	3.44329E-06	0.157178602
90.75317383	5.8924E-06	0.276621936
90.75927734	8.22253E-06	0.417141911
90.76538086	9.39421E-06	0.489696956
90.77148438	9.56603E-06	0.496002749

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
74.36	0.017944988	-9.77667E-05	-0.018291936	-4.115685643	3.264143428	2.524664287
74.365	0.025215052	-0.000134298	-0.025632493	-5.767311034	3.26430412	2.524664287
74.37	0.016353622	-9.06783E-05	-0.016836478	-3.788207654	3.264371714	2.524664287
74.375	0.006737353	-4.26368E-05	-0.007175255	-1.61443247	3.264383186	2.524664287
74.38	0.008988195	-5.34917E-05	-0.009367404	-2.107665974	3.264403604	2.524664287
74.385	0.014428597	-8.05237E-05	-0.014817118	-3.333851511	3.264456221	2.524664287
74.39	0.014159	-7.93968E-05	-0.014587584	-3.28220642	3.26450689	2.524664287
74.395	0.0083574	-5.07244E-05	-0.008804906	-1.981103798	3.264524543	2.524664287
74.4	0.004065141	-2.92491E-05	-0.004501238	-1.01277866	3.26452872	2.524664287
74.405	0.006516821	-4.13272E-05	-0.006939426	-1.561370905	3.264539453	2.524664287
74.41	0.007804614	-4.78702E-05	-0.008259104	-1.85829839	3.264554848	2.524664287
74.415	0.002952693	-2.37917E-05	-0.003423768	-0.77034771	3.264557052	2.524664287
74.42	0.000249177	-9.98318E-06	-0.000698599	-0.157184803	3.264557068	2.524664287
74.425	0.001362802	-1.562E-05	-0.001836785	-0.413276674	3.264557537	2.524664287
74.43	-0.000972503	-3.90948E-06	0.000499585	0.112406576	3.264557776	2.524664287
74.435	-0.006314203	2.32159E-05	0.005847108	1.315599311	3.264567853	2.524664287
74.44	-0.0074417	2.90876E-05	0.006999041	1.5747843	3.264581849	2.524664287
74.445	-0.005644728	1.99396E-05	0.005152276	1.159262147	3.264589902	2.524664287
74.45	-0.009010387	3.67214E-05	0.008507398	1.914164553	3.264610421	2.524664287
74.455	-0.015229699	6.83768E-05	0.01473718	3.315865563	3.264669043	2.524664287
74.46	-0.016360669	7.42755E-05	0.015892926	3.575908389	3.264736695	2.524664287
74.465	-0.015980195	7.23028E-05	0.015494622	3.486289874	3.264801236	2.524664287
74.47	-0.020330737	9.43612E-05	0.019845015	4.465128385	3.264905704	2.524664287
74.475	-0.024946895	0.000117962	0.024479739	5.507941166	3.265062997	2.524664287
74.48	-0.025678545	0.00012179	0.025231045	5.67698505	3.265229651	2.524664287
74.485	-0.026579497	0.000126357	0.026127392	5.878663219	3.265408205	2.524664287
74.49	-0.030361817	0.00014563	0.029907812	6.729257605	3.265641192	2.524664287
74.495	-0.033359672	0.000161025	0.03292547	7.408230765	3.26592246	2.524664287
74.5	-0.033386203	0.000161238	0.032961119	7.41625167	3.266204175	2.524664287
74.505	-0.034394769	0.000166353	0.03396941	7.643117332	3.266503167	2.524664287
74.51	-0.037794249	0.000183712	0.037369092	8.408045639	3.266864184	2.524664287
74.515	-0.039484829	0.000192434	0.039076541	8.79222171	3.267258221	2.524664287
74.52	-0.039642995	0.00019328	0.039242012	8.829452779	3.26765542	2.524664287
74.525	-0.041349341	0.00020199	0.040946409	9.212941917	3.268087549	2.524664287
74.53	-0.043429073	0.000212656	0.043032755	9.682369945	3.26856424	2.524664287
74.535	-0.044597849	0.000218693	0.04421336	9.948005963	3.269066934	2.524664287
74.54	-0.045034922	0.000220999	0.044664168	10.04943779	3.26957953	2.524664287
74.545	-0.045007639	0.00022091	0.044646077	10.04536731	3.270091504	2.524664287
74.55	-0.046051206	0.000226271	0.045694766	10.2813224	3.270627496	2.524664287
74.555	-0.04670722	0.000229722	0.046369181	10.43306577	3.271178867	2.524664287
74.56	-0.045016493	0.00022118	0.044644566	10.04502744	3.271691043	2.524664287
74.565	-0.044151556	0.000216774	0.043755443	9.844974742	3.272183726	2.524664287
74.57	-0.044196998	0.000217059	0.043813017	9.857928764	3.272677424	2.524664287
74.575	-0.042336582	0.000207622	0.041909562	9.429651377	3.273130434	2.524664287
74.58	-0.040757718	0.000199556	0.040283606	9.063811331	3.273550285	2.524664287
74.585	-0.039305143	0.000192153	0.038791996	8.728199173	3.273940744	2.524664287
74.59	-0.03701333	0.000180398	0.036424808	8.195581834	3.274286996	2.524664287
74.595	-0.0378741	0.00018467	0.037287569	8.389703079	3.27464954	2.524664287
74.6	-0.039215008	0.000191525	0.038671199	8.701019711	3.275038209	2.524664287
74.605	-0.037134802	0.000180898	0.036525905	8.218328644	3.275386738	2.524664287
74.61	-0.037360131	0.000181907	0.036730871	8.26444592	3.275739508	2.524664287
74.615	-0.03960325	0.000193307	0.039031575	8.782104329	3.276135912	2.524664287
74.62	-0.039585226	0.000193175	0.039004702	8.776058036	3.276531955	2.524664287
74.625	-0.041636812	0.000203522	0.041091627	9.245615975	3.276970113	2.524664287
74.63	-0.044637262	0.000218831	0.044176354	9.939679719	3.277473696	2.524664287
74.635	-0.044869573	0.000220003	0.044412476	9.992807025	3.277982534	2.524664287
74.64	-0.047753577	0.00023449	0.047300955	10.64271482	3.278558886	2.524664287
74.645	-0.051680827	0.000254657	0.051240192	11.52904328	3.279233934	2.524664287
74.65	-0.051447633	0.000253546	0.051005837	11.47631334	3.279902904	2.524664287
74.655	-0.051409676	0.000253301	0.050956587	11.465232	3.280570888	2.524664287
74.66	-0.053036028	0.000261568	0.05258936	11.83260606	3.281281803	2.524664287
74.665	-0.055356023	0.000273343	0.054887457	12.34967778	3.282056275	2.524664287
74.67	-0.061907203	0.000306863	0.061423459	13.82027818	3.283024906	2.524664287
74.675	-0.069591493	0.000346484	0.069138424	15.55614536	3.284248925	2.524664287
74.68	-0.071927482	0.000358767	0.071527924	16.09378286	3.285556497	2.524664287
74.685	-0.070430622	0.000351213	0.070002714	15.75061074	3.286810213	2.524664287
74.69	-0.070915154	0.000353674	0.070499931	15.86248442	3.288081238	2.524664287
74.695	-0.076482109	0.000382134	0.076070513	17.11586547	3.28955965	2.524664287
74.7	-0.081459186	0.000408018	0.081097755	18.24699479	3.291236739	2.524664287
74.705	-0.080105475	0.000401302	0.079741722	17.94188737	3.29285855	2.524664287
74.71	-0.079851663	0.000400015	0.079482347	17.88352815	3.2944701	2.524664287
74.715	-0.085032426	0.000426537	0.084687444	19.05467485	3.296297548	2.524664287
74.72	-0.086866356	0.00043632	0.086582616	19.4810887	3.298204673	2.524664287
74.725	-0.085413264	0.000429015	0.085107735	19.14924032	3.300048527	2.524664287
74.73	-0.087422956	0.00043953	0.087204383	19.62098627	3.301980171	2.524664287
74.735	-0.089428791	0.000450202	0.08927074	20.08591657	3.30400147	2.524664287
74.74	-0.086936459	0.000437696	0.086746177	19.51788987	3.305911674	2.524664287
74.745	-0.08242558	0.000415552	0.082281572	18.51335361	3.307628791	2.524664287
74.75	-0.078637993	0.000396938	0.078533101	17.66994765	3.309191726	2.524664287
74.755	-0.073517427	0.000371655	0.07344827	16.52586073	3.310557744	2.524664287
74.76	-0.066953766	0.000339004	0.066891689	15.05063008	3.311690734	2.524664287
74.765	-0.064831084	0.000328337	0.064752069	14.56921548	3.312753022	2.524664287
74.77	-0.065957148	0.000333977	0.065891042	14.82548453	3.313852534	2.524664287
74.775	-0.065366531	0.0003311	0.065310049	14.69476109	3.314932442	2.524664287
74.78	-0.067208018	0.000340306	0.067168257	15.11285784	3.316074053	2.524664287
74.785	-0.06952142	0.000352037	0.069534454	15.6452522	3.317295608	2.524664287
74.79	-0.067435587	0.000341835	0.067474878	15.18184763	3.318444963	2.524664287
74.795	-0.067758388	0.000343529	0.067817226	15.25887583	3.319605348	2.524664287
74.8	-0.068521015	0.00034758	0.068634892	15.4428507	3.320792	2.524664287
74.805	-0.064542275	0.000328002	0.064684894	14.55410121	3.321844845	2.524664287
74.81	-0.064255539	0.000326637	0.064416011	14.49360238	3.322888356	2.524664287
74.815	-0.065215473	0.000331642	0.0654264	14.72094	3.323963279	2.524664287
74.82	-0.061250459	0.00031212	0.061501435	13.83782297	3.324911467	2.524664287
74.825	-0.060651755	0.000309208	0.060922031	13.70745691	3.32584121	2.524664287
74.83	-0.061609597	0.000314243	0.061938611	13.93618743	3.32680055	2.524664287
74.835	-0.057874484	0.000295866	0.05824602	13.10535441	3.327647095	2.524664287
74.84	-0.05475746	0.000280465	0.055163771	12.41184841	3.328404909	2.524664287
74.845	-0.051386667	0.00026382	0.051835125	11.66290305	3.329072295	2.524664287
74.85	-0.046842216	0.000241177	0.047311258	10.64503301	3.329626858	2.524664287
74.855	-0.046612196	0.000240102	0.047101663	10.59787424	3.330175987	2.524664287
74.86	-0.046046854	0.000237543	0.046585632	10.48176721	3.330711878	2.524664287
74.865	-0.040478512	0.000209902	0.041070736	9.240915517	3.331125997	2.524664287
74.87	-0.033570233	0.000175374	0.034191229	7.693026494	3.331410826	2.524664287
74.875	-0.026524596	0.000140005	0.027155101	6.109897617	3.331588643	2.524664287

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
90.77758789	9.05754E-06	0.505152282
90.78369141	9.61842E-06	0.571255557
90.78979492	1.13134E-05	0.700921566
90.79589844	1.25769E-05	0.877904346
90.80200195	1.40967E-05	1.068541472
90.80810547	1.52397E-05	1.1910952
90.81420898	1.3785E-05	1.20809502
90.8203125	1.15591E-05	1.136791034
90.82641602	1.2342E-05	1.294985003
90.83251953	1.55653E-05	1.852841197
90.83862305	1.80207E-05	2.273455295
90.84472656	1.83605E-05	2.261605788
90.85083008	1.77377E-05	2.206996752
90.85693359	1.69935E-05	1.903856956
90.86303711	1.5997E-05	1.583094551
90.86914063	1.53556E-05	1.458360039
90.87524414	1.54397E-05	1.38636858
90.88134766	1.57561E-05	1.267779362
90.88745117	1.51266E-05	1.135430347
90.89355469	1.28537E-05	0.892449284
90.8996582	1.04117E-05	0.631009076
90.90576172	9.61639E-06	0.541945263
90.91186523	1.13938E-05	0.615932546
90.91796875	1.41992E-05	0.720826328
90.92407227	1.52158E-05	0.764712966
90.93017578	1.39932E-05	0.669020538
90.9362793	1.22131E-05	0.527895627
90.94238281	1.0764E-05	0.457491198
90.94848633	9.49413E-06	0.393993876
90.95458984	9.19009E-06	0.361268654
90.96069336	1.0488E-05	0.416756986
90.96679688	1.09605E-05	0.427255728
90.97290039	8.26215E-06	0.308179798
90.97900391	4.86734E-06	0.182541322
90.98510742	3.23199E-06	0.118429517
90.99121094	3.5203E-06	0.128111981
90.99731445	5.0057E-06	0.191744366
91.00341797	5.03789E-06	0.192534544
91.00952148	5.00511E-06	0.187067633
91.015625	7.16303E-06	0.271353507
91.02172852	1.0275E-05	0.389438837
91.02783203	1.19423E-05	0.460999837
91.03393555	1.0314E-05	0.41234538
91.04003906	6.8112E-06	0.270464963
91.04614258	4.95371E-06	0.196303542
91.05224609	6.24612E-06	0.252888455
91.05834961	7.48638E-06	0.305514169
91.06445313	7.34415E-06	0.311291053
91.07055664	9.56907E-06	0.429969038
91.07666016	1.17882E-05	0.533650824
91.08276367	1.12806E-05	0.528569214
91.08886719	9.02992E-06	0.447649932
91.0949707	6.72868E-06	0.328980496
91.10107422	6.33128E-06	0.320939259
91.10717773	6.55234E-06	0.358654299
91.11328125	6.06818E-06	0.338109502
91.11938477	4.22584E-06	0.258422786
91.12548828	3.72819E-06	0.249085777
91.1315918	5.8956E-06	0.384028821
91.13769531	6.9792E-06	0.499577898
91.14379883	7.26345E-06	0.588933569
91.14990234	7.35943E-06	0.619427924
91.15600586	7.94448E-06	0.783233284
91.16210938	8.36445E-06	0.936433957
91.16821289	7.25959E-06	0.797862196
91.17431641	5.74684E-06	0.685679179
91.18041992	6.78386E-06	0.857455238
91.18652344	8.94193E-06	1.053723613
91.19262695	9.55821E-06	1.111731002
91.19873047	8.95241E-06	1.032006932
91.20483398	9.6782E-06	0.981697109
91.2109375	1.13372E-05	1.083250545
91.21704102	1.31028E-05	1.204737388
91.22314453	1.52244E-05	1.163052358
91.22924805	1.66157E-05	1.135210143
91.23535156	1.67508E-05	1.12608539
91.24145508	1.54201E-05	0.975755379
91.24755859	1.29843E-05	0.78809301
91.25366211	1.16409E-05	0.681229024
91.25976563	1.2638E-05	0.665618739
91.26586914	1.49315E-05	0.740413934
91.27197266	1.59256E-05	0.77789058
91.27807617	1.42092E-05	0.671762891
91.28417969	1.18593E-05	0.555651615
91.2902832	1.08744E-05	0.497131973
91.29638672	1.16114E-05	0.498787015
91.30249023	1.39753E-05	0.596090718
91.30859375	1.60394E-05	0.685521818
91.31469727	1.64866E-05	0.67774938
91.32080078	1.60541E-05	0.663851248
91.3269043	1.44223E-05	0.608354716
91.33300781	1.2223E-05	0.503246999
91.33911133	1.16831E-05	0.479762918
91.34521484	1.30333E-05	0.533969787
91.35131836	1.44734E-05	0.586760084
91.35742188	1.43419E-05	0.606528226
91.36352539	1.34775E-05	0.588623218
91.36962891	1.32594E-05	0.576728848
91.37573242	1.34304E-05	0.593073942
91.38183594	1.42553E-05	0.623970296
91.38793945	1.50928E-05	0.66676671
91.39404297	1.45686E-05	0.686251476
91.40014648	1.29752E-05	0.620013846
91.40625	1.19363E-05	0.577878073

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
74.88	-0.021427251	0.000114281	0.022044728	4.960063897	3.331704683	2.524664287
74.885	-0.019802272	0.000106066	0.020413769	4.593098024	3.331803791	2.524664287
74.89	-0.017747391	9.57779E-05	0.01837226	4.133758533	3.331883396	2.524664287
74.895	-0.014335421	7.8635E-05	0.014972415	3.368793267	3.331935336	2.524664287
74.9	-0.011356434	6.36471E-05	0.012002008	2.700451695	3.331967931	2.524664287
74.905	-0.008562736	4.96049E-05	0.009220728	2.074663871	3.331986463	2.524853996
74.91	-0.00505948	3.19907E-05	0.005734281	1.290213249	3.331992932	2.525799197
74.915	-0.000860195	1.07213E-05	0.001527755	0.343744959	3.331993119	2.526664802
74.92	0.001095376	7.3773E-07	-0.000445435	-0.100222834	3.331993423	2.527448987
74.925	0.001189966	2.71741E-07	-0.000537515	-0.120940864	3.33199378	2.528150605
74.93	0.00422783	-1.50293E-05	-0.003560036	-0.801008151	3.331998298	2.528769007
74.935	0.007685629	-3.25959E-05	-0.00702775	-1.581243699	3.332013227	2.52930298
74.94	0.008551572	-3.70096E-05	-0.007898644	-1.777194925	3.33203171	2.529751287
74.945	0.01058742	-4.72832E-05	-0.009925183	-2.233166105	3.332060041	2.530113331
74.95	0.013101699	-6.0029E-05	-0.012438178	-2.798589958	3.332103425	2.530388416
74.955	0.015019903	-6.9723E-05	-0.01434862	-3.228439604	3.332160443	2.530575799
74.96	0.01858056	-8.77472E-05	-0.017898725	-4.027213073	3.332247698	2.530674872
74.965	0.020734176	-9.87122E-05	-0.020057166	-4.512862457	3.332356353	2.53069103
74.97	0.02206512	-0.000105414	-0.021375969	-4.809592992	3.332479405	2.53069103
74.975	0.026771789	-0.000129312	-0.026075664	-5.867024361	3.332660552	2.53069103
74.98	0.030492459	-0.000148344	-0.029815366	-6.708457356	3.332895548	2.53069103
74.985	0.031783206	-0.000154955	-0.031113706	-7.000583777	3.33315086	2.53069103
74.99	0.035309411	-0.000172908	-0.034637678	-7.793477548	3.333465966	2.53069103
74.995	0.039393046	-0.000193808	-0.038737222	-8.715874992	3.333858173	2.53069103
75	0.04200842	-0.000207251	-0.041372139	-9.308731369	3.334304187	2.53069103
75.005	0.044057235	-0.000217807	-0.043440264	-9.774059502	3.334794768	2.53069103
75.01	0.04527947	-0.000224123	-0.0446774	-10.05241501	3.335312945	2.53069103
75.015	0.047675885	-0.000236393	-0.047079727	-10.59293851	3.335887423	2.53069103
75.02	0.050486559	-0.000250859	-0.049910529	-11.22986914	3.336531633	2.53069103
75.025	0.050747295	-0.000252327	-0.050194669	-11.29380052	3.337182515	2.53069103
75.03	0.051867163	-0.000258085	-0.051323967	-11.54789268	3.337862439	2.53069103
75.035	0.05469658	-0.000272626	-0.054166973	-12.18756884	3.338618569	2.531140227
75.04	0.055553907	-0.000277165	-0.055054131	-12.38717952	3.339398588	2.531541809
75.045	0.055869058	-0.000278898	-0.055392824	-12.46338545	3.340187482	2.531856692
75.05	0.056265888	-0.000281068	-0.05581689	-12.55880034	3.340987622	2.532084765
75.055	0.055427615	-0.000276921	-0.054979538	-12.37039605	3.341764099	2.53222603
75.06	0.055173237	-0.000275718	-0.054736611	-12.31573753	3.342533465	2.532280806
75.065	0.054728087	-0.000273583	-0.054305552	-12.2187493	3.343290466	2.532280806
75.07	0.053114814	-0.000265472	-0.052668962	-11.85051655	3.344003495	2.532280806
75.075	0.051374674	-0.000256695	-0.050898974	-11.45226905	3.344670569	2.532280806
75.08	0.048141466	-0.000240271	-0.047589283	-10.7075886	3.345256322	2.532280806
75.085	0.046167748	-0.000230148	-0.045551149	-10.24900845	3.34579503	2.532280806
75.09	0.047596053	-0.000237415	-0.047018389	-10.5791375	3.346367586	2.532280806
75.095	0.047542417	-0.000237216	-0.046977893	-10.57002596	3.346938852	2.532280806
75.1	0.046774015	-0.000233295	-0.046186419	-10.39194427	3.347491801	2.532280806
75.105	0.048258718	-0.00024089	-0.047719799	-10.73695482	3.348080411	2.532280806
75.11	0.04797816	-0.000239561	-0.047451122	-10.67650242	3.348662196	2.532280806
75.115	0.046651664	-0.000232793	-0.046084883	-10.36909869	3.349212257	2.532280806
75.12	0.048751774	-0.000243467	-0.048239728	-10.85393883	3.349812955	2.532280806
75.125	0.051494547	-0.000257552	-0.051080146	-11.49303283	3.350483146	2.532280806
75.13	0.051521386	-0.00025782	-0.051133535	-11.50504543	3.351154036	2.532280806
75.135	0.051144516	-0.00025594	-0.050753966	-11.41964232	3.351815146	2.532280806
75.14	0.053084618	-0.000265853	-0.052753	-11.86942496	3.352527365	2.532280806
75.145	0.056006597	-0.000280858	-0.055774711	-12.54931005	3.353320148	2.532280806
75.15	0.057550342	-0.000288889	-0.057344995	-12.90262389	3.354157237	2.532280806
75.155	0.058422768	-0.000293489	-0.058243512	-13.10479013	3.355019898	2.532280806
75.16	0.058880949	-0.000295996	-0.058733131	-13.2149544	3.355896143	2.532280806
75.165	0.057845842	-0.000290868	-0.057697533	-12.9819449	3.35674185	2.532280806
75.17	0.057284122	-0.00028807	-0.057132725	-12.85486304	3.357571213	2.532280806
75.175	0.058682473	-0.000295243	-0.058581195	-13.18076881	3.358441561	2.532280806
75.18	0.062045754	-0.000312508	-0.061956772	-13.94027362	3.359414532	2.532280806
75.185	0.067694877	-0.00034166	-0.06764327	-15.21973572	3.360572743	2.532280806
75.19	0.070810344	-0.000358043	-0.070836184	-15.93814129	3.361840013	2.532280806
75.195	0.067298605	-0.000340791	-0.067354194	-15.15469355	3.362984704	2.532280806
75.2	0.064374979	-0.000326382	-0.064449122	-14.50105239	3.364032098	2.532280806
75.205	0.067653435	-0.000342746	-0.067752023	-15.24420512	3.365188891	2.532280806
75.21	0.070231424	-0.000355859	-0.070396025	-15.83910565	3.366435524	2.532280806
75.215	0.067548219	-0.000342889	-0.067777943	-15.25003712	3.367588722	2.532280806
75.22	0.065198332	-0.000331405	-0.065461684	-14.72887883	3.36866308	2.532280806
75.225	0.066802941	-0.000339547	-0.067105531	-15.09874448	3.36979097	2.532280806
75.23	0.067380641	-0.00034276	-0.067753871	-15.24462098	3.370938453	2.532280806
75.235	0.064066123	-0.000326649	-0.064502972	-14.51316875	3.371975821	2.532280806
75.24	0.062259915	-0.000317903	-0.062740933	-14.11670989	3.372955521	2.532280806
75.245	0.062251588	-0.000318166	-0.062794175	-14.12868946	3.373934958	2.532280806
75.25	0.059514789	-0.000304966	-0.06013631	-13.53066967	3.37483017	2.532280806
75.255	0.056711459	-0.000291407	-0.057408327	-12.91687358	3.375643033	2.532280806
75.26	0.05245624	-0.00027072	-0.053250294	-11.98131625	3.37633849	2.532280806
75.265	0.04102242	-0.00021415	-0.041902765	-9.428122065	3.376763813	2.532280806
75.27	0.027264352	-0.000145515	-0.028177386	-6.339911789	3.376951687	2.532280806
75.275	0.015503924	-8.65316E-05	-0.016416959	-3.693815858	3.377012439	2.532280806
75.28	0.005542073	-3.62951E-05	-0.006425115	-1.445650826	3.377020201	2.532280806
75.285	0.00158209	-1.61358E-05	-0.00242168	-0.544877972	3.377020834	2.532280806
75.29	0.00040136	-1.017E-05	-0.001237589	-0.278457413	3.377020875	2.532280806
75.295	-0.00566232	2.03797E-05	0.004821104	1.08474846	3.377028978	2.532280806
75.3	-0.011717668	5.11454E-05	0.010914668	2.455800326	3.37706368	2.532280806
75.305	-0.01164833	5.10054E-05	0.010872735	2.446365404	3.377097973	2.532280806
75.31	-0.010084692	4.30955E-05	0.00927616	2.087135966	3.377123677	2.532280806
75.315	-0.013824216	6.17464E-05	0.013012516	2.927816202	3.377171978	2.532280806
75.32	-0.021277145	9.95269E-05	0.020481435	4.608322974	3.377286399	2.532280806
75.325	-0.023720707	0.000112154	0.02297513	5.169404263	3.377428609	2.532280806
75.33	-0.022006585	0.000103531	0.021234224	4.777700498	3.377551009	2.532280806
75.335	-0.025662014	0.000121899	0.024898715	5.602210812	3.377717449	2.532280806
75.34	-0.030853219	0.000148365	0.030119048	6.776785844	3.377958038	2.532280806
75.345	-0.031117312	0.000149846	0.030405279	6.841187706	3.378202764	2.532280806
75.35	-0.033228011	0.000160529	0.03251659	7.316232828	3.378481816	2.532280806
75.355	-0.038855027	0.000189188	0.03816049	8.586110317	3.378863383	2.532280806
75.36	-0.041909689	0.000204904	0.041252662	9.281849019	3.379307303	2.532280806
75.365	-0.043489548	0.000213053	0.042855242	9.642429545	3.379785322	2.532557826
75.37	-0.046639873	0.000229155	0.046020504	10.35461332	3.380335104	2.533772898
75.375	-0.050766269	0.000250313	0.050176332	11.28967472	3.380986472	2.534884923
75.38	-0.053934858	0.000266671	0.053387126	12.01210343	3.381721689	2.535891885
75.385	-0.054947871	0.000272031	0.054438651	12.24869646	3.382484782	2.536792166
75.39	-0.057201773	0.000283636	0.056714631	12.76079204	3.383311762	2.537584761
75.395	-0.06133041	0.000304923	0.060887026	13.69958091	3.384262427	2.538268484

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
91.41235352	1.27549E-05	0.651417598
91.41845703	1.38978E-05	0.697404175
91.42456055	1.34533E-05	0.67653552
91.43066406	1.1991E-05	0.651981526
91.43676758	1.09613E-05	0.624893014
91.44287109	1.07066E-05	0.654497162
91.44897461	1.02252E-05	0.685563108
91.45507813	8.82413E-06	0.589423127
91.46118164	7.63111E-06	0.524273593
91.46728516	7.34725E-06	0.553352252
91.47338867	7.29941E-06	0.587942163
91.47949219	6.6311E-06	0.605995312
91.4855957	5.05526E-06	0.522252193
91.49169922	4.26081E-06	0.427270062
91.49780273	5.05165E-06	0.530813309
91.50390625	6.75285E-06	0.778884748
91.51000977	8.38593E-06	0.945231311
91.51611328	8.52031E-06	1.002229421
91.5222168	7.52742E-06	0.922779137
91.52832031	5.78306E-06	0.63920412
91.53442383	3.93946E-06	0.420318557
91.54052734	3.26277E-06	0.345857014
91.54663086	3.2886E-06	0.304434919
91.55273438	4.78765E-06	0.3965674
91.55883789	6.39993E-06	0.519774458
91.56494141	5.96712E-06	0.45331479
91.57104492	4.48643E-06	0.31257921
91.57714844	3.73355E-06	0.250239148
91.58325195	4.15231E-06	0.247460969
91.58935547	6.01345E-06	0.326439836
91.59545898	8.19808E-06	0.449870043
91.6015625	8.47618E-06	0.441495564
91.60766602	7.11816E-06	0.346907388
91.61376953	8.23647E-06	0.397440527
91.61987305	9.54242E-06	0.429613586
91.62597656	8.77058E-06	0.381268082
91.63208008	8.26007E-06	0.364942686
91.63818359	1.05081E-05	0.442403114
91.64428711	1.31597E-05	0.548772983
91.65039063	1.35768E-05	0.580918268
91.65649414	1.2673E-05	0.525287006
91.66259766	1.20159E-05	0.501273063
91.66870117	1.19538E-05	0.502267682
91.67480469	1.25283E-05	0.510156798
91.6809082	1.30861E-05	0.552104839
91.68701172	1.30599E-05	0.57153422
91.69311523	1.25592E-05	0.537830488
91.69921875	1.16219E-05	0.499664792
91.70532227	1.04644E-05	0.446055592
91.71142578	1.00516E-05	0.42521233
91.7175293	1.09523E-05	0.48685787
91.72363281	1.20889E-05	0.552969659
91.72973633	1.24788E-05	0.572744012
91.73583984	1.25121E-05	0.595223472
91.74194336	1.28515E-05	0.616396123
91.74804688	1.34318E-05	0.652627726
91.75415039	1.34364E-05	0.701917815
91.76025391	1.22712E-05	0.667210815
91.76635742	1.04781E-05	0.588583685
91.77246094	9.33647E-06	0.57334752
91.77856445	1.01977E-05	0.652017822
91.78466797	1.25529E-05	0.825951992
91.79077148	1.3991E-05	0.997644274
91.796875	1.34554E-05	1.012870927
91.80297852	1.20618E-05	1.003544587
91.80908203	1.17286E-05	1.157116511
91.81518555	1.29606E-05	1.348854675
91.82128906	1.42948E-05	1.55960738
91.82739258	1.40061E-05	1.733643679
91.83349609	1.24272E-05	1.630920281
91.83959961	1.16173E-05	1.621762833
91.84570313	1.21818E-05	1.962320394
91.85180664	1.26124E-05	2.002708684
91.85791016	1.2609E-05	1.755904192
91.86401367	1.32576E-05	1.805412804
91.87011719	1.4568E-05	1.862602273
91.8762207	1.56992E-05	1.780564406
91.88232422	1.59458E-05	1.754332455
91.88842773	1.53615E-05	1.534049872
91.89453125	1.43377E-05	1.242660566
91.90063477	1.39611E-05	1.153672509
91.90673828	1.5211E-05	1.122122758
91.9128418	1.66999E-05	1.067822468
91.91894531	1.77408E-05	1.099471218
91.92504883	1.9194E-05	1.14028919
91.93115234	2.02397E-05	1.118650326
91.93725586	2.00726E-05	1.101424429
91.94335938	1.92872E-05	1.000648122
91.94946289	1.90513E-05	0.92031821
91.95556641	1.94454E-05	0.943458841
91.96166992	1.88051E-05	0.886522498
91.96777344	1.69935E-05	0.774335092
91.97387695	1.48177E-05	0.680384397
91.97998047	1.28397E-05	0.560838171
91.98608398	1.19409E-05	0.51231245
91.9921875	1.21888E-05	0.538916478
91.99829102	1.29528E-05	0.549782571
92.00439453	1.29647E-05	0.549022406
92.01049805	1.20299E-05	0.535472914
92.01660156	1.13913E-05	0.492577626
92.02270508	1.10944E-05	0.475356513
92.02880859	1.18662E-05	0.520867285
92.03491211	1.40002E-05	0.600464679
92.04101563	1.54296E-05	0.67271723

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
75.4	-0.062467262	0.000311022	0.062081669	13.96837542	3.385248663	2.538841885
75.405	-0.062577649	0.000311776	0.062229545	14.0016476	3.386238388	2.539304309
75.41	-0.065137707	0.000325052	0.064829049	14.58653592	3.387310748	2.539655478
75.415	-0.066177758	0.000330664	0.065927622	14.83371496	3.388417627	2.539894742
75.42	-0.065367397	0.000326772	0.065141791	14.65690296	3.389497564	2.540021899
75.425	-0.066040402	0.000330426	0.06587971	14.82293484	3.390599852	2.540043553
75.43	-0.066503249	0.000333075	0.066399615	14.9399133	3.391717646	2.540043553
75.435	-0.065095748	0.00032618	0.065007425	14.62667061	3.392788626	2.540043553
75.44	-0.063030185	0.000315883	0.062929722	14.15918748	3.393792717	2.540043553
75.445	-0.061707202	0.00030936	0.061614141	13.8631818	3.394755099	2.540043553
75.45	-0.060066971	0.000301271	0.059983748	13.49634324	3.395666999	2.540043553
75.455	-0.055583258	0.000278998	0.055498331	12.4871244	3.396447843	2.540043553
75.46	-0.051613474	0.000259406	0.0515575	11.60043749	3.397121133	2.540043553
75.465	-0.049536343	0.000249272	0.049520852	11.1421917	3.397741321	2.540043553
75.47	-0.044257609	0.000223195	0.044285016	9.964128525	3.398236374	2.540043553
75.475	-0.038719752	0.000195636	0.038759164	8.720811951	3.398615289	2.540043553
75.48	-0.036313265	0.000183702	0.036368598	8.18293445	3.398948567	2.540043553
75.485	-0.031905776	0.000161816	0.031988035	7.197307915	3.399205852	2.540043553
75.49	-0.026685267	0.000135698	0.026766706	6.022508859	3.399385829	2.540043553
75.495	-0.024435159	0.000124409	0.024511697	5.515131926	3.399536735	2.540043553
75.5	-0.021984705	0.000112157	0.022065981	4.964845683	3.399658892	2.540043553
75.505	-0.01960536	0.000100191	0.019678469	4.42765563	3.399756038	2.540043553
75.51	-0.019931803	0.000101764	0.019997777	4.499499727	3.399856446	2.540043553
75.515	-0.020904623	0.00010665	0.020984131	4.721429524	3.399966895	2.540043553
75.52	-0.02108566	0.000107598	0.021175424	4.764470471	3.400079265	2.540043553
75.525	-0.021053067	0.000107475	0.021150697	4.758906868	3.400191288	2.540043553
75.53	-0.021269391	0.0001086	0.021377711	4.809984881	3.400305625	2.540043553
75.535	-0.021744699	0.000111035	0.021869227	4.920576084	3.400425129	2.540043553
75.54	-0.022150059	0.000113132	0.022292165	5.01573718	3.40054913	2.540043553
75.545	-0.023094099	0.000117945	0.023263212	5.234222673	3.400683926	2.540043553
75.55	-0.023573641	0.000120495	0.02377744	5.349923935	3.400824379	2.540043553
75.555	-0.022455805	0.00011505	0.022677843	5.102514761	3.400951827	2.540043553
75.56	-0.021476112	0.000110281	0.021715313	4.885945379	3.401068397	2.540043553
75.565	-0.019540638	0.000100771	0.019796942	4.454311967	3.401164903	2.540043553
75.57	-0.015957543	8.29592E-05	0.016242624	3.654590354	3.401229261	2.540043553
75.575	-0.013903568	7.27621E-05	0.014210707	3.197408989	3.401278119	2.540043553
75.58	-0.011063458	5.87111E-05	0.011412372	2.567783804	3.401309054	2.540043553
75.585	-0.00523191	2.9499E-05	0.005600247	1.260055502	3.401315972	2.540043553
75.59	-0.000534095	5.84249E-06	0.000898934	0.202260232	3.401316044	2.540043553
75.595	0.002985092	-1.18752E-05	-0.002618979	-0.589270263	3.401318297	2.540043553
75.6	0.007134497	-3.28226E-05	-0.006774687	-1.524304478	3.401331161	2.540043553
75.605	0.010053376	-4.76176E-05	-0.009707591	-2.184207988	3.401356706	2.540043553
75.61	0.012127027	-5.81367E-05	-0.011791744	-2.653142493	3.401393875	2.540043553
75.615	0.013847637	-6.68845E-05	-0.013524227	-3.042950996	3.40144234	2.540043553
75.62	0.01443712	-6.99043E-05	-0.014122144	-3.177482494	3.401495019	2.540043553
75.625	0.015445854	-7.49877E-05	-0.015128486	-3.403909244	3.401555317	2.540043553
75.63	0.017356564	-8.46134E-05	-0.01703346	-3.832528559	3.401631455	2.540043553
75.635	0.020314626	-9.95166E-05	-0.019981369	-4.495808068	3.401735757	2.540043553
75.64	0.024594858	-0.000121223	-0.024271686	-5.461129434	3.401888642	2.540043553
75.645	0.027453303	-0.000135819	-0.027154401	-6.109740329	3.402079129	2.540043553
75.65	0.028802196	-0.000142744	-0.028521579	-6.41735527	3.402288795	2.540043553
75.655	0.030830851	-0.000153098	-0.03056496	-6.877115889	3.402529036	2.540043553
75.66	0.032330912	-0.000160803	-0.032085023	-7.219130157	3.402793223	2.540043553
75.665	0.03352731	-0.000166954	-0.033298116	-7.492076139	3.403077324	2.540043553
75.67	0.034740162	-0.000173223	-0.034534086	-7.770169452	3.403382352	2.540043553
75.675	0.033876791	-0.000168974	-0.033676121	-7.577127317	3.403672407	2.540043553
75.68	0.03328928	-0.000166014	-0.033078543	-7.442672234	3.403952489	2.540043553
75.685	0.035075336	-0.000175072	-0.034898547	-7.852173053	3.404263431	2.540043553
75.69	0.036669636	-0.000183213	-0.036503225	-8.213225686	3.404603283	2.540043553
75.695	0.038166929	-0.000190854	-0.038008673	-8.551951387	3.404971454	2.540043553
75.7	0.03998534	-0.000200146	-0.03983881	-8.963732321	3.405375544	2.540043553
75.705	0.040955019	-0.000205147	-0.040823573	-9.185303919	3.40579947	2.540043553
75.71	0.042374194	-0.00021241	-0.042253357	-9.507005262	3.406253285	2.540043553
75.715	0.043510727	-0.000218281	-0.04340887	-9.766995803	3.40673177	2.540043553
75.72	0.043360587	-0.0002176	-0.043271416	-9.736068565	3.407206959	2.540043553
75.725	0.044825619	-0.000225044	-0.044739644	-10.06642001	3.407714801	2.540043553
75.73	0.047463331	-0.000238493	-0.047384794	-10.66157855	3.408284168	2.540043553
75.735	0.048885913	-0.000245833	-0.048827789	-10.98625258	3.408888177	2.540043553
75.74	0.049756266	-0.000250375	-0.049720564	-11.18712682	3.409513884	2.540043553
75.745	0.049732725	-0.000250397	-0.049720501	-11.18711277	3.410139	2.540043553
75.75	0.049409813	-0.000248859	-0.049409899	-11.11722728	3.410756025	2.540043553
75.755	0.050245364	-0.000253193	-0.050274229	-11.3117015	3.411394094	2.540043553
75.76	0.050070864	-0.000252465	-0.050121913	-11.27743049	3.412027739	2.540043553
75.765	0.048712421	-0.000245709	-0.048758077	-10.97056735	3.412627468	2.540043553
75.77	0.047821823	-0.000241313	-0.047870788	-10.77092736	3.413205469	2.540043553
75.775	0.045812148	-0.000231264	-0.045844033	-10.31490736	3.41373591	2.540043553
75.78	0.043476044	-0.000219511	-0.043475157	-9.781910338	3.414213633	2.540043553
75.785	0.041804709	-0.000211137	-0.041788337	-9.402375856	3.414655332	2.540043553
75.79	0.038210175	-0.000193226	-0.038183357	-8.591255243	3.415024338	2.540043553
75.795	0.034236899	-0.000173457	-0.034208394	-7.696888543	3.415320593	2.540043553
75.8	0.032180715	-0.00016321	-0.032149806	-7.233706256	3.415582331	2.540043553
75.805	0.029255111	-0.000148675	-0.029231725	-6.577138076	3.415798642	2.540043553
75.81	0.025231827	-0.00012856	-0.025196792	-5.669278164	3.415959549	2.540043553
75.815	0.022971415	-0.000117164	-0.02291253	-5.155319299	3.416092917	2.540043553
75.82	0.022571757	-0.000115075	-0.022494013	-5.061152823	3.416221684	2.540043553
75.825	0.021728682	-0.00011083	-0.021643608	-4.869811694	3.416341012	2.540043553
75.83	0.019501866	-9.96594E-05	-0.0194066	-4.366485109	3.416437136	2.540043553
75.835	0.018276972	-9.34213E-05	-0.018157893	-4.085525925	3.416521563	2.540043553
75.84	0.018629013	-9.50835E-05	-0.018493596	-4.161059171	3.416609275	2.540043553
75.845	0.017587424	-8.98361E-05	-0.017440408	-3.924091859	3.416687452	2.540043553
75.85	0.016082472	-8.22045E-05	-0.015913528	-3.580543803	3.416752822	2.540043553
75.855	0.016885073	-8.60576E-05	-0.016691611	-3.755612535	3.41682488	2.540043553
75.86	0.018101127	-9.20399E-05	-0.017899161	-4.027311267	3.416907691	2.540043553
75.865	0.018133857	-9.21198E-05	-0.017915242	-4.030929484	3.416990802	2.540043553
75.87	0.01910431	-9.68226E-05	-0.018864202	-4.244445462	3.417083046	2.540043553
75.875	0.022205231	-0.000112177	-0.021960158	-4.94103557	3.417207665	2.540043553
75.88	0.025008856	-0.000126141	-0.024773276	-5.573987123	3.41736574	2.540043553
75.885	0.025970657	-0.000130917	-0.025734852	-5.790341633	3.417536208	2.540043553
75.89	0.028211614	-0.000142013	-0.027968028	-6.292806268	3.417737363	2.540043553
75.895	0.032145047	-0.00016158	-0.031902593	-7.178083386	3.417998522	2.540043553
75.9	0.033776534	-0.000169769	-0.033547948	-7.548288311	3.418286863	2.540043553
75.905	0.034649668	-0.000174113	-0.034420442	-7.744599457	3.418590304	2.540043553
75.91	0.037628613	-0.000188939	-0.037396962	-8.414316357	3.418948163	2.540043553
75.915	0.039636919	-0.000199022	-0.039419777	-8.869449826	3.419345241	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
92.04711914	1.59764E-05	0.724612013
92.05322266	1.60014E-05	0.724963205
92.05932617	1.42691E-05	0.655199904
92.06542969	1.15528E-05	0.528073762
92.0715332	1.02105E-05	0.470646126
92.07763672	1.13908E-05	0.574302683
92.08374023	1.31342E-05	0.697627411
92.08984375	1.24014E-05	0.662185578
92.09594727	9.9261E-06	0.564650372
92.10205078	9.01009E-06	0.526954125
92.1081543	9.6489E-06	0.563500131
92.11425781	1.05564E-05	0.674471324
92.12036133	1.126E-05	0.781784206
92.12646484	1.18581E-05	0.853192003
92.13256836	1.31634E-05	1.060528049
92.13867188	1.44149E-05	1.245783883
92.14477539	1.38771E-05	1.196516485
92.15087891	1.2038E-05	1.151654493
92.15698242	1.12818E-05	1.181110917
92.16308594	1.2469E-05	1.356485779
92.16918945	1.35785E-05	1.813687688
92.17529297	1.40105E-05	2.026824907
92.18139648	1.48483E-05	1.943689782
92.1875	1.49189E-05	2.117033651
92.19360352	1.38948E-05	2.054620646
92.19970703	1.33167E-05	1.842727043
92.20581055	1.40993E-05	2.049226126
92.21191406	1.50435E-05	2.202857898
92.21801758	1.45338E-05	1.877853241
92.22412109	1.29014E-05	1.600262071
92.23022461	1.09517E-05	1.232787548
92.23632813	9.36449E-06	0.865545912
92.24243164	9.38422E-06	0.825062948
92.24853516	1.12504E-05	0.945937487
92.25463867	1.34234E-05	0.991353975
92.26074219	1.32084E-05	0.971904844
92.2668457	1.02036E-05	0.718122654
92.27294922	8.24717E-06	0.501563504
92.27905273	8.43048E-06	0.497598642
92.28515625	7.72844E-06	0.447094277
92.29125977	7.2706E-06	0.398505437
92.29736328	7.1445E-06	0.396415241
92.3034668	7.64953E-06	0.40726814
92.30957031	8.50173E-06	0.423155263
92.31567383	7.80515E-06	0.389856785
92.32177734	6.88642E-06	0.339033109
92.32788086	6.87954E-06	0.332172946
92.33398438	6.49992E-06	0.318742981
92.34008789	6.16482E-06	0.296773356
92.34619141	6.3599E-06	0.299978924
92.35229492	8.0341E-06	0.380402972
92.35839844	1.02135E-05	0.471495687
92.36450195	1.08222E-05	0.499341109
92.37060547	1.02098E-05	0.494925265
92.37670898	9.1979E-06	0.446965929
92.3828125	7.62756E-06	0.367234311
92.38891602	5.71468E-06	0.286385106
92.39501953	4.04003E-06	0.202464516
92.40112305	3.76595E-06	0.191064906
92.40722656	4.07879E-06	0.225155388
92.41333008	3.04839E-06	0.172852701
92.41943359	2.3493E-06	0.135782381
92.42553711	4.17248E-06	0.25110698
92.43164063	6.19182E-06	0.36380651
92.43774414	6.70942E-06	0.416057583
92.44384766	6.63733E-06	0.450547035
92.44995117	7.52054E-06	0.502353805
92.45605469	8.72022E-06	0.618884775
92.4621582	9.0679E-06	0.692572668
92.46826172	8.89966E-06	0.662718311
92.47436523	1.01642E-05	0.808590992
92.48046875	1.33592E-05	1.14334918
92.48657227	1.61685E-05	1.435633978
92.49267578	1.68431E-05	1.747048268
92.4987793	1.55909E-05	1.80342469
92.50488281	1.50084E-05	1.730193772
92.51098633	1.65829E-05	2.126854036
92.51708984	1.86905E-05	2.710894745
92.52319336	1.96669E-05	2.899671534
92.52929688	1.90039E-05	3.078778588
92.53540039	1.8481E-05	3.373584786
92.54150391	1.9413E-05	2.959091706
92.54760742	2.03771E-05	2.883496156
92.55371094	2.12615E-05	3.053287447
92.55981445	2.25062E-05	2.690980619
92.56591797	2.29238E-05	2.533320071
92.57202148	2.2037E-05	2.489715707
92.578125	2.04768E-05	2.063633234
92.58422852	1.95663E-05	1.841920831
92.59033203	2.03538E-05	1.77640837
92.59643555	2.17913E-05	1.608329759
92.60253906	2.2514E-05	1.578220867
92.60864258	2.19832E-05	1.545020448
92.61474609	2.06351E-05	1.344264822
92.62084961	1.94936E-05	1.235415424
92.62695313	1.84719E-05	1.140782949
92.63305664	1.8334E-05	1.016552345
92.63916016	1.99158E-05	1.075103899
92.64526367	2.14631E-05	1.183414075
92.65136719	2.19716E-05	1.156958818
92.6574707	2.1402E-05	1.1423809
92.66357422	1.9673E-05	1.078908283
92.66967773	1.78792E-05	0.91222563
92.67578125	1.72769E-05	0.870428361

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
75.92	0.040112873	-0.000201447	-0.039906139	-8.978881169	3.419751912	2.540043553
75.925	0.042035566	-0.000211032	-0.041828124	-9.411327958	3.420198503	2.540043553
75.93	0.04458828	-0.000223817	-0.044390196	-9.987794096	3.420700981	2.540043553
75.935	0.04567468	-0.000229354	-0.045499155	-10.23730981	3.421228244	2.540043553
75.94	0.045561956	-0.000228897	-0.045406696	-10.21650665	3.421752907	2.540043553
75.945	0.045715368	-0.000229724	-0.045573381	-10.25401065	3.422281109	2.540043553
75.95	0.046704239	-0.000234719	-0.046573622	-10.479065	3.42283241	2.540043553
75.955	0.04733456	-0.00023796	-0.047222415	-10.62504348	3.423398692	2.540043553
75.96	0.047331023	-0.000238037	-0.047237626	-10.62846594	3.423964889	2.540043553
75.965	0.047421388	-0.000238568	-0.047344094	-10.65242123	3.42453325	2.540043553
75.97	0.047779157	-0.000240418	-0.047714393	-10.73573832	3.42511022	2.540043553
75.975	0.049187484	-0.000247498	-0.049131358	-11.05455559	3.425721704	2.540043553
75.98	0.050786782	-0.000255598	-0.050746835	-11.41803795	3.426373598	2.540043553
75.985	0.050696841	-0.000255327	-0.050687434	-11.40467271	3.427023186	2.540043553
75.99	0.050161369	-0.000252818	-0.050180971	-11.29071848	3.427659124	2.540043553
75.995	0.049169176	-0.000248075	-0.049223444	-11.07527499	3.428270153	2.540043553
76	0.045855609	-0.000231769	-0.045934171	-10.33518847	3.428801601	2.540043553
76.005	0.04295168	-0.000217403	-0.043039359	-9.683855693	3.429267869	2.540043553
76.01	0.042125376	-0.000213408	-0.042234729	-9.502814076	3.429716371	2.540043553
76.015	0.039083459	-0.000198491	-0.039231873	-8.827171431	3.430102437	2.540043553
76.02	0.032790166	-0.000167298	-0.032961031	-7.416232064	3.430374183	2.540043553
76.025	0.02758361	-0.000141328	-0.027748181	-6.243340783	3.430566482	2.540043553
76.03	0.0252452	-0.000129623	-0.025400856	-5.715192504	3.430727559	2.540043553
76.035	0.024193068	-0.000124386	-0.024350969	-5.478967923	3.43087549	2.540043553
76.04	0.023064027	-0.000118824	-0.023236471	-5.228205897	3.431009935	2.540043553
76.045	0.020268874	-0.000105007	-0.020468848	-4.605490807	3.431113768	2.540043553
76.05	0.014571486	-7.66089E-05	-0.014786489	-3.326960076	3.431167432	2.540043553
76.055	0.008373079	-4.55196E-05	-0.008574421	-1.929244706	3.431185152	2.540043553
76.06	0.005193605	-2.94335E-05	-0.005363742	-1.206842002	3.431191969	2.540043553
76.065	0.004835084	-2.75185E-05	-0.004982122	-1.120977433	3.431197878	2.540043553
76.07	0.005348445	-3.0057E-05	-0.005494755	-1.236319766	3.431205107	2.540043553
76.075	0.004576812	-2.6233E-05	-0.00472522	-1.063174556	3.431210402	2.540043553
76.08	0.00104574	-8.53688E-06	-0.001196436	-0.269198105	3.431210678	2.540043553
76.085	-0.001692565	5.33198E-06	0.001567172	0.352613692	3.431211402	2.540043553
76.09	-0.000158308	-2.23693E-06	3.89695E-05	0.008768135	3.431211408	2.540043553
76.095	0.00169532	-1.15585E-05	-0.001841884	-0.414423896	3.431212135	2.540043553
76.1	0.000529256	-5.74721E-06	-0.00066847	-0.150405852	3.431212206	2.540043553
76.105	-0.000412032	-9.66415E-07	0.000296452	0.066701759	3.431212249	2.540043553
76.11	0.001224198	-9.12515E-06	-0.001350798	-0.3039296	3.431212627	2.540043553
76.115	0.00288063	-1.74827E-05	-0.003036609	-0.683237115	3.431214725	2.540043553
76.12	0.002374564	-1.49883E-05	-0.002532865	-0.56989469	3.43121615	2.540043553
76.125	0.002996425	-1.80607E-05	-0.003153152	-0.709459304	3.431218419	2.540043553
76.13	0.006796103	-3.70531E-05	-0.006980199	-1.570544847	3.431230092	2.540043553
76.135	0.007652898	-4.14889E-05	-0.007872464	-1.771304373	3.431244895	2.540043553
76.14	0.005304475	-2.98783E-05	-0.005528886	-1.24399939	3.431252006	2.540043553
76.145	0.007371994	-4.01186E-05	-0.007596217	-1.709148759	3.431265742	2.540043553
76.15	0.009926769	-5.29719E-05	-0.010184579	-2.291530275	3.431290647	2.540043553
76.155	0.007619468	-4.16675E-05	-0.007902494	-1.778061247	3.43130532	2.540043553
76.16	0.006977901	-3.84991E-05	-0.007263518	-1.634291524	3.431317626	2.540043553
76.165	0.008032807	-4.38582E-05	-0.008345526	-1.877743293	3.431333935	2.540043553
76.17	0.005593554	-3.18786E-05	-0.00592789	-1.333775264	3.431341842	2.540043553
76.175	0.004246974	-2.51987E-05	-0.00458116	-1.030761015	3.431346401	2.540043553
76.18	0.005475204	-3.13907E-05	-0.005831439	-1.312073815	3.431353978	2.540043553
76.185	0.003375992	-2.11423E-05	-0.003763623	-0.846815207	3.431356858	2.540043553
76.19	-0.000334128	-2.76424E-06	-6.21933E-05	-0.013993495	3.431356887	2.540043553
76.195	-0.001059304	8.26002E-07	0.000660435	0.148597931	3.43135717	2.540043553
76.2	-0.00214304	6.09736E-06	0.001719637	0.386918219	3.431358331	2.540043553
76.205	-0.005584352	2.31255E-05	0.005110319	1.149821763	3.431366213	2.540043553
76.21	-0.006937927	2.98655E-05	0.006451679	1.451627671	3.431378378	2.540043553
76.215	-0.006928498	2.97274E-05	0.006423789	1.4453525	3.431390511	2.540043553
76.22	-0.010292616	4.64252E-05	0.009745634	2.192767754	3.431417286	2.540043553
76.225	-0.014877713	6.94618E-05	0.01432396	3.222891088	3.431473229	2.540043553
76.23	-0.018675486	8.85607E-05	0.018116195	4.076143938	3.431561379	2.540043553
76.235	-0.023598775	0.0001134	0.023043634	5.184817611	3.431702131	2.540043553
76.24	-0.026624028	0.000128778	0.02609161	5.870612328	3.431881283	2.540043553
76.245	-0.027360617	0.000132512	0.026831256	6.037032617	3.432070486	2.540043553
76.25	-0.031758843	0.000154678	0.031220526	7.024618264	3.432325407	2.540043553
76.255	-0.036642795	0.000179503	0.036131182	8.129515957	3.432664761	2.540043553
76.26	-0.036998488	0.000181429	0.036508574	8.214429108	3.433010735	2.540043553
76.265	-0.039064417	0.000191849	0.038571592	8.6786081	3.433396426	2.540043553
76.27	-0.044345426	0.000218677	0.043870204	9.870795817	3.433893445	2.540043553
76.275	-0.046519853	0.000229887	0.046082615	10.36858837	3.434440402	2.540043553
76.28	-0.047069141	0.000232767	0.046650715	10.49641077	3.435000351	2.540043553
76.285	-0.049925109	0.000247308	0.049518623	11.14169018	3.435630312	2.540043553
76.29	-0.052832113	0.0002622	0.052453757	11.80209526	3.436335771	2.540043553
76.295	-0.053886264	0.000267726	0.053542644	12.04709488	3.437069663	2.540043553
76.3	-0.054424458	0.000270599	0.05410854	12.17442151	3.437818288	2.540043553
76.305	-0.055739336	0.000277404	0.055448844	12.47598987	3.438603522	2.540043553
76.31	-0.056772686	0.000282834	0.056518027	12.71655606	3.439418142	2.540043553
76.315	-0.056183497	0.000280042	0.055954124	12.58967791	3.440215941	2.540043553
76.32	-0.055742656	0.000277953	0.055532367	12.49478269	3.441001269	2.540043553
76.325	-0.055999661	0.000279426	0.055829934	12.56173524	3.441793856	2.540043553
76.33	-0.055040055	0.000274754	0.054886657	12.34949783	3.442559512	2.540043553
76.335	-0.053915164	0.00026921	0.053767854	12.09776717	3.443294191	2.540043553
76.34	-0.053110781	0.000265316	0.052982326	11.92102331	3.444007112	2.540043553
76.345	-0.050970638	0.000254654	0.050832533	11.43731987	3.444663735	2.540043553
76.35	-0.049011655	0.000244868	0.048860687	10.99365448	3.445270855	2.540043553
76.355	-0.047135627	0.000235536	0.046981252	10.57078173	3.445832387	2.540043553
76.36	-0.043753691	0.000218549	0.043563019	9.801679282	3.446316231	2.540043553
76.365	-0.04125798	0.000205995	0.041038837	9.233738352	3.446746452	2.540043553
76.37	-0.039125275	0.000195334	0.038896493	8.751710948	3.447133345	2.540043553
76.375	-0.034714832	0.000173314	0.034475653	7.757022023	3.447437928	2.540043553
76.38	-0.030898732	0.000154304	0.030663073	6.899191366	3.447679228	2.540043553
76.385	-0.028793032	0.000143834	0.028564736	6.427065572	3.44788876	2.540043553
76.39	-0.026044524	0.000130167	0.025827351	5.811153983	3.448060199	2.540043553
76.395	-0.02396232	0.000119774	0.023747084	5.343093886	3.448205321	2.540043553
76.4	-0.023112138	0.000115547	0.022901193	5.152768387	3.448340328	2.540043553
76.405	-0.021804803	0.00010906	0.021603471	4.860780936	3.448460494	2.540043553
76.41	-0.020807214	0.000104097	0.020610878	4.63744761	3.448569915	2.540043553
76.415	-0.020441181	0.000102302	0.020251916	4.556681192	3.448675521	2.540043553
76.42	-0.019584899	9.80712E-05	0.019406109	4.366374622	3.448772465	2.540043553
76.425	-0.019193774	9.61357E-05	0.01901919	4.279317856	3.448865575	2.540043553
76.43	-0.019976324	0.000100081	0.019815845	4.45856519	3.448966432	2.540043553
76.435	-0.020042962	0.00010051	0.019902338	4.478026148	3.449067963	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
92.68188477	1.82918E-05	0.942791929
92.68798828	1.94753E-05	0.996343025
92.6940918	1.86598E-05	1.020100904
92.70019531	1.60872E-05	0.891624924
92.70629883	1.31996E-05	0.6979156
92.71240234	1.13625E-05	0.627295108
92.71850586	1.0983E-05	0.594284906
92.72460938	1.06995E-05	0.559962204
92.73071289	9.9424E-06	0.567765857
92.73681641	9.05206E-06	0.5328527
92.74291992	8.17823E-06	0.476677508
92.74902344	7.64181E-06	0.453484643
92.75512695	7.05346E-06	0.402157586
92.76123047	6.74508E-06	0.398331058
92.76733398	7.4383E-06	0.481658033
92.7734375	8.25416E-06	0.541410056
92.77954102	8.42628E-06	0.58392314
92.78564453	7.69693E-06	0.56411141
92.79174805	7.0534E-06	0.513161984
92.79785156	7.43702E-06	0.58845302
92.80395508	8.16967E-06	0.724529493
92.81005859	8.62452E-06	0.808383046
92.81616211	8.94965E-06	0.946773365
92.82226563	1.01657E-05	1.217104478
92.82836914	1.1491E-05	1.386827363
92.83447266	1.18375E-05	1.570850442
92.84057617	1.15529E-05	1.825615655
92.84667969	1.10598E-05	1.780952142
92.8527832	1.04389E-05	1.971460313
92.85888672	9.66992E-06	2.603739446
92.86499023	9.28154E-06	2.18886609
92.87109375	9.94467E-06	2.153270246
92.87719727	1.07953E-05	2.473107246
92.88330078	1.10531E-05	2.077066281
92.8894043	1.16351E-05	1.840442088
92.89550781	1.2604E-05	1.913138587
92.90161133	1.26312E-05	1.722285235
92.90771484	1.20426E-05	1.416922095
92.91381836	1.23009E-05	1.349583618
92.91992188	1.31265E-05	1.231845502
92.92602539	1.32933E-05	1.070783721
92.93212891	1.25644E-05	0.966073546
92.93823242	1.21946E-05	0.868129911
92.94433594	1.36817E-05	0.929296824
92.95043945	1.58646E-05	1.101616636
92.95654297	1.65681E-05	1.047397381
92.96264648	1.60427E-05	0.93246588
92.96875	1.60381E-05	0.93929508
92.97485352	1.7107E-05	0.983344387
92.98095703	1.79503E-05	1.039206316
92.98706055	1.78613E-05	1.053323211
92.99316406	1.72133E-05	0.944236367
92.99926758	1.62332E-05	0.86321351
93.00537109	1.51259E-05	0.810469895
93.01147461	1.41729E-05	0.738272179
93.01757813	1.37582E-05	0.734711282
93.02368164	1.37635E-05	0.74623962
93.02978516	1.345E-05	0.686458196
93.03588867	1.41741E-05	0.721367156
93.04199219	1.7002E-05	0.873664146
93.0480957	1.87753E-05	0.927013874
93.05419922	1.76447E-05	0.902408498
93.06030273	1.51679E-05	0.82193765
93.06640625	1.38563E-05	0.740418225
93.07250977	1.39375E-05	0.757632339
93.07861328	1.39638E-05	0.765661467
93.0847168	1.36339E-05	0.750340915
93.09082031	1.28571E-05	0.788457055
93.09692383	1.08522E-05	0.727386902
93.10302734	8.28801E-06	0.573774216
93.10913086	6.70204E-06	0.495032317
93.11523438	6.70052E-06	0.483007283
93.12133789	7.39645E-06	0.542417106
93.12744141	7.1902E-06	0.603496297
93.13354492	6.88665E-06	0.604698898
93.13964844	7.18958E-06	0.674199407
93.14575195	6.42138E-06	0.678930021
93.15185547	5.14045E-06	0.516250606
93.15795898	5.15608E-06	0.537179724
93.1640625	6.61455E-06	0.813579923
93.17016602	7.62411E-06	1.001829889
93.17626953	7.09432E-06	1.058143631
93.18237305	5.18305E-06	0.961538885
93.18847656	3.15737E-06	0.599516705
93.19458008	2.75841E-06	0.512430368
93.20068359	3.8998E-06	0.826480907
93.20678711	5.49347E-06	1.247139004
93.21289063	5.94934E-06	1.266237381
93.21899414	5.34638E-06	1.357302581
93.22509766	5.40198E-06	1.298294866
93.23120117	6.33532E-06	1.093654521
93.23730469	8.0784E-06	1.300186621
93.2434082	1.09295E-05	1.557904107
93.24951172	1.3321E-05	1.564350715
93.25561523	1.38319E-05	1.555873923
93.26171875	1.30183E-05	1.397821416
93.26782227	1.28702E-05	1.252772791
93.27392578	1.43363E-05	1.396900953
93.2800293	1.56663E-05	1.458655641
93.28613281	1.59551E-05	1.316799933
93.29223633	1.56248E-05	1.234332497
93.29833984	1.5343E-05	1.14689141
93.30444336	1.56019E-05	1.104367728
93.31054688	1.59484E-05	1.152913744

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
76.44	-0.018951918	9.51402E-05	0.018820187	4.234542175	3.449158742	2.540043553
76.445	-0.019126877	9.60437E-05	0.019004595	4.276033853	3.449251204	2.540043553
76.45	-0.020623979	0.000103602	0.020530371	4.61933342	3.449358707	2.540043553
76.455	-0.020753462	0.00010441	0.02069338	4.656010494	3.449467564	2.540043553
76.46	-0.019379808	9.77085E-05	0.019340311	4.351569966	3.449562488	2.540043553
76.465	-0.017714903	8.95329E-05	0.017699528	3.982393912	3.449641802	2.540043553
76.47	-0.015668868	7.94424E-05	0.015683582	3.528805952	3.449703854	2.540043553
76.475	-0.013969426	7.10543E-05	0.014008488	3.151909863	3.449753175	2.540043553
76.48	-0.01284586	6.55587E-05	0.012911371	2.905058407	3.449794881	2.540043553
76.485	-0.010768245	5.53375E-05	0.010871613	2.446112865	3.449824188	2.540043553
76.49	-0.007354441	3.84292E-05	0.007499463	1.687379179	3.449837858	2.540043553
76.495	-0.00359685	1.97515E-05	0.003777422	0.849919846	3.449841128	2.540043553
76.5	-0.000620514	4.92269E-06	0.000824599	0.185534848	3.449841225	2.540043553
76.505	0.001190262	-4.09753E-06	-0.000970614	-0.218388047	3.449841583	2.540043553
76.51	0.0028925	-1.25527E-05	-0.002652725	-0.596863138	3.449843698	2.540043553
76.515	0.005077266	-2.3415E-05	-0.004812777	-1.082874937	3.449850213	2.540043553
76.52	0.007425864	-3.51161E-05	-0.007138498	-1.606162161	3.44986415	2.540043553
76.525	0.009395372	-4.49595E-05	-0.009094059	-2.046163173	3.44988646	2.540043553
76.53	0.010139586	-4.869E-05	-0.00983498	-2.212870426	3.449912445	2.540043553
76.535	0.01104413	-5.31628E-05	-0.010723156	-2.412710002	3.449943273	2.540043553
76.54	0.01368383	-6.62999E-05	-0.013330833	-2.999437391	3.449990598	2.540043553
76.545	0.015931604	-7.75439E-05	-0.015561567	-3.501352598	3.450054747	2.540043553
76.55	0.017313589	-8.445E-05	-0.016931164	-3.809511836	3.450130509	2.540043553
76.555	0.019717208	-9.64433E-05	-0.019308686	-4.344454443	3.450228767	2.540043553
76.56	0.021948238	-0.000107615	-0.021522229	-4.842501524	3.450350519	2.540043553
76.565	0.023774028	-0.000116743	-0.023330024	-5.249255334	3.450493369	2.540043553
76.57	0.026924082	-0.000132473	-0.026443751	-5.949844048	3.450676583	2.540043553
76.575	0.030290223	-0.000149325	-0.029777482	-6.699933526	3.450908472	2.540043553
76.58	0.033637774	-0.000166089	-0.033091235	-7.445527912	3.451194449	2.540043553
76.585	0.037862119	-0.000187592	-0.037338572	-8.401178738	3.451556763	2.540043553
76.59	0.041203532	-0.000204692	-0.040713541	-9.160546731	3.45198585	2.540043553
76.595	0.043494973	-0.000216455	-0.043033597	-9.682559374	3.452463989	2.540043553
76.6	0.046793011	-0.00023331	-0.046356312	-10.43017023	3.453017387	2.540043553
76.605	0.050103852	-0.000250299	-0.049703072	-11.18319114	3.453651867	2.540043553
76.61	0.051880739	-0.000259546	-0.051522551	-11.59257389	3.454332148	2.540043553
76.615	0.052726349	-0.000264052	-0.05240772	-11.79173709	3.455034786	2.540043553
76.62	0.053503704	-0.000268185	-0.053219503	-11.97438818	3.455758294	2.540043553
76.625	0.054895142	-0.000275419	-0.054640017	-12.29400383	3.456519924	2.540043553
76.63	0.056695978	-0.00028475	-0.056471816	-12.70615853	3.457332343	2.540043553
76.635	0.058225266	-0.000292732	-0.058038213	-13.05859795	3.458189182	2.540043553
76.64	0.059483131	-0.000299359	-0.05933817	-13.35108821	3.459083441	2.540043553
76.645	0.059888436	-0.000301687	-0.059794804	-13.45383085	3.459989929	2.540043553
76.65	0.059413543	-0.000299535	-0.059360234	-13.35605256	3.460882097	2.540043553
76.655	0.059395816	-0.000299673	-0.059388199	-13.36234487	3.461773733	2.540043553
76.66	0.059737515	-0.000301652	-0.059787835	-13.45226286	3.462675658	2.540043553
76.665	0.059733376	-0.0003019	-0.059836185	-13.46314153	3.463577457	2.540043553
76.67	0.059467423	-0.000300837	-0.059621459	-13.41482829	3.464471244	2.540043553
76.675	0.058403227	-0.000295748	-0.058594133	-13.18367983	3.465333329	2.540043553
76.68	0.056509694	-0.000286456	-0.056718972	-12.76176862	3.466140418	2.540043553
76.685	0.054294109	-0.000275528	-0.054515346	-12.26595279	3.466885461	2.540043553
76.69	0.051495705	-0.000261657	-0.051720371	-11.63708357	3.467555682	2.540043553
76.695	0.047758925	-0.000243038	-0.047972193	-10.79374339	3.468132163	2.540043553
76.7	0.04298267	-0.000219572	-0.043254047	-9.732160675	3.468599105	2.540043553
76.705	0.03710639	-0.000190578	-0.037432492	-8.422310606	3.4689471	2.540043553
76.71	0.029954587	-0.000155148	-0.030330238	-6.824303621	3.469173879	2.540043553
76.715	0.021441344	-0.000112805	-0.021858569	-4.918178137	3.469290072	2.540043553
76.72	0.011380577	-6.25533E-05	-0.011826408	-2.660941753	3.469322806	2.540043553
76.725	2.73632E-05	-5.58223E-06	-0.000480562	-0.108126497	3.469322807	2.540043553
76.73	-0.011388553	5.19976E-05	0.010957549	2.465448507	3.469355587	2.540043553
76.735	-0.020715762	9.93229E-05	0.020337428	4.575921332	3.469464049	2.540043553
76.74	-0.025930712	0.000126022	0.025620977	5.764719936	3.469633993	2.540043553
76.745	-0.027169848	0.000132595	0.026920718	6.057161517	3.469820566	2.540043553
76.75	-0.026666318	0.00013026	0.026449149	5.951058455	3.470000289	2.540043553
76.755	-0.02623709	0.000128218	0.026036965	5.858317234	3.470174272	2.540043553
76.76	-0.026843221	0.000131359	0.02667117	6.001013231	3.470356386	2.540043553
76.765	-0.029216844	0.000143439	0.029064416	6.539493652	3.470572132	2.540043553
76.77	-0.032092671	0.000158133	0.031967647	7.192720511	3.47083244	2.540043553
76.775	-0.033118165	0.000163516	0.033030693	7.431905923	3.47110965	2.540043553
76.78	-0.03282439	0.000162181	0.032761056	7.371237493	3.471381964	2.540043553
76.785	-0.033145657	0.000163912	0.033108865	7.449494537	3.471659634	2.540043553
76.79	-0.034124956	0.000168969	0.034107492	7.674185667	3.471953954	2.540043553
76.795	-0.035603124	0.000176558	0.035605428	8.011221402	3.472274324	2.540043553
76.8	-0.037355543	0.000185571	0.037383949	8.411388582	3.472627009	2.540043553
76.805	-0.038022917	0.000189122	0.038084664	8.569049371	3.472992407	2.540043553
76.81	-0.038159235	0.000189944	0.038246775	8.605524396	3.47336043	2.540043553
76.815	-0.03971235	0.000197911	0.039818016	8.959053574	3.473759021	2.540043553
76.82	-0.041940051	0.000209347	0.042072633	9.466342324	3.474203584	2.540043553
76.825	-0.043120205	0.000215526	0.043290413	9.740343018	3.474673519	2.540043553
76.83	-0.043374401	0.000217006	0.043582114	9.805975742	3.475149011	2.540043553
76.835	-0.043866191	0.000219657	0.044104304	9.923468437	3.475635346	2.540043553
76.84	-0.045507085	0.000228131	0.045773699	10.29908225	3.476158746	2.540043553
76.845	-0.046903761	0.000235441	0.047213092	10.6229457	3.476714767	2.540043553
76.85	-0.046094501	0.000231605	0.046438432	10.44864727	3.477251767	2.540043553
76.855	-0.045032041	0.000226414	0.045390705	10.21290858	3.477764297	2.540043553
76.86	-0.045495407	0.000228948	0.045902408	10.32804174	3.478287429	2.540043553
76.865	-0.0449556	0.000226475	0.045402912	10.21565519	3.47879822	2.540043553
76.87	-0.04255334	0.000214555	0.042998256	9.674607698	3.479255881	2.540043553
76.875	-0.040420105	0.000203948	0.040860093	9.193520853	3.479668805	2.540043553
76.88	-0.038241418	0.000193133	0.038681208	8.703271821	3.480038415	2.540043553
76.885	-0.034544877	0.000174809	0.034992973	7.873418958	3.480340024	2.540043553
76.89	-0.030169254	0.000153176	0.03064348	6.894782908	3.480570064	2.540043553
76.895	-0.025675874	0.000130887	0.026167476	5.887682163	3.480736684	2.540043553
76.9	-0.021368737	0.00010945	0.021867262	4.920133964	3.480852092	2.540043553
76.905	-0.018145031	9.33823E-05	0.018647175	4.195614306	3.480935305	2.540043553
76.91	-0.015121893	7.83169E-05	0.015630296	3.516816704	3.480993099	2.540043553
76.915	-0.012274126	6.4095E-05	0.012784335	2.876475377	3.481031176	2.540043553
76.92	-0.010590362	5.56778E-05	0.011100902	2.497702838	3.481059522	2.540043553
76.925	-0.008592358	4.57233E-05	0.009110855	2.049942438	3.481078182	2.540043553
76.93	-0.006242004	3.39834E-05	0.00676509	1.522145225	3.481088029	2.540043553
76.935	-0.004807426	2.68112E-05	0.005332633	1.199842501	3.48109387	2.540043553
76.94	-0.002742329	1.65224E-05	0.003278569	0.73767805	3.481095771	2.540043553
76.945	-0.00026122	4.12437E-06	0.000804694	0.181056064	3.481095788	2.540043553
76.95	0.001388483	-4.12151E-06	-0.000839889	-0.188974945	3.481096276	2.540043553
76.955	0.004121834	-1.77464E-05	-0.003555914	-0.800080559	3.48110057	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
93.31665039	1.66026E-05	1.143899587
93.32275391	1.74991E-05	1.114185755
93.32885742	1.72098E-05	1.078120098
93.33496094	1.59794E-05	0.971273201
93.34106445	1.49949E-05	0.921507666
93.34716797	1.44795E-05	0.930160681
93.35327148	1.4403E-05	0.863836906
93.359375	1.44208E-05	0.830153979
93.36547852	1.42645E-05	0.84049386
93.37158203	1.32884E-05	0.769207425
93.37768555	1.13005E-05	0.677475957
93.38378906	9.60739E-06	0.593619958
93.38989258	8.24535E-06	0.486533196
93.39599609	7.37904E-06	0.463988995
93.40209961	7.72695E-06	0.514758428
93.40820313	8.6304E-06	0.550796953
93.41430664	8.96621E-06	0.61662411
93.42041016	7.4037E-06	0.548171943
93.42651367	4.25773E-06	0.305687428
93.43261719	1.54162E-06	0.118834327
93.4387207	9.92055E-07	0.078351074
93.44482422	8.97918E-07	0.067253895
93.45092773	8.17517E-07	0.066507034
93.45703125	1.76116E-06	0.155177729
93.46313477	4.30971E-06	0.379824669
93.46923828	7.50791E-06	0.714317175
93.4753418	9.32561E-06	0.882523392
93.48144531	8.79631E-06	0.792526994
93.48754883	8.43495E-06	0.860908781
93.49365234	8.73944E-06	1.020129839
93.49975586	8.40754E-06	1.01327919
93.50585938	8.68314E-06	1.201697124
93.51196289	9.69165E-06	1.419200067
93.51806641	1.04307E-05	1.587566588
93.52416992	1.02408E-05	1.973342003
93.53027344	9.4063E-06	1.89944974
93.53637695	9.12804E-06	1.83057617
93.54248047	9.26944E-06	2.51382211
93.54858398	9.01345E-06	2.96685448
93.5546875	7.82996E-06	2.084060893
93.56079102	5.6581E-06	1.546860048
93.56689453	4.4239E-06	1.0708464
93.57299805	4.44397E-06	0.751058262
93.57910156	4.54873E-06	0.761565315
93.58520508	4.95872E-06	0.914854131
93.59130859	6.57285E-06	0.942791125
93.59741211	9.06088E-06	1.179326873
93.60351563	1.08131E-05	1.255567429
93.60961914	1.12598E-05	1.088800376
93.61572266	1.20405E-05	1.171617447
93.62182617	1.29013E-05	1.201109977
93.62792969	1.17454E-05	0.985506777
93.6340332	9.09201E-06	0.770505502
93.64013672	6.93719E-06	0.530148446
93.64624023	6.58494E-06	0.449308341
93.65234375	6.64236E-06	0.461431645
93.65844727	6.07987E-06	0.406249368
93.66455078	5.76819E-06	0.37267834
93.6706543	5.29944E-06	0.364056722
93.67675781	4.96698E-06	0.337320281
93.68286133	6.31677E-06	0.413324722
93.68896484	8.20808E-06	0.541901044
93.69506836	8.39969E-06	0.540580191
93.70117188	6.53307E-06	0.430609262
93.70727539	4.27082E-06	0.305176118
93.71337891	2.89783E-06	0.20003665
93.71948242	1.78482E-06	0.119339688
93.72558594	1.79076E-06	0.12432214
93.73168945	1.42838E-06	0.09866936
93.73779297	2.34336E-06	0.166444254
93.74389648	4.2354E-06	0.322317457
93.75	5.2247E-06	0.386762152
93.75610352	5.89936E-06	0.44091718
93.76220703	6.14249E-06	0.483868913
93.76831055	4.77632E-06	0.364315195
93.77441406	2.60933E-06	0.20843762
93.78051758	2.43935E-06	0.217143943
93.78662109	4.757E-06	0.422569182
93.79272461	6.65992E-06	0.633558108
93.79882813	6.98242E-06	0.704602131
93.80493164	7.46433E-06	0.726673784
93.81103516	8.22867E-06	0.919141805
93.81713867	7.58486E-06	0.982083319
93.82324219	6.13221E-06	0.811569507
93.8293457	5.69649E-06	0.977260712
93.83544922	6.98273E-06	1.396539646
93.84155273	8.19549E-06	1.550402775
93.84765625	8.20342E-06	2.116707528
93.85375977	7.32593E-06	2.432474503
93.85986328	6.27166E-06	1.9438231
93.8659668	6.14844E-06	2.848014078
93.87207031	5.77152E-06	4.841675345
93.87817383	4.52529E-06	2.312262403
93.88427734	3.97919E-06	1.627719129
93.89038086	4.05267E-06	1.889762039
93.89648438	4.98203E-06	1.365776466
93.90258789	5.40883E-06	1.196594986
93.90869141	4.017E-06	0.902119099
93.91479492	2.21117E-06	0.394742518
93.92089844	1.20705E-06	0.187680072
93.92700195	1.31398E-06	0.179887744
93.93310547	2.40802E-06	0.261464386
93.93920898	4.32326E-06	0.441429128
93.9453125	5.2884E-06	0.53080565

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
76.96	0.007480118	-3.45442E-05	-0.006902146	-1.552982741	3.481114711	2.540043553
76.965	0.009752864	-4.5943E-05	-0.009171438	-2.063573598	3.481138751	2.540043553
76.97	0.01261953	-6.02885E-05	-0.012025723	-2.705787586	3.481179001	2.540043553
76.975	0.015621975	-7.53649E-05	-0.015023481	-3.380283233	3.481240681	2.540043553
76.98	0.017254676	-8.36175E-05	-0.016663559	-3.749300819	3.481315928	2.540043553
76.985	0.019251518	-9.36631E-05	-0.018659184	-4.198316337	3.4814096	2.540043553
76.99	0.021298102	-0.000104	-0.020711795	-4.660153803	3.481524245	2.540043553
76.995	0.021911953	-0.000107196	-0.021346282	-4.802913372	3.481645595	2.540043553
77	0.022550391	-0.000110484	-0.02199874	-4.949716522	3.481774119	2.540043553
77.005	0.023305491	-0.000114377	-0.022771367	-5.123557669	3.481911394	2.540043553
77.01	0.022792117	-0.000111952	-0.02228159	-5.013357763	3.482042688	2.540043553
77.015	0.021689252	-0.000106548	-0.02119063	-4.767891701	3.482161584	2.540043553
77.02	0.020848223	-0.000102432	-0.020360123	-4.581027581	3.482271437	2.540043553
77.025	0.01982096	-9.73976E-05	-0.019344416	-4.352493556	3.482370732	2.540043553
77.03	0.017916417	-8.79807E-05	-0.017445528	-3.92524388	3.482451861	2.540043553
77.035	0.015598627	-7.64656E-05	-0.015125097	-3.403146914	3.482513357	2.540043553
77.04	0.013432423	-6.56938E-05	-0.012955892	-2.91507568	3.482558959	2.540043553
77.045	0.010451122	-5.08465E-05	-0.009968197	-2.242844297	3.482586565	2.540043553
77.05	0.007010399	-3.36416E-05	-0.006509143	-1.46455727	3.482598986	2.540043553
77.055	0.004612972	-2.15848E-05	-0.004087029	-0.91958162	3.482604365	2.540043553
77.06	0.003292589	-1.48726E-05	-0.002739254	-0.616332226	3.482607105	2.540043553
77.065	0.003791932	-1.72083E-05	-0.003211457	-0.722577818	3.482610739	2.540043553
77.07	0.006642093	-3.13098E-05	-0.006057297	-1.362891854	3.482621889	2.540043553
77.075	0.010108503	-4.85747E-05	-0.009537839	-2.146013862	3.482647715	2.540043553
77.08	0.013024252	-6.3166E-05	-0.012476525	-2.807218163	3.482690587	2.540043553
77.085	0.014414783	-7.02193E-05	-0.013896175	-3.126639367	3.482743103	2.540043553
77.09	0.012940805	-6.29967E-05	-0.012437873	-2.798521398	3.482785429	2.540043553
77.095	0.009444636	-4.56179E-05	-0.008932147	-2.009733057	3.482807973	2.540043553
77.1	0.00538045	-2.54097E-05	-0.004860565	-1.093627207	3.48281529	2.540043553
77.105	0.002263521	-9.79577E-06	-0.001720185	-0.387041645	3.482816585	2.540043553
77.11	0.002092412	-8.75816E-06	-0.001513908	-0.3406294	3.482817691	2.540043553
77.115	0.004240925	-1.92958E-05	-0.003640984	-0.819221462	3.482822237	2.540043553
77.12	0.006463743	-3.02798E-05	-0.005856475	-1.317706809	3.482832797	2.540043553
77.125	0.007427975	-3.50504E-05	-0.006818197	-1.534094286	3.482846742	2.540043553
77.13	0.006837735	-3.20605E-05	-0.006214408	-1.398241888	3.482858558	2.540043553
77.135	0.007480231	-3.51037E-05	-0.006828943	-1.536512253	3.4828727	2.540043553
77.14	0.011161939	-5.32702E-05	-0.010488651	-2.359946461	3.482904189	2.540043553
77.145	0.014563964	-7.01472E-05	-0.01388512	-3.124151971	3.482957798	2.540043553
77.15	0.016777482	-8.11161E-05	-0.016090871	-3.62044596	3.48302894	2.540043553
77.155	0.020167925	-9.79293E-05	-0.019469303	-4.380593244	3.483131741	2.540043553
77.16	0.02340879	-0.000114069	-0.022709673	-5.109676422	3.483270236	2.540043553
77.165	0.02518641	-0.000122952	-0.024472669	-5.50635059	3.483430564	2.540043553
77.17	0.02701382	-0.000132061	-0.02627923	-5.912826661	3.483615001	2.540043553
77.175	0.029053524	-0.00014225	-0.028299127	-6.367303617	3.483828342	2.540043553
77.18	0.030630048	-0.000150169	-0.029868286	-6.720364421	3.484065463	2.540043553
77.185	0.031190813	-0.000153063	-0.030441741	-6.84939174	3.484311347	2.540043553
77.19	0.029811713	-0.000146301	-0.02907639	-6.54218778	3.484535967	2.540043553
77.195	0.027847404	-0.000136536	-0.027106023	-6.098855075	3.484731963	2.540043553
77.2	0.028115029	-0.000137769	-0.027355393	-6.154963317	3.484931743	2.540043553
77.205	0.031929757	-0.000156672	-0.031156653	-7.010246834	3.485189415	2.540043553
77.21	0.038107115	-0.000187931	-0.037344254	-8.402457155	3.485556434	2.540043553
77.215	0.042949798	-0.000212665	-0.042234664	-9.502799499	3.486022661	2.540043553
77.22	0.042242536	-0.000209413	-0.041567033	-9.352582337	3.486473661	2.540043553
77.225	0.036885566	-0.000183004	-0.036240772	-8.154173689	3.486817526	2.540043553
77.23	0.034208657	-0.000169663	-0.033553499	-7.549537314	3.487113292	2.540043553
77.235	0.036577281	-0.000181443	-0.035931496	-8.08458662	3.487451434	2.540043553
77.24	0.037045722	-0.000183968	-0.036440412	-8.199092671	3.487798292	2.540043553
77.245	0.032869385	-0.000163372	-0.032287074	-7.264591635	3.488071353	2.540043553
77.25	0.029878382	-0.000148508	-0.029296493	-6.591710816	3.488296979	2.540043553
77.255	0.030118133	-0.000149707	-0.02953893	-6.64625915	3.488526241	2.540043553
77.26	0.029363998	-0.00014606	-0.028804212	-6.480947805	3.488744166	2.540043553
77.265	0.026462243	-0.00013171	-0.025919678	-5.83192757	3.488921148	2.540043553
77.27	0.02484367	-0.000123637	-0.024298085	-5.467069022	3.489077142	2.540043553
77.275	0.025816122	-0.000128455	-0.025270927	-5.685958635	3.489245587	2.540043553
77.28	0.026173087	-0.000130314	-0.025646205	-5.770396215	3.489418722	2.540043553
77.285	0.024413721	-0.00012164	-0.023896975	-5.376819438	3.489569363	2.540043553
77.29	0.02422885	-0.000120701	-0.023710284	-5.334813885	3.489717732	2.540043553
77.295	0.026269566	-0.000130897	-0.025768395	-5.797888861	3.489892146	2.540043553
77.3	0.02564603	-0.000127962	-0.02517559	-5.664507853	3.490058379	2.540043553
77.305	0.02315858	-0.000115678	-0.022699911	-5.107479869	3.490193929	2.540043553
77.31	0.023177536	-0.000115814	-0.022728944	-5.114012288	3.490329701	2.540043553
77.315	0.021941886	-0.000109825	-0.021525053	-4.843137018	3.490451382	2.540043553
77.32	0.017776123	-8.9097E-05	-0.017367151	-3.907608891	3.490531246	2.540043553
77.325	0.017036308	-8.53517E-05	-0.016618203	-3.739095705	3.4906046	2.540043553
77.33	0.017321461	-8.68514E-05	-0.016920987	-3.807222025	3.490680431	2.540043553
77.335	0.01384539	-6.9542E-05	-0.013448583	-3.025931239	3.49072888	2.540043553
77.34	0.013932711	-6.98589E-05	-0.013519669	-3.041925609	3.490777942	2.540043553
77.345	0.017296842	-8.66943E-05	-0.016916452	-3.806201739	3.490853558	2.540043553
77.35	0.015781247	-7.92496E-05	-0.015413337	-3.468000913	3.490916502	2.540043553
77.355	0.015437667	-7.74852E-05	-0.015057655	-3.387972379	3.490976736	2.540043553
77.36	0.018531191	-9.29946E-05	-0.018186651	-4.091996442	3.491063529	2.540043553
77.365	0.016845228	-8.47299E-05	-0.016518005	-3.7165512	3.491135247	2.540043553
77.37	0.016327058	-8.21049E-05	-0.015988754	-3.59746957	3.491202621	2.540043553
77.375	0.02002299	-0.000100647	-0.019728699	-4.438957211	3.49130395	2.540043553
77.38	0.017946566	-9.05113E-05	-0.017682513	-3.978565454	3.491385352	2.540043553
77.385	0.015428864	-7.8027E-05	-0.015164215	-3.411948376	3.491445517	2.540043553
77.39	0.017801735	-8.98757E-05	-0.017556131	-3.950129386	3.491525611	2.540043553
77.395	0.015690098	-7.96154E-05	-0.015484758	-3.484070652	3.491587831	2.540043553
77.4	0.012891499	-6.57673E-05	-0.012693212	-2.855972629	3.491629834	2.540043553
77.405	0.013563629	-6.92241E-05	-0.013391294	-3.013041256	3.491676332	2.540043553
77.41	0.009186876	-4.76123E-05	-0.009058613	-2.038187923	3.491697663	2.540043553
77.415	0.003985068	-2.16005E-05	-0.003857467	-0.867930002	3.491701676	2.540043553
77.42	0.001976371	-1.15841E-05	-0.001856359	-0.417680774	3.491702664	2.540043553
77.425	-0.00332935	1.49534E-05	0.003440872	0.774196289	3.491705465	2.540043553
77.43	-0.00669936	3.19934E-05	0.006838868	1.538745299	3.491716808	2.540043553
77.435	-0.005548718	2.62584E-05	0.005680873	1.278196356	3.49172459	2.540043553
77.44	-0.00780809	3.75299E-05	0.007942363	1.787031727	3.491739999	2.540043553
77.445	-0.009839227	4.77816E-05	0.009984909	2.246604536	3.491764467	2.540043553
77.45	-0.009126598	4.41904E-05	0.009259696	2.083431639	3.491785519	2.540043553
77.455	-0.011857024	5.7804E-05	0.011980862	2.695693929	3.491821051	2.540043553
77.46	-0.014940434	7.33115E-05	0.01506741	3.390167165	3.491877467	2.540043553
77.465	-0.01576589	7.74698E-05	0.015894709	3.576309441	3.491940289	2.540043553
77.47	-0.018103564	8.91794E-05	0.018223493	4.100285828	3.492023123	2.540043553
77.475	-0.020299451	0.000100234	0.020420947	4.594712994	3.492127269	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
93.95141602	4.73872E-06	0.437697321
93.95751953	4.5437E-06	0.419981659
93.96362305	4.81154E-06	0.419254906
93.96972656	5.31479E-06	0.404636168
93.97583008	5.81359E-06	0.441448164
93.98193359	5.54242E-06	0.4275339
93.98803711	4.78032E-06	0.348213179
93.99414063	4.36035E-06	0.323690648
94.00024414	5.33851E-06	0.401503412
94.00634766	6.60352E-06	0.47164379
94.01245117	6.70402E-06	0.48188335
94.01855469	6.21242E-06	0.430047705
94.0246582	6.81441E-06	0.459758797
94.03076172	7.4299E-06	0.54778125
94.03686523	6.51849E-06	0.467305431
94.04296875	4.71749E-06	0.30966124
94.04907227	4.67245E-06	0.309758828
94.05517578	7.05457E-06	0.453004199
94.0612793	9.54028E-06	0.614372776
94.06738281	9.70217E-06	0.673131201
94.07348633	7.37966E-06	0.496552236
94.07958984	5.16731E-06	0.350817691
94.08569336	4.04123E-06	0.294858361
94.09179688	2.28358E-06	0.164791263
94.09790039	5.81138E-07	0.044353424
94.10400391	9.57392E-08	0.008126187
94.11010742	1.83124E-06	0.158535498
94.11621094	3.39648E-06	0.316917704
94.12231445	2.83268E-06	0.280700326
94.12841797	1.26164E-06	0.120816936
94.13452148	5.82676E-07	0.061499081
94.140625	2.88932E-07	0.03543617
94.14672852	1.76355E-06	0.230804484
94.15283203	3.40838E-06	0.496105848
94.15893555	4.131E-06	0.625537488
94.16503906	4.42529E-06	0.638885302
94.17114258	3.96108E-06	0.638248085
94.17724609	2.24882E-06	0.426222077
94.18334961	9.63994E-07	0.19802715
94.18945313	1.60027E-06	0.428990584
94.19555664	3.23754E-06	0.983796876
94.20166016	4.68542E-06	1.303234575
94.20776367	4.39625E-06	1.54408665
94.21386719	3.56051E-06	1.875304333
94.2199707	4.26211E-06	2.103876447
94.22607422	4.6354E-06	1.720719445
94.23217773	3.91016E-06	1.51565753
94.23828125	3.42618E-06	1.178342021
94.24438477	4.49754E-06	1.093773744
94.25048828	4.77765E-06	1.15270915
94.2565918	2.56582E-06	0.481248669
94.26269531	2.23849E-06	0.316441545
94.26879883	4.04678E-06	0.603983599
94.27490234	3.54117E-06	0.516353927
94.28100586	2.58607E-06	0.32814442
94.28710938	1.98405E-06	0.260913474
94.29321289	8.3427E-07	0.096728167
94.29931641	3.43962E-06	0.357096012
94.30541992	5.94448E-06	0.641046359
94.31152344	6.77672E-06	0.672601878
94.31762695	5.74673E-06	0.547270139
94.32373047	3.81623E-06	0.367623772
94.32983398	2.35523E-06	0.198998226
94.3359375	2.20723E-06	0.180682375
94.34204102	4.30046E-06	0.35682843
94.34814453	6.93734E-06	0.525893523
94.35424805	8.27818E-06	0.630124874
94.36035156	7.9622E-06	0.626658614
94.36645508	6.7546E-06	0.496402704
94.37255859	6.2138E-06	0.442426036
94.37866211	6.9365E-06	0.485221793
94.38476563	8.51356E-06	0.582978482
94.39086914	9.65938E-06	0.709906256
94.39697266	8.39675E-06	0.659118837
94.40307617	5.31268E-06	0.405718021
94.40917969	3.30094E-06	0.25694024
94.4152832	3.32734E-06	0.269422614
94.42138672	4.20419E-06	0.347099183
94.42749023	4.39554E-06	0.410567408
94.43359375	4.70586E-06	0.47621577
94.43969727	5.73368E-06	0.56101771
94.44580078	5.74092E-06	0.604556304
94.4519043	4.67475E-06	0.493735573
94.45800781	3.90163E-06	0.395555644
94.46411133	4.70046E-06	0.554116872
94.47021484	6.32737E-06	0.776205999
94.47631836	7.23379E-06	0.858297949
94.48242188	7.18335E-06	0.965270896
94.48852539	6.98277E-06	0.87411606
94.49462891	6.31316E-06	0.775900801
94.50073242	5.05673E-06	0.772561094
94.50683594	4.02587E-06	0.643921065
94.51293945	4.22472E-06	0.775585949
94.51904297	4.79491E-06	1.130408297
94.52514648	4.40405E-06	0.927210031
94.53125	2.95774E-06	0.734248832
94.53735352	2.56525E-06	0.897261987
94.54345703	3.50618E-06	1.18029008
94.54956055	3.47656E-06	1.547071265
94.55566406	3.02811E-06	2.465652737
94.56176758	2.72501E-06	1.536617379
94.56787109	2.27606E-06	1.006735414
94.57397461	2.04233E-06	1.115047944
94.58007813	1.78217E-06	0.782307336

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
77.48	-0.021804122	0.000107794	0.021923168	4.932712798	3.492247427	2.540043553
77.485	-0.024450987	0.000121095	0.024564686	5.527054423	3.492398529	2.540043553
77.49	-0.026347481	0.00013067	0.026465505	5.954738669	3.492573979	2.540043553
77.495	-0.028112272	0.000139557	0.028228991	6.351522963	3.49277372	2.540043553
77.5	-0.030657795	0.00015239	0.030774357	6.924230249	3.493011272	2.540043553
77.505	-0.032160758	0.000160019	0.032286718	7.264511593	3.493272685	2.540043553
77.51	-0.033904509	0.000168831	0.034033195	7.657468853	3.493563215	2.540043553
77.515	-0.03621771	0.000180557	0.036355988	8.180097328	3.493894742	2.540043553
77.52	-0.036429973	0.000181792	0.036596099	8.234122313	3.494230165	2.540043553
77.525	-0.034736135	0.000173412	0.034904397	7.853489306	3.494535122	2.540043553
77.53	-0.033179381	0.000165639	0.033336238	7.500653545	3.494813358	2.540043553
77.535	-0.033431136	0.000166899	0.033590856	7.557942507	3.495095832	2.540043553
77.54	-0.034786605	0.000173747	0.034973305	7.868993632	3.495401676	2.540043553
77.545	-0.034951153	0.000174648	0.035155042	7.909884441	3.49571042	2.540043553
77.55	-0.035448148	0.000177177	0.035665482	8.024733349	3.496028007	2.540043553
77.555	-0.036802617	0.000184054	0.037048562	8.335926404	3.496370328	2.540043553
77.56	-0.036369339	0.000181994	0.036631507	8.242089106	3.496704636	2.540043553
77.565	-0.035622856	0.000178303	0.035886322	8.074422355	3.497025361	2.540043553
77.57	-0.035864754	0.000179581	0.036144455	8.132502375	3.497350457	2.540043553
77.575	-0.035301602	0.000176839	0.035590898	8.00795194	3.497665424	2.540043553
77.58	-0.034570861	0.000173232	0.034862876	7.844147162	3.497967486	2.540043553
77.585	-0.033826074	0.000169567	0.034123449	7.677776125	3.498256674	2.540043553
77.59	-0.032363011	0.000162271	0.032651851	7.346666455	3.498521386	2.540043553
77.595	-0.031924037	0.000160066	0.032207308	7.246644399	3.498778965	2.540043553
77.6	-0.032706516	0.000164028	0.033007489	7.4266851	3.499049327	2.540043553
77.605	-0.032818473	0.000164677	0.033138431	7.456146944	3.499321542	2.540043553
77.61	-0.031517711	0.000158235	0.031838138	7.163580973	3.499572606	2.540043553
77.615	-0.029827702	0.000149791	0.030136384	6.780686425	3.499797468	2.540043553
77.62	-0.029316916	0.000147232	0.029620769	6.66467297	3.500014695	2.540043553
77.625	-0.029393901	0.000147647	0.029704688	6.683554717	3.500233063	2.540043553
77.63	-0.029281953	0.000147122	0.029598719	6.659711866	3.500449772	2.540043553
77.635	-0.029733063	0.000149425	0.030063799	6.76435475	3.500673209	2.540043553
77.64	-0.029990536	0.000150796	0.030340663	6.82664914	3.500900532	2.540043553
77.645	-0.029226908	0.000147055	0.029585267	6.656685025	3.501116427	2.540043553
77.65	-0.027871573	0.000140315	0.028227783	6.351251144	3.501312762	2.540043553
77.655	-0.027099602	0.000136453	0.027450091	6.176270471	3.501498373	2.540043553
77.66	-0.028271257	0.000142363	0.028643531	6.444794446	3.501700379	2.540043553
77.665	-0.028332833	0.0001428	0.028731356	6.464554988	3.501903267	2.540043553
77.67	-0.025810306	0.000130203	0.026192026	5.893205955	3.502071636	2.540043553
77.675	-0.026370019	0.000132967	0.026751464	6.019079298	3.502247387	2.540043553
77.68	-0.029044139	0.000146473	0.029476876	6.632297114	3.50246059	2.540043553
77.685	-0.028106359	0.000141925	0.028558364	6.425631898	3.502660247	2.540043553
77.69	-0.026762209	0.000135227	0.027206436	6.121448175	3.502841264	2.540043553
77.695	-0.027453569	0.000138741	0.027916152	6.281134242	3.503031755	2.540043553
77.7	-0.028047851	0.000141803	0.028534203	6.420195669	3.503230582	2.540043553
77.705	-0.029366901	0.000148518	0.029889327	6.725098572	3.503448549	2.540043553
77.71	-0.029762381	0.000150679	0.030324793	6.823078358	3.503672427	2.540043553
77.715	-0.027807107	0.000141013	0.028373495	6.38403632	3.503867856	2.540043553
77.72	-0.027205303	0.000138067	0.027779037	6.250283264	3.504054916	2.540043553
77.725	-0.02770506	0.000140712	0.02831307	6.370440717	3.504248913	2.540043553
77.73	-0.026480203	0.000134746	0.027109121	6.099552277	3.504426135	2.540043553
77.735	-0.024302863	0.000123968	0.024937513	5.610940459	3.504575412	2.540043553
77.74	-0.022248561	0.00011378	0.022888338	5.149876102	3.504700518	2.540043553
77.745	-0.020741468	0.000106338	0.021392396	4.813289069	3.50480925	2.540043553
77.75	-0.018806477	9.67883E-05	0.019473504	4.381538386	3.50489864	2.540043553
77.755	-0.015100351	7.84022E-05	0.015781801	3.550905195	3.50495627	2.540043553
77.76	-0.011616036	6.1109E-05	0.012312744	2.770367505	3.504990373	2.540043553
77.765	-0.009086613	4.85823E-05	0.00980174	2.205391581	3.505011241	2.540043553
77.77	-0.005587098	3.12322E-05	0.006326452	1.423451627	3.505019131	2.540043553
77.775	-0.001636719	1.15301E-05	0.002383624	0.536315311	3.505019808	2.540043553
77.78	0.00156892	-4.48576E-06	-0.000818772	-0.184223751	3.50502043	2.540043553
77.785	0.004175396	-1.75106E-05	-0.00342132	-0.76979696	3.505024836	2.540043553
77.79	0.006792709	-3.05846E-05	-0.00603209	-1.357220221	3.505036498	2.540043553
77.795	0.009380368	-4.35352E-05	-0.008616667	-1.938750138	3.505058737	2.540043553
77.8	0.010873469	-5.10179E-05	-0.010109302	-2.274592889	3.505088619	2.540043553
77.805	0.012875477	-6.09861E-05	-0.012096947	-2.721813096	3.505130518	2.540043553
77.81	0.016832023	-8.08095E-05	-0.016047041	-3.610584121	3.505202124	2.540043553
77.815	0.019475842	-9.41698E-05	-0.018707287	-4.209139672	3.50529799	2.540043553
77.82	0.020637372	-0.000100036	-0.019874765	-4.4718222	3.505405633	2.540043553
77.825	0.023596517	-0.000114897	-0.022831317	-5.137046226	3.505546358	2.540043553
77.83	0.027101186	-0.000132568	-0.026344282	-5.927463458	3.50573199	2.540043553
77.835	0.029606044	-0.000145245	-0.028862688	-6.494104862	3.505953522	2.540043553
77.84	0.031813749	-0.000156437	-0.031084916	-6.994106032	3.506209325	2.540043553
77.845	0.033569772	-0.000165365	-0.032857039	-7.392833747	3.506494147	2.540043553
77.85	0.035692031	-0.000176129	-0.034992535	-7.873320286	3.506816119	2.540043553
77.855	0.037688763	-0.000186314	-0.037012197	-8.327744419	3.507175123	2.540043553
77.86	0.038032236	-0.000188204	-0.037386838	-8.412038654	3.507540701	2.540043553
77.865	0.038481824	-0.000190584	-0.03785863	-8.518191831	3.507914973	2.540043553
77.87	0.039119881	-0.000193932	-0.03852216	-8.66748593	3.508301759	2.540043553
77.875	0.038757567	-0.000192236	-0.038179789	-8.590452507	3.508681414	2.540043553
77.88	0.039638504	-0.000196742	-0.039079063	-8.792789224	3.509078524	2.540043553
77.885	0.041374035	-0.000205591	-0.04083244	-9.187299078	3.509511169	2.540043553
77.89	0.041918287	-0.000208477	-0.041404041	-9.315909253	3.509955271	2.540043553
77.895	0.042720017	-0.000212633	-0.042227289	-9.501139968	3.510416523	2.540043553
77.9	0.043577958	-0.0002171	-0.043111051	-9.699986418	3.510896488	2.540043553
77.905	0.043626673	-0.000217494	-0.043188837	-9.717488308	3.511377527	2.540043553
77.91	0.044163009	-0.000220322	-0.043747456	-9.843177624	3.511870466	2.540043553
77.915	0.044478605	-0.000222065	-0.044091852	-9.920666664	3.512370476	2.540043553
77.92	0.044217185	-0.000220894	-0.043855432	-9.867472282	3.512864625	2.540043553
77.925	0.044300763	-0.000221452	-0.043967941	-9.892786812	3.513360644	2.540043553
77.93	0.043924775	-0.00021971	-0.043616142	-9.813632007	3.513848279	2.540043553
77.935	0.043571787	-0.000218065	-0.043284188	-9.738942297	3.514328108	2.540043553
77.94	0.043293807	-0.000216826	-0.043033857	-9.682617861	3.514801835	2.540043553
77.945	0.041607727	-0.000208514	-0.041356407	-9.305191535	3.515239381	2.540043553
77.95	0.040043015	-0.00020077	-0.039794507	-8.953764073	3.515644637	2.540043553
77.955	0.038575623	-0.000193545	-0.038337936	-8.626035604	3.516020736	2.540043553
77.96	0.035409266	-0.000177773	-0.035160488	-7.911109883	3.516337626	2.540043553
77.965	0.032664251	-0.000164053	-0.032398796	-7.289729041	3.516607289	2.540043553
77.97	0.030503903	-0.000153295	-0.030234784	-6.802826505	3.516842462	2.540043553
77.975	0.02686248	-0.000135085	-0.026574797	-5.979329278	3.517024838	2.540043553
77.98	0.023837869	-0.000119902	-0.023525931	-5.293334518	3.517168457	2.540043553
77.985	0.021993438	-0.000110668	-0.021672882	-4.876398457	3.517290711	2.540043553
77.99	0.019276037	-9.70637E-05	-0.018944356	-4.262480059	3.51738462	2.540043553
77.995	0.016598586	-8.36282E-05	-0.016251484	-3.656583853	3.517454254	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
94.58618164	2.13824E-06	0.617316515
94.59228516	2.63814E-06	0.798203679
94.59838867	2.21031E-06	0.666081318
94.60449219	1.24378E-06	0.286254153
94.6105957	1.09712E-06	0.24363621
94.61669922	1.42992E-06	0.258928095
94.62280273	1.80661E-06	0.259773582
94.62890625	2.6529E-06	0.378241697
94.63500977	2.02985E-06	0.279561836
94.64111328	4.25573E-07	0.053294044
94.6472168	2.72198E-06	0.333991996
94.65332031	2.60192E-06	0.27507667
94.65942383	7.29653E-07	0.069456118
94.66552734	2.44896E-06	0.244091251
94.67163086	4.13686E-06	0.391288166
94.67773438	5.45594E-06	0.496964263
94.68383789	6.49348E-06	0.634321071
94.68994141	6.43256E-06	0.579210734
94.69604492	6.09556E-06	0.528960197
94.70214844	6.66592E-06	0.61349835
94.70825195	7.92403E-06	0.688464438
94.71435547	7.74166E-06	0.705147046
94.72045898	6.90247E-06	0.696060747
94.7265625	8.06832E-06	0.742590034
94.73266602	8.5785E-06	0.78245034
94.73876953	7.6436E-06	0.705982883
94.74487305	7.28111E-06	0.652070388
94.75097656	7.71142E-06	0.776755437
94.75708008	8.50274E-06	0.902479848
94.76318359	9.4693E-06	0.946460053
94.76928711	1.05875E-05	1.123894848
94.77539063	1.15337E-05	1.195094703
94.78149414	1.11822E-05	1.135575864
94.78759766	1.00522E-05	1.197816973
94.79370117	9.85174E-06	1.240060564
94.79980469	1.06161E-05	1.31460801
94.8059082	1.14497E-05	1.612914731
94.81201172	1.13618E-05	1.617128968
94.81811523	1.09949E-05	1.543167278
94.82421875	1.10472E-05	1.822882635
94.83032227	1.06343E-05	1.918369975
94.83642578	1.03798E-05	2.080290058
94.8425293	1.0895E-05	3.041698903
94.84863281	1.17619E-05	3.07593458
94.85473633	1.21687E-05	3.291661995
94.86083984	1.13071E-05	4.940085488
94.86694336	1.01234E-05	5.227943201
94.87304688	9.96547E-06	6.547153399
94.87915039	1.04431E-05	26.34766676
94.88525391	1.15655E-05	10.10917276
94.89135742	1.33383E-05	9.542761985
94.89746094	1.50275E-05	18.16259404
94.90356445	1.55513E-05	13.96287851
94.90966797	1.38957E-05	6.2775498
94.91577148	1.15954E-05	4.514614714
94.921875	1.08379E-05	4.554037435
94.92797852	1.11519E-05	3.158068719
94.93408203	1.18206E-05	2.929968598
94.94018555	1.13352E-05	2.678620558
94.94628906	9.87472E-06	1.728126076
94.95239258	8.71265E-06	1.393147615
94.95849609	7.28318E-06	1.159821734
94.96459961	7.16869E-06	0.998025982
94.97070313	9.09984E-06	1.24792818
94.97680664	1.09129E-05	1.413546705
94.98291016	1.09685E-05	1.248383955
94.98901367	9.15977E-06	1.052163916
94.99511719	7.17752E-06	0.813705119
95.0012207	6.88991E-06	0.75452185
95.00732422	8.34835E-06	0.957618421
95.01342773	9.62414E-06	1.014198908
95.01953125	1.02396E-05	1.009126081
95.02563477	1.12089E-05	1.154368366
95.03173828	1.1744E-05	1.147517217
95.0378418	1.14693E-05	1.071645059
95.04394531	1.13321E-05	1.079659764
95.05004883	1.15854E-05	1.03996744
95.05615234	1.30448E-05	1.127263721
95.06225586	1.45493E-05	1.268565999
95.06835938	1.44825E-05	1.228996375
95.07446289	1.40611E-05	1.243168604
95.08056641	1.4529E-05	1.42737287
95.08666992	1.59098E-05	1.519761478
95.09277344	1.73154E-05	1.595448401
95.09887695	1.8129E-05	1.734406077
95.10498047	1.81274E-05	1.787599298
95.11108398	1.62769E-05	1.771060873
95.1171875	1.36621E-05	1.609224497
95.12329102	1.26027E-05	1.434731982
95.12939453	1.31644E-05	1.660634537
95.13549805	1.43323E-05	1.88906548
95.14160156	1.4843E-05	1.817450496
95.14770508	1.44043E-05	2.008772031
95.15380859	1.42555E-05	2.131948559
95.15991211	1.42821E-05	2.11980695
95.16601563	1.39752E-05	2.466833658
95.17211914	1.38721E-05	2.26842694
95.17822266	1.41853E-05	2.185760453
95.18432617	1.46501E-05	2.742808632
95.19042969	1.43954E-05	2.876961475
95.1965332	1.35583E-05	3.37217414
95.20263672	1.31202E-05	4.583264972
95.20874023	1.2148E-05	3.46526465
95.21484375	1.08292E-05	4.03616227

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
78	0.014165469	-7.14334E-05	-0.013808843	-3.106989651	3.517504969	2.540043553
78.005	0.010996854	-5.55388E-05	-0.010627303	-2.391143065	3.517535533	2.540043553
78.01	0.007838509	-3.96746E-05	-0.007454287	-1.67721463	3.517551062	2.540043553
78.015	0.004142643	-2.11432E-05	-0.003750807	-0.843931623	3.5175554	2.540043553
78.02	-0.000257369	9.56409E-07	0.000661567	0.148852499	3.517555416	2.540043553
78.025	-0.003633448	1.79756E-05	0.004056537	0.912720905	3.517558753	2.540043553
78.03	-0.006698954	3.34261E-05	0.007136299	1.605667296	3.517570095	2.540043553
78.035	-0.010372563	5.19578E-05	0.010827399	2.436164775	3.517597288	2.540043553
78.04	-0.013054763	6.55765E-05	0.013537997	3.046049271	3.517640361	2.540043553
78.045	-0.01445795	7.27897E-05	0.014973013	3.368927929	3.517693193	2.540043553
78.05	-0.015222378	7.68034E-05	0.015771319	3.548546812	3.517751758	2.540043553
78.055	-0.014890311	7.53193E-05	0.015471575	3.481104468	3.517807796	2.540043553
78.06	-0.013914697	7.05783E-05	0.014514364	3.265731839	3.517856731	2.540043553
78.065	-0.013014459	6.62033E-05	0.013631356	3.067055187	3.51789954	2.540043553
78.07	-0.01147954	5.86531E-05	0.012108147	2.724333048	3.517932846	2.540043553
78.075	-0.009021706	4.64536E-05	0.009648573	2.170928939	3.517953417	2.540043553
78.08	-0.006374976	3.32757E-05	0.006993841	1.573614336	3.517963688	2.540043553
78.085	-0.003488775	1.88753E-05	0.004095159	0.921410814	3.517966765	2.540043553
78.09	-0.000504296	3.94791E-06	0.0010929	0.245902423	3.517966829	2.540043553
78.095	0.00214486	-9.31776E-06	-0.001573104	-0.353948392	3.517967992	2.540043553
78.1	0.00506511	-2.39595E-05	-0.004513467	-1.015530054	3.517974476	2.540043553
78.105	0.00771407	-3.72918E-05	-0.007188951	-1.617514066	3.517989516	2.540043553
78.11	0.009015644	-4.3889E-05	-0.008512165	-1.915237099	3.518010059	2.540043553
78.115	0.009815534	-4.79574E-05	-0.009327949	-2.098788521	3.518034409	2.540043553
78.12	0.010196498	-4.99282E-05	-0.009723074	-2.18769174	3.518060686	2.540043553
78.125	0.01015985	-4.97792E-05	-0.009692997	-2.180924272	3.518086775	2.540043553
78.13	0.010934131	-5.36902E-05	-0.010477221	-2.357374749	3.518116991	2.540043553
78.135	0.011130027	-5.47402E-05	-0.010686823	-2.404535092	3.5181483	2.540043553
78.14	0.01039763	-5.10965E-05	-0.009951053	-2.238986926	3.518175624	2.540043553
78.145	0.011211791	-5.5187E-05	-0.010777072	-2.424841117	3.518207395	2.540043553
78.15	0.011670595	-5.75665E-05	-0.011253744	-2.532092462	3.518241819	2.540043553
78.155	0.010473148	-5.16103E-05	-0.010051097	-2.261496869	3.518269541	2.540043553
78.16	0.010876424	-5.36389E-05	-0.010460812	-2.35368278	3.51829944	2.540043553
78.165	0.011362526	-5.61606E-05	-0.010969943	-2.468237098	3.51833207	2.540043553
78.17	0.00988815	-4.88392E-05	-0.009491777	-2.135649871	3.518356782	2.540043553
78.175	0.00955371	-4.7182E-05	-0.009157427	-2.060421008	3.518379851	2.540043553
78.18	0.009678788	-4.78852E-05	-0.009299429	-2.092371602	3.518403527	2.540043553
78.185	0.008450741	-4.18093E-05	-0.008073333	-1.816500024	3.518421577	2.540043553
78.19	0.00754888	-3.73529E-05	-0.007174525	-1.614268051	3.518435979	2.540043553
78.195	0.005875272	-2.90504E-05	-0.005500674	-1.237651615	3.518444704	2.540043553
78.2	0.003761983	-1.84878E-05	-0.003372436	-0.758798186	3.518448281	2.540043553
78.205	0.003403302	-1.67328E-05	-0.003018946	-0.679262848	3.518451208	2.540043553
78.21	0.001480908	-7.21273E-06	-0.001102102	-0.247972918	3.518451762	2.540043553
78.215	-0.00222754	1.13407E-05	0.002630612	0.591887736	3.518453016	2.540043553
78.22	-0.003934441	1.99054E-05	0.004352415	0.979293338	3.518456929	2.540043553
78.225	-0.006095736	3.06901E-05	0.006519399	1.466864819	3.51846632	2.540043553
78.23	-0.009511958	4.78325E-05	0.009961311	2.241294967	3.518489188	2.540043553
78.235	-0.010849416	5.45994E-05	0.011319154	2.546809691	3.518518938	2.540043553
78.24	-0.012151704	6.11343E-05	0.012629994	2.841748593	3.518556258	2.540043553
78.245	-0.014428925	7.26024E-05	0.014929348	3.359103245	3.518608878	2.540043553
78.25	-0.014889766	7.50052E-05	0.015410801	3.467430261	3.518664912	2.540043553
78.255	-0.014871529	7.49612E-05	0.015401922	3.46543256	3.518720808	2.540043553
78.26	-0.015228619	7.6821E-05	0.015774815	3.549333332	3.518779422	2.540043553
78.265	-0.014134465	7.1423E-05	0.014684838	3.304088458	3.518829915	2.540043553
78.27	-0.012573981	6.36507E-05	0.013116254	2.951157206	3.518869875	2.540043553
78.275	-0.010459259	5.31029E-05	0.010988878	2.472497503	3.518897524	2.540043553
78.28	-0.006643219	3.40565E-05	0.007151051	1.608986436	3.518908678	2.540043553
78.285	-0.004618825	2.3857E-05	0.005097634	1.146967649	3.51891407	2.540043553
78.29	-0.007001737	3.55498E-05	0.007458083	1.678068589	3.51892646	2.540043553
78.295	-0.011020074	5.54848E-05	0.011477928	2.582533842	3.518957154	2.540043553
78.3	-0.012756965	6.42445E-05	0.013242703	2.97960826	3.518998285	2.540043553
78.305	-0.009911304	5.02885E-05	0.010425609	2.34576202	3.519023112	2.540043553
78.31	-0.004665717	2.42415E-05	0.005175084	1.164393824	3.519028614	2.540043553
78.315	-0.003229123	1.69309E-05	0.003704063	0.833414224	3.51903125	2.540043553
78.32	-0.006531061	3.32317E-05	0.006994143	1.573682203	3.51904203	2.540043553
78.325	-0.008217919	4.16782E-05	0.00869744	1.956923982	3.519059099	2.540043553
78.33	-0.006390892	3.26264E-05	0.006869948	1.545738258	3.519069422	2.540043553
78.335	-0.006602042	3.35699E-05	0.0070608	1.588679916	3.519080438	2.540043553
78.34	-0.0100192	5.05087E-05	0.01047721	2.357372194	3.519105809	2.540043553
78.345	-0.011218698	5.65598E-05	0.01169623	2.631651773	3.519137619	2.540043553
78.35	-0.009672534	4.89081E-05	0.010151324	2.28404793	3.519161265	2.540043553
78.355	-0.010097974	5.09576E-05	0.010565318	2.37719664	3.519187037	2.540043553
78.36	-0.012024231	6.0532E-05	0.012496219	2.811649373	3.519223579	2.540043553
78.365	-0.011634574	5.86504E-05	0.012115775	2.726049451	3.519257791	2.540043553
78.37	-0.01061829	5.35587E-05	0.011087861	2.494768707	3.519286287	2.540043553
78.375	-0.012283811	6.17518E-05	0.012741844	2.86691487	3.519324423	2.540043553
78.38	-0.014470669	7.26243E-05	0.014930407	3.359341542	3.519377347	2.540043553
78.385	-0.014960531	7.50854E-05	0.015425636	3.470768025	3.519433915	2.540043553
78.39	-0.015758384	7.90349E-05	0.01621509	3.648395263	3.519496678	2.540043553
78.395	-0.016859629	8.45235E-05	0.017306407	3.893941472	3.519568518	2.540043553
78.4	-0.016581269	8.31459E-05	0.01702818	3.831340587	3.519638007	2.540043553
78.405	-0.017734524	8.87855E-05	0.018153652	4.084571716	3.519717497	2.540043553
78.41	-0.022439591	0.000112441	0.022853176	5.14196464	3.519844761	2.540043553
78.415	-0.026905009	0.000135074	0.027345267	6.152684992	3.520027715	2.540043553
78.42	-0.027840267	0.000139968	0.02831599	6.371097768	3.52022361	2.540043553
78.425	-0.027347816	0.000137597	0.027837215	6.263373433	3.520412636	2.540043553
78.43	-0.02773157	0.000139617	0.028245083	6.35514368	3.520607004	2.540043553
78.435	-0.028099812	0.000141584	0.028636404	6.443190958	3.520806568	2.540043553
78.44	-0.027919886	0.000140791	0.028476317	6.407171252	3.521003585	2.540043553
78.445	-0.027605457	0.000139328	0.028180848	6.340690783	3.521196189	2.540043553
78.45	-0.026493075	0.000133854	0.027075808	6.092056735	3.521373584	2.540043553
78.455	-0.024593509	0.000124395	0.025167109	5.662599561	3.521526452	2.540043553
78.46	-0.02259211	0.000114403	0.023152408	5.209291721	3.521655452	2.540043553
78.465	-0.020394348	0.000103408	0.020936788	4.710777731	3.521760574	2.540043553
78.47	-0.018093789	9.1887E-05	0.018616864	4.18879431	3.521843318	2.540043553
78.475	-0.015101265	7.68891E-05	0.015599033	3.509782325	3.521900955	2.540043553
78.48	-0.01044478	5.37398E-05	0.010945904	2.462828377	3.521928528	2.540043553
78.485	-0.006602992	3.45057E-05	0.007084109	1.593924618	3.521939547	2.540043553
78.49	-0.005975339	3.12452E-05	0.006430185	1.446791674	3.521948571	2.540043553
78.495	-0.007253223	3.75282E-05	0.007698799	1.732229681	3.521961868	2.540043553
78.5	-0.008998435	4.62021E-05	0.009449134	2.126055104	3.521982333	2.540043553
78.505	-0.01002221	5.13351E-05	0.010484443	2.35899971	3.522007719	2.540043553
78.51	-0.009953925	5.10089E-05	0.010418555	2.344174815	3.522032761	2.540043553
78.515	-0.010959176	5.60049E-05	0.011426033	2.570857535	3.522063116	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
95.22094727	1.0751E-05	8.170078105
95.22705078	1.21711E-05	12.47507368
95.2331543	1.36308E-05	19.05450414
95.23925781	1.31773E-05	12.39627886
95.24536133	1.11067E-05	11.37777309
95.25146484	9.75945E-06	6.420940948
95.25756836	9.99843E-06	4.861632855
95.26367188	1.07475E-05	4.76059759
95.26977539	1.02436E-05	2.785816758
95.27587891	8.26814E-06	1.936287898
95.28198242	7.29758E-06	1.789451106
95.28808594	8.06497E-06	1.774327632
95.29418945	9.1951E-06	2.047725274
95.30029297	9.6668E-06	2.090515679
95.30639648	9.07672E-06	1.45390527
95.3125	7.97588E-06	1.176662633
95.31860352	6.81966E-06	1.070381641
95.32470703	6.22248E-06	0.90661969
95.33081055	6.80522E-06	0.985694604
95.33691406	7.57146E-06	1.045703084
95.34301758	7.91665E-06	0.909444976
95.34912109	8.06139E-06	0.905799528
95.35522461	7.53044E-06	0.83921918
95.36132813	6.3667E-06	0.647439642
95.36743164	4.64984E-06	0.490646539
95.37353516	3.19828E-06	0.335554735
95.37963867	3.89917E-06	0.378613455
95.38574219	4.43014E-06	0.441597876
95.3918457	4.60476E-06	0.441765707
95.39794922	5.11083E-06	0.48367372
95.40405273	5.08165E-06	0.539985118
95.41015625	4.87999E-06	0.507966044
95.41625977	4.71943E-06	0.481935954
95.42236328	5.05131E-06	0.56101564
95.4284668	5.67571E-06	0.608138873
95.43457031	6.34414E-06	0.709282033
95.44067383	6.29271E-06	0.799396575
95.44677734	5.13343E-06	0.609431653
95.45288086	4.2907E-06	0.501695601
95.45898438	4.77324E-06	0.560332506
95.46508789	5.87384E-06	0.662467425
95.47119141	7.14658E-06	0.89270604
95.47729492	8.0542E-06	1.051456833
95.48339844	1.00482E-05	1.210970676
95.48950195	1.3461E-05	1.740779125
95.49560547	1.46614E-05	1.99012898
95.50170898	1.249E-05	1.706059623
95.5078125	1.01979E-05	1.695328743
95.51391602	1.02676E-05	1.953134804
95.52001953	1.23758E-05	2.413015467
95.52612305	1.47205E-05	3.854282149
95.53222656	1.58631E-05	4.400655572
95.53833008	1.60469E-05	4.152326253
95.54443359	1.54652E-05	6.059846233
95.55053711	1.46181E-05	6.976179609
95.55664063	1.41368E-05	7.052530433
95.56274414	1.38836E-05	11.22095627
95.56884766	1.41855E-05	6.535998272
95.57495117	1.45307E-05	10.1609777
95.58105469	1.39491E-05	18.61254614
95.5871582	1.28151E-05	13.80436008
95.59326172	1.20075E-05	21.0630025
95.59936523	1.17004E-05	6.254821788
95.60546875	1.16524E-05	7.800198855
95.61157227	1.16486E-05	9.691051178
95.61767578	1.16337E-05	5.301670458
95.6237793	1.10377E-05	7.860286189
95.62988281	1.01376E-05	3.991141442
95.63598633	9.82757E-06	2.644142058
95.64208984	9.23865E-06	2.608712719
95.64819336	7.92616E-06	1.731334239
95.65429688	6.63668E-06	1.349802166
95.66040039	6.50636E-06	1.342192584
95.66650391	7.11553E-06	1.09658417
95.67260742	6.91937E-06	1.009794324
95.67871094	5.40168E-06	0.797137594
95.68481445	4.02114E-06	0.539459154
95.69091797	4.21312E-06	0.639970089
95.69702148	3.34964E-06	0.516499937
95.703125	1.96972E-06	0.248769801
95.70922852	1.80261E-06	0.233988213
95.71533203	1.37754E-06	0.186153557
95.72143555	1.76512E-06	0.223486977
95.72753906	1.92635E-06	0.263245718
95.73364258	1.63236E-06	0.217078917
95.73974609	2.32694E-06	0.28191636
95.74584961	3.93764E-06	0.501429994
95.75195313	4.46666E-06	0.549833194
95.75805664	3.49652E-06	0.40938812
95.76416016	2.53271E-06	0.330734571
95.77026367	3.2522E-06	0.413821785
95.77636719	4.33598E-06	0.509114283
95.7824707	3.93635E-06	0.475041255
95.78857422	2.73281E-06	0.302744002
95.79467773	1.65511E-06	0.183634511
95.80078125	1.30467E-06	0.178671162
95.80688477	1.79642E-06	0.241381144
95.81298828	2.18684E-06	0.286384916
95.8190918	2.46897E-06	0.354508743
95.82519531	2.81408E-06	0.368889559
95.83129883	2.90314E-06	0.422354857
95.83740234	2.9957E-06	0.546065515
95.84350586	2.96061E-06	0.49969723
95.84960938	2.23117E-06	0.478735381

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
78.52	-0.012614158	6.42943E-05	0.013096748	2.946768201	3.522103331	2.540043553
78.525	-0.013209052	6.73209E-05	0.013706541	3.083971826	3.522147429	2.540043553
78.53	-0.014158587	7.21138E-05	0.014671997	3.301199306	3.522198095	2.540043553
78.535	-0.014493794	7.39027E-05	0.015032027	3.382205965	3.522251189	2.540043553
78.54	-0.013068695	6.68971E-05	0.013617578	3.063955122	3.522294354	2.540043553
78.545	-0.012469678	6.39725E-05	0.013027325	2.931148073	3.522333654	2.540043553
78.55	-0.011438167	5.89431E-05	0.012012567	2.702827611	3.52236672	2.540043553
78.555	-0.008760972	4.56727E-05	0.009336702	2.10075794	3.52238612	2.540043553
78.56	-0.00734976	3.8678E-05	0.007927178	1.783615015	3.522399772	2.540043553
78.565	-0.004788833	2.60138E-05	0.005380321	1.210572157	3.522405568	2.540043553
78.57	-6.26166E-06	2.13433E-06	0.000593171	0.133463539	3.522405568	2.540043553
78.575	0.001628667	-6.13803E-06	-0.001063874	-0.239371676	3.522406239	2.540043553
78.58	0.002058349	-8.29762E-06	-0.001496353	-0.336679522	3.52240731	2.540043553
78.585	0.004814101	-2.20995E-05	-0.004259244	-0.958329846	3.522413167	2.540043553
78.59	0.005099976	-2.36699E-05	-0.004569599	-1.028159851	3.522419741	2.540043553
78.595	0.003088514	-1.36611E-05	-0.002549313	-0.573595507	3.522422152	2.540043553
78.6	0.004007301	-1.821E-05	-0.003467861	-0.780268803	3.52242621	2.540043553
78.605	0.005832819	-2.73853E-05	-0.005316872	-1.196296221	3.522434809	2.540043553
78.61	0.005251606	-2.45668E-05	-0.004747681	-1.068228293	3.522441779	2.540043553
78.615	0.004390999	-2.02705E-05	-0.003880326	-0.873037277	3.522446653	2.540043553
78.62	0.005437756	-2.54721E-05	-0.004930673	-1.109401446	3.522454126	2.540043553
78.625	0.007304393	-3.48185E-05	-0.006803734	-1.530840169	3.522467611	2.540043553
78.63	0.008455854	-4.06236E-05	-0.007964557	-1.792025219	3.522485682	2.540043553
78.635	0.009433755	-4.55554E-05	-0.008950475	-2.013856808	3.522508175	2.540043553
78.64	0.01054731	-5.11798E-05	-0.010074596	-2.266784017	3.522536291	2.540043553
78.645	0.011219325	-5.4608E-05	-0.010759627	-2.42091617	3.522568105	2.540043553
78.65	0.011785721	-5.7512E-05	-0.011339834	-2.551462555	3.522603211	2.540043553
78.655	0.011522193	-5.62858E-05	-0.011091578	-2.495605029	3.522636765	2.540043553
78.66	0.010712574	-5.22756E-05	-0.010281879	-2.313422703	3.52266577	2.540043553
78.665	0.011857096	-5.79934E-05	-0.011436004	-2.573100863	3.522701303	2.540043553
78.67	0.013152295	-6.45425E-05	-0.012744134	-2.867430259	3.522745023	2.540043553
78.675	0.012713352	-6.24157E-05	-0.012314619	-2.770789201	3.522785873	2.540043553
78.68	0.013962344	-6.86616E-05	-0.013566701	-3.052507758	3.522835144	2.540043553
78.685	0.01612992	-7.95883E-05	-0.015747934	-3.543285262	3.522900901	2.540043553
78.69	0.015579859	-7.69873E-05	-0.015221895	-3.424926418	3.522962249	2.540043553
78.695	0.014502424	-7.16756E-05	-0.014149588	-3.183657215	3.523015406	2.540043553
78.7	0.014551376	-7.19787E-05	-0.014210834	-3.197437656	3.523068922	2.540043553
78.705	0.014493427	-7.17644E-05	-0.014167556	-3.18770006	3.523122013	2.540043553
78.71	0.014818461	-7.34657E-05	-0.014511123	-3.265002601	3.523177511	2.540043553
78.715	0.014957008	-7.4277E-05	-0.014674942	-3.301861972	3.523234052	2.540043553
78.72	0.013817893	-6.8723E-05	-0.013553737	-3.049590766	3.523282309	2.540043553
78.725	0.012024876	-5.98856E-05	-0.011770993	-2.648473385	3.523318855	2.540043553
78.73	0.009915871	-4.94432E-05	-0.009665812	-2.174807619	3.523343706	2.540043553
78.735	0.008410626	-4.19937E-05	-0.008164827	-1.837086082	3.523361584	2.540043553
78.74	0.007092109	-3.55137E-05	-0.00685974	-1.543441584	3.523374297	2.540043553
78.745	0.004219171	-2.12695E-05	-0.003992649	-0.898346014	3.523378796	2.540043553
78.75	0.001592218	-8.19017E-06	-0.001362037	-0.306458308	3.523379437	2.540043553
78.755	-6.80445E-06	-2.65999E-07	0.000230811	0.051932545	3.523379437	2.540043553
78.76	-0.003007903	1.46424E-05	0.003225745	0.725792669	3.523381723	2.540043553
78.765	-0.006232175	3.07343E-05	0.006455797	1.452554254	3.52339154	2.540043553
78.77	-0.008195573	4.0535E-05	0.008421729	1.89488913	3.523408516	2.540043553
78.775	-0.010851133	5.3776E-05	0.011076236	2.492153202	3.523438275	2.540043553
78.78	-0.013655958	6.78233E-05	0.013890465	3.125354724	3.523485408	2.540043553
78.785	-0.014823958	7.37198E-05	0.015071185	3.391016713	3.523540948	2.540043553
78.79	-0.015441527	7.68358E-05	0.015694998	3.531374646	3.523601211	2.540043553
78.795	-0.016278485	8.10401E-05	0.016536553	3.7207245	3.523668185	2.540043553
78.8	-0.01716349	8.54826E-05	0.017425581	3.92075573	3.523742639	2.540043553
78.805	-0.018339929	9.13934E-05	0.018608163	4.186836696	3.523827649	2.540043553
78.81	-0.018848053	9.4002E-05	0.019129951	4.30423891	3.523917435	2.540043553
78.815	-0.018166418	9.06525E-05	0.018453547	4.152048166	3.524000844	2.540043553
78.82	-0.017922482	8.94531E-05	0.018211391	4.09756307	3.524082029	2.540043553
78.825	-0.017920786	8.94921E-05	0.018219263	4.099334073	3.524163198	2.540043553
78.83	-0.016460243	8.22454E-05	0.016756632	3.770242264	3.524231675	2.540043553
78.835	-0.015215253	7.60125E-05	0.015499224	3.487325475	3.524290186	2.540043553
78.84	-0.014951549	7.46981E-05	0.015234132	3.427679763	3.524346686	2.540043553
78.845	-0.013000177	6.49615E-05	0.013271089	2.985995075	3.5243894	2.540043553
78.85	-0.011643128	5.80784E-05	0.011884106	2.673923917	3.524423662	2.540043553
78.855	-0.013669798	6.81103E-05	0.013909387	3.12961211	3.524470891	2.540043553
78.86	-0.01439775	7.17621E-05	0.014646151	3.295384006	3.524523283	2.540043553
78.865	-0.013584854	6.76376E-05	0.013813305	3.107993722	3.524569925	2.540043553
78.87	-0.01593904	7.92899E-05	0.01616461	3.63703724	3.524634135	2.540043553
78.875	-0.018389614	9.1536E-05	0.0186331	4.192447423	3.524719607	2.540043553
78.88	-0.018773539	9.34368E-05	0.019016077	4.278617278	3.524808684	2.540043553
78.885	-0.02109636	0.000104967	0.021322623	4.797590146	3.524921168	2.540043553
78.89	-0.024428998	0.000121623	0.024650911	5.546455046	3.525071998	2.540043553
78.895	-0.026282406	0.000130925	0.02650863	5.964441801	3.525246583	2.540043553
78.9	-0.027971507	0.000139391	0.028198804	6.344730952	3.525444329	2.540043553
78.905	-0.029830538	0.000148721	0.030051556	6.761600129	3.525669233	2.540043553
78.91	-0.031879593	0.000159022	0.032093424	7.2210205	3.525926096	2.540043553
78.915	-0.032918032	0.000164341	0.033147427	7.458170964	3.526199966	2.540043553
78.92	-0.031054436	0.000155151	0.031292046	7.040710341	3.526443704	2.540043553
78.925	-0.029646746	0.000148119	0.029873107	6.721449114	3.526665845	2.540043553
78.93	-0.030430313	0.000152039	0.030664718	6.899561482	3.526899885	2.540043553
78.935	-0.030068533	0.000150276	0.030308636	6.819443204	3.527128392	2.540043553
78.94	-0.030256387	0.000151187	0.030492667	6.860849997	3.527359764	2.540043553
78.945	-0.032880258	0.000164315	0.033142073	7.456966489	3.527633005	2.540043553
78.95	-0.033378553	0.000166942	0.033657827	7.573011029	3.527914591	2.540043553
78.955	-0.031297642	0.000156623	0.031574902	7.104352858	3.528162161	2.540043553
78.96	-0.030937694	0.000154816	0.031210327	7.02232348	3.52840407	2.540043553
78.965	-0.031998437	0.000160147	0.032286791	7.264527925	3.528662852	2.540043553
78.97	-0.032318313	0.000161819	0.032624256	7.340457697	3.528926833	2.540043553
78.975	-0.03211223	0.000160858	0.032430254	7.296807174	3.529187459	2.540043553
78.98	-0.031960063	0.000160154	0.032288038	7.264808451	3.52944562	2.540043553
78.985	-0.032531891	0.000163061	0.032875009	7.396877035	3.529713102	2.540043553
78.99	-0.033478667	0.000167885	0.033848297	7.615866815	3.52999638	2.540043553
78.995	-0.033042399	0.000165835	0.03343433	7.522724273	3.530272322	2.540043553
79	-0.032261066	0.000162015	0.032662993	7.349173459	3.530535369	2.540043553
79.005	-0.032959848	0.00016559	0.033385075	7.511641942	3.530809935	2.540043553
79.01	-0.032505018	0.000163481	0.032959069	7.415790562	3.531076975	2.540043553
79.015	-0.030226808	0.000152209	0.030684267	6.903960096	3.531307895	2.540043553
79.02	-0.030157053	0.000151889	0.030620192	6.889543297	3.53153775	2.540043553
79.025	-0.031365435	0.000158036	0.031861263	7.168784123	3.531786394	2.540043553
79.03	-0.030774591	0.000155233	0.031295038	7.041383565	3.532025759	2.540043553
79.035	-0.030469938	0.000153818	0.031009486	6.977134386	3.532260408	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
95.85571289	1.4679E-06	0.400726752
95.86181641	1.41477E-06	0.297800921
95.86791992	2.19586E-06	0.545258303
95.87402344	3.92024E-06	1.172018728
95.88012695	3.46852E-06	0.998849059
95.88623047	2.56891E-06	1.084924257
95.89233398	5.1E-06	1.887345815
95.8984375	5.85067E-06	1.969317909
95.90454102	4.77996E-06	2.441907469
95.91064453	3.84833E-06	2.25413951
95.91674805	2.08331E-06	2.225596867
95.92285156	2.26763E-06	7.708340183
95.92895508	3.52249E-06	3.232854222
95.93505859	5.46184E-06	18.08694539
95.94116211	7.28406E-06	7.17715699
95.94726563	7.10128E-06	10.41859832
95.95336914	5.53614E-06	2.806278012
95.95947266	4.34541E-06	1.295709483
96.00219727	5.02749E-06	0.928785565
96.00830078	5.6327E-06	0.95078582
96.0144043	6.16177E-06	0.996919665
96.02050781	6.66658E-06	1.259854746
96.02661133	7.99866E-06	1.262629346
96.03271484	8.57E-06	1.163441375
96.03881836	7.19856E-06	1.035379214
96.04492188	4.91925E-06	0.672026991
96.05102539	3.56802E-06	0.476678602
96.05712891	3.32453E-06	0.454036828
96.06323242	3.59214E-06	0.435452987
96.06933594	3.33121E-06	0.39916165
96.07543945	3.01941E-06	0.362856964
96.08154297	3.1262E-06	0.349008451
96.08764648	3.68132E-06	0.444208805
96.09375	5.22121E-06	0.640934864
96.09985352	6.34827E-06	0.712151025
96.10595703	5.71435E-06	0.693593127
96.11206055	4.84397E-06	0.587717648
96.11816406	5.58224E-06	0.660517389
96.12426758	7.77421E-06	1.070194103
96.13037109	9.96317E-06	1.341600568
96.13647461	1.04001E-05	1.323865021
96.14257813	9.74772E-06	1.346383825
96.14868164	8.91511E-06	1.173628223
96.15478516	8.9425E-06	1.266700666
96.16088867	1.05771E-05	1.788741798
96.16699219	1.23031E-05	1.867760462
96.1730957	1.31004E-05	2.042611308
96.17919922	1.32681E-05	2.346667964
96.18530273	1.34632E-05	2.092130291
96.19140625	1.41079E-05	2.286831206
96.19750977	1.49258E-05	2.857503189
96.20361328	1.6241E-05	3.124246894
96.2097168	1.75555E-05	3.981971529
96.21582031	1.71227E-05	4.105443358
96.22192383	1.56474E-05	3.298833143
96.22802734	1.50668E-05	3.631120956
96.23413086	1.54311E-05	4.075999462
96.24023438	1.54215E-05	4.056442682
96.24633789	1.47409E-05	6.140771609
96.25244141	1.48573E-05	5.105064839
96.25854492	1.54163E-05	4.536859574
96.26464844	1.50077E-05	7.928262414
96.27075195	1.37629E-05	7.724386136
96.27685547	1.21484E-05	8.698751806
96.28295898	1.07875E-05	7.982710168
96.2890625	1.00336E-05	4.959045368
96.29516602	9.51663E-06	7.652094813
96.30126953	9.05085E-06	4.130193255
96.30737305	8.35112E-06	3.059384089
96.31347656	7.87083E-06	3.759501713
96.31958008	8.62612E-06	2.610062492
96.32568359	1.07592E-05	3.221952355
96.33178711	1.24855E-05	3.836624326
96.33789063	1.20396E-05	3.017366205
96.34399414	1.04954E-05	3.050595029
96.35009766	1.0506E-05	2.475969908
96.35620117	1.19596E-05	2.113997905
96.36230469	1.27829E-05	2.285183342
96.3684082	1.14973E-05	1.822271551
96.37451172	9.1661E-06	1.423052468
96.38061523	7.88495E-06	1.366064259
96.38671875	8.1536E-06	1.125791875
96.39282227	9.00232E-06	1.124799016
96.39892578	8.67522E-06	1.149950958
96.4050293	7.47556E-06	0.927524775
96.41113281	6.82757E-06	0.887697345
96.41723633	5.85852E-06	0.81600695
96.42333984	4.69782E-06	0.569738199
96.42944336	4.78369E-06	0.607081794
96.43554688	5.97219E-06	0.791878864
96.44165039	7.14982E-06	0.838662427
96.44775391	7.75957E-06	0.99434968
96.45385742	8.28512E-06	1.132821757
96.45996094	8.87141E-06	1.091048909
96.46606445	8.85613E-06	1.157492414
96.47216797	8.50145E-06	1.065424099
96.47827148	8.30203E-06	0.941917617
96.484375	8.68936E-06	1.150890532

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
79.04	-0.030064214	0.000151947	0.030631652	6.892121647	3.53248885	2.540043553
79.045	-0.027878884	0.00014115	0.028454337	6.402225739	3.532685289	2.540043553
79.05	-0.027853182	0.00014105	0.028435139	6.39790633	3.532881365	2.540043553
79.055	-0.029698473	0.000150389	0.030320087	6.822019612	3.533104283	2.540043553
79.06	-0.029044087	0.000147298	0.029695918	6.68158145	3.533317485	2.540043553
79.065	-0.028542484	0.000144892	0.029210294	6.572316229	3.533523386	2.540043553
79.07	-0.029680758	0.000150724	0.030387822	6.83726004	3.533746038	2.540043553
79.075	-0.0289521	0.000147286	0.029693493	6.681035966	3.533957891	2.540043553
79.08	-0.027997792	0.000142666	0.028760756	6.471170043	3.534156009	2.540043553
79.085	-0.028183916	0.000143782	0.028986156	6.521885115	3.53435677	2.540043553
79.09	-0.02643617	0.000135286	0.0272725	6.136312598	3.534533403	2.540043553
79.095	-0.024138822	0.000123995	0.024997995	5.624548781	3.534680671	2.540043553
79.1	-0.02250038	0.000116033	0.023395118	5.263901557	3.534808626	2.540043553
79.105	-0.018191437	9.48197E-05	0.019127981	4.303795677	3.534892265	2.540043553
79.11	-0.012387198	6.60698E-05	0.013352654	3.004347252	3.534931046	2.540043553
79.115	-0.007419096	4.14176E-05	0.00840733	1.891649149	3.534944958	2.540043553
79.12	-0.000913895	9.03204E-06	0.001919924	0.431982965	3.534945169	2.540043553
79.125	0.005258393	-2.18795E-05	-0.004262699	-0.959107365	3.534952157	2.540043553
79.13	0.007595163	-3.36365E-05	-0.006611853	-1.487666818	3.534966737	2.540043553
79.135	0.009518213	-4.32255E-05	-0.00852684	-1.918538966	3.534989635	2.540043553
79.14	0.012784178	-5.9534E-05	-0.011781839	-2.650913753	3.535030941	2.540043553
79.145	0.016048495	-7.58312E-05	-0.015032117	-3.382226296	3.535096036	2.540043553
79.15	0.021284405	-0.000102093	-0.020264678	-4.559552645	3.535210534	2.540043553
79.155	0.026256492	-0.000127198	-0.025261019	-5.683729233	3.535384775	2.540043553
79.16	0.027291637	-0.000132515	-0.026318391	-5.921638082	3.535573025	2.540043553
79.165	0.02927697	-0.000142479	-0.028299409	-6.367366972	3.53578966	2.540043553
79.17	0.034041659	-0.000166514	-0.033074439	-7.441748752	3.536082545	2.540043553
79.175	0.037110038	-0.000182096	-0.036167588	-8.137707226	3.536430609	2.540043553
79.18	0.039416667	-0.000193815	-0.038492324	-8.660772831	3.536823286	2.540043553
79.185	0.041703253	-0.000205461	-0.040801478	-9.180332489	3.537262843	2.540043553
79.19	0.04252734	-0.000209713	-0.041644364	-9.369981965	3.537719945	2.540043553
79.195	0.045242975	-0.000223443	-0.044363947	-9.981888124	3.538237287	2.540043553
79.2	0.048753266	-0.000241394	-0.047908497	-10.77941193	3.538838023	2.540043553
79.205	0.048758528	-0.000241608	-0.047942858	-10.78714313	3.539438888	2.540043553
79.21	0.049339034	-0.000244615	-0.048544271	-10.92246092	3.540054146	2.540043553
79.215	0.052392524	-0.000260206	-0.051620266	-11.61455977	3.540747914	2.540043553
79.22	0.053374783	-0.000265381	-0.052640731	-11.8441644	3.54146794	2.540043553
79.225	0.053420236	-0.000265742	-0.052712055	-11.86021226	3.542189193	2.540043553
79.23	0.054632621	-0.00027201	-0.053947863	-12.13826912	3.542943555	2.540043553
79.235	0.055333243	-0.000275705	-0.05467617	-12.30213814	3.54371739	2.540043553
79.24	0.056482843	-0.000281658	-0.055849322	-12.5660975	3.544523713	2.540043553
79.245	0.057817697	-0.000288596	-0.057216378	-12.8736851	3.545368598	2.540043553
79.25	0.057573735	-0.00028753	-0.057000845	-12.82519006	3.546206368	2.540043553
79.255	0.058291324	-0.000291284	-0.057745947	-12.99283815	3.547065151	2.540043553
79.26	0.059960311	-0.000299929	-0.059448518	-13.3759165	3.547973816	2.540043553
79.265	0.059240378	-0.000296508	-0.058757581	-13.22045564	3.548860791	2.540043553
79.27	0.058061642	-0.000290682	-0.057581662	-12.9558739	3.549712821	2.540043553
79.275	0.058405123	-0.000292577	-0.057964327	-13.04197355	3.550574961	2.540043553
79.28	0.057541473	-0.000288412	-0.057123496	-12.8527867	3.551411792	2.540043553
79.285	0.055290302	-0.000277173	-0.054856498	-12.34271205	3.552184426	2.540043553
79.29	0.053977112	-0.000270646	-0.053540735	-12.04666537	3.552920795	2.540043553
79.295	0.052784398	-0.000264765	-0.052355612	-11.78001266	3.55362498	2.540043553
79.3	0.050205757	-0.00025186	-0.049756652	-11.19524673	3.554262044	2.540043553
79.305	0.047423719	-0.000237879	-0.046943134	-10.56220526	3.554830461	2.540043553
79.31	0.044807309	-0.000224722	-0.044297423	-9.966920243	3.555337888	2.540043553
79.315	0.042006505	-0.0002106	-0.041459652	-9.328421695	3.555783862	2.540043553
79.32	0.040098294	-0.00020098	-0.039527859	-8.893768371	3.556190237	2.540043553
79.325	0.038060492	-0.000190733	-0.037471165	-8.431012171	3.556556358	2.540043553
79.33	0.034957403	-0.000175048	-0.034325157	-7.723160255	3.556865213	2.540043553
79.335	0.033245616	-0.000166352	-0.03258203	-7.3309567	3.557144561	2.540043553
79.34	0.032893506	-0.000164587	-0.032228146	-7.251332749	3.557418022	2.540043553
79.345	0.03186027	-0.000159407	-0.031190398	-7.017839567	3.557674574	2.540043553
79.35	0.030232648	-0.000151221	-0.029550731	-6.648914369	3.557905582	2.540043553
79.355	0.027483635	-0.000137352	-0.026774243	-6.024204685	3.55809649	2.540043553
79.36	0.024218622	-0.000120805	-0.023463965	-5.279392071	3.558244734	2.540043553
79.365	0.022173064	-0.000110405	-0.021384831	-4.811586997	3.558368993	2.540043553
79.37	0.019960191	-9.91709E-05	-0.019140139	-4.306531344	3.558469687	2.540043553
79.375	0.017939871	-8.88625E-05	-0.017081395	-3.843313829	3.558551029	2.540043553
79.38	0.017691142	-8.75454E-05	-0.016818425	-3.784145607	3.558630131	2.540043553
79.385	0.016163848	-7.98195E-05	-0.015276184	-3.437141297	3.558696165	2.540043553
79.39	0.01306627	-6.40655E-05	-0.012133101	-2.729947689	3.558739314	2.540043553
79.395	0.012115629	-5.91264E-05	-0.011148158	-2.50833564	3.558776414	2.540043553
79.4	0.012022107	-5.8594E-05	-0.011042006	-2.484451396	3.558812943	2.540043553
79.405	0.010592851	-5.1303E-05	-0.00958849	-2.157410249	3.558841303	2.540043553
79.41	0.009554198	-4.59463E-05	-0.008520904	-1.917203326	3.558864373	2.540043553
79.415	0.009377887	-4.497E-05	-0.008326353	-1.873429422	3.558886601	2.540043553
79.42	0.009023746	-4.31119E-05	-0.007956129	-1.790128977	3.558907181	2.540043553
79.425	0.008593807	-4.08657E-05	-0.007508592	-1.689433268	3.558925847	2.540043553
79.43	0.008391968	-3.97782E-05	-0.00729193	-1.64068429	3.558943646	2.540043553
79.435	0.008138972	-3.84464E-05	-0.007026619	-1.580989273	3.558960388	2.540043553
79.44	0.007468958	-3.50003E-05	-0.006340185	-1.426541655	3.558974488	2.540043553
79.445	0.006964001	-3.2372E-05	-0.00581672	-1.308762011	3.558986745	2.540043553
79.45	0.007006926	-3.25285E-05	-0.005848509	-1.315914584	3.558999154	2.540043553
79.455	0.006916072	-3.20186E-05	-0.005746343	-1.292927185	3.559011243	2.540043553
79.46	0.007080219	-3.27934E-05	-0.00590308	-1.328192968	3.559023913	2.540043553
79.465	0.007753264	-3.61753E-05	-0.006585967	-1.48184261	3.559039106	2.540043553
79.47	0.00780038	-3.64138E-05	-0.006634073	-1.492666521	3.559054484	2.540043553
79.475	0.007422036	-3.44835E-05	-0.006244269	-1.404960529	3.559068407	2.540043553
79.48	0.007346421	-3.40867E-05	-0.006164142	-1.386932031	3.559082047	2.540043553
79.485	0.007345474	-3.40784E-05	-0.006162463	-1.386554204	3.559095684	2.540043553
79.49	0.007245514	-3.35795E-05	-0.006061728	-1.363888748	3.559108952	2.540043553
79.495	0.006657798	-3.06127E-05	-0.005466363	-1.229931709	3.559120155	2.540043553
79.5	0.006182347	-2.81847E-05	-0.004982886	-1.121149335	3.559129815	2.540043553
79.505	0.006545418	-3.00068E-05	-0.005350866	-1.203944919	3.559140643	2.540043553
79.51	0.006655728	-3.05582E-05	-0.005462204	-1.228995966	3.55915184	2.540043553
79.515	0.007568718	-3.51315E-05	-0.006385511	-1.436740011	3.559166318	2.540043553
79.52	0.010733112	-5.11497E-05	-0.009616984	-2.163821375	3.559195434	2.540043553
79.525	0.013132286	-6.33888E-05	-0.012083768	-2.718847876	3.559239021	2.540043553
79.53	0.014168468	-6.87012E-05	-0.013153924	-2.959632811	3.559289757	2.540043553
79.535	0.016427347	-8.02004E-05	-0.015469201	-3.480570192	3.559357961	2.540043553
79.54	0.018314529	-8.9879E-05	-0.017416727	-3.918763496	3.559442736	2.540043553
79.545	0.019136446	-9.4142E-05	-0.018274194	-4.111693591	3.559535291	2.540043553
79.55	0.021045881	-0.000103907	-0.020237607	-4.553461682	3.559647237	2.540043553
79.555	0.022792581	-0.000112913	-0.02204748	-4.960683081	3.559778537	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
96.49047852	9.6068E-06	1.386106908
96.49658203	1.00945E-05	1.382420114
96.50268555	1.01793E-05	1.507204717
96.50878906	9.94378E-06	1.407661839
96.51489258	9.39539E-06	1.293345837
96.52099609	9.68861E-06	1.538246684
96.52709961	1.09795E-05	1.820708871
96.53320313	1.174E-05	2.18636681
96.53930664	1.1129E-05	2.386274632
96.54541016	9.71541E-06	1.83660795
96.55151367	9.25564E-06	1.884577659
96.55761719	1.00005E-05	2.379252596
96.5637207	1.04556E-05	2.484000318
96.56982422	9.98193E-06	3.229624992
96.57592773	9.12896E-06	3.113615874
96.58203125	9.005E-06	2.426980003
96.58813477	9.6193E-06	3.081782667
96.59423828	1.00331E-05	3.576537617
96.6003418	1.00542E-05	4.042125243
96.60644531	1.00779E-05	9.208666908
96.61254883	1.06305E-05	8.074683396
96.61865234	1.11721E-05	7.61132072
96.62475586	1.06674E-05	15.49826538
96.63085938	9.43227E-06	10.30893542
96.63696289	8.7272E-06	17.71750519
96.64306641	9.14906E-06	4.784958393
96.64916992	1.0401E-05	3.713149269
96.65527344	1.13749E-05	4.239186482
96.66137695	1.12271E-05	3.575312368
96.66748047	9.70651E-06	3.048418519
96.67358398	7.29151E-06	2.146822814
96.6796875	5.55632E-06	1.29172686
96.68579102	5.40969E-06	1.302851544
96.69189453	5.60246E-06	1.287790202
96.69799805	5.93064E-06	1.210167536
96.70410156	6.73859E-06	1.533197712
96.71020508	7.35565E-06	1.426512435
96.71630859	7.27043E-06	1.152216429
96.72241211	6.65657E-06	1.09799647
96.72851563	5.9506E-06	0.879830814
96.73461914	5.57076E-06	0.804100422
96.74072266	5.87164E-06	1.034604875
96.74682617	7.04794E-06	1.060447633
96.75292969	8.06403E-06	1.085524401
96.7590332	8.31975E-06	1.241005642
96.76513672	7.57979E-06	1.023520856
96.77124023	6.02181E-06	0.803341279
96.77734375	5.68595E-06	0.833969167
96.78344727	6.7685E-06	0.914813657
96.78955078	8.18231E-06	1.135582178
96.7956543	9.07647E-06	1.215729941
96.80175781	7.94187E-06	0.950072508
96.80786133	5.79822E-06	0.793255488
96.81396484	4.79179E-06	0.706471535
96.82006836	5.8249E-06	0.798237747
96.82617188	7.98893E-06	1.248801633
96.83227539	9.02335E-06	1.332807819
96.83837891	8.93005E-06	1.256053975
96.84448242	8.52312E-06	1.400810935
96.85058594	7.54717E-06	1.191166389
96.85668945	6.85298E-06	1.134917079
96.86279297	6.98166E-06	1.3933967
96.86889648	7.90556E-06	1.329252869
96.875	8.63971E-06	1.508375598
96.88110352	8.13714E-06	1.810809448
96.88720703	7.46622E-06	1.523762307
96.89331055	7.22429E-06	1.672644328
96.89941406	6.63894E-06	1.939171064
96.90551758	6.29977E-06	1.507236619
96.91162109	6.52235E-06	1.708220816
96.91772461	7.83239E-06	2.445231113
96.92382813	9.13444E-06	2.776313823
96.92993164	8.79116E-06	3.97120562
96.93603516	8.10578E-06	5.094841447
96.94213867	8.3798E-06	3.980064544
96.94824219	9.19863E-06	6.105954733
96.9543457	9.59234E-06	8.543957628
96.96044922	8.98563E-06	9.661667022
96.96655273	8.18063E-06	17.65854421
96.97265625	7.94026E-06	5.260318281
96.97875977	8.00207E-06	7.115580887
96.98486328	7.78295E-06	4.393674953
96.9909668	7.67181E-06	3.21276237
96.99707031	8.70755E-06	3.918016445
97.00317383	9.52164E-06	2.957582916
97.00927734	8.85907E-06	2.521693489
97.01538086	7.81364E-06	2.259351028
97.02148438	7.51783E-06	1.750013911
97.02758789	7.54733E-06	1.842014178
97.03369141	7.31649E-06	1.678341681
97.03979492	6.89042E-06	1.190189495
97.04589844	6.62071E-06	1.171377502
97.05200195	5.93307E-06	0.969778583
97.05810547	5.18683E-06	0.753226784
97.06420898	5.15107E-06	0.818475468
97.0703125	5.34165E-06	0.755185735
97.07641602	5.40215E-06	0.674070649
97.08251953	4.75641E-06	0.632249623
97.08862305	4.10728E-06	0.496999732
97.09472656	4.52329E-06	0.52370195
97.10083008	5.61531E-06	0.72515249
97.10693359	6.74582E-06	0.799083479
97.11303711	6.78636E-06	0.772192238
97.11914063	6.09629E-06	0.754003837

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
79.56	0.022954928	-0.000113903	-0.022246064	-5.005364295	3.559911713	2.540043553
79.565	0.02280076	-0.000113256	-0.022115344	-4.975952398	3.560043107	2.540043553
79.57	0.023135295	-0.00011508	-0.022482732	-5.058614737	3.560178385	2.540043553
79.575	0.023415694	-0.000116665	-0.022801154	-5.130259543	3.560316961	2.540043553
79.58	0.022257602	-0.000110983	-0.021653969	-4.872142942	3.56044217	2.540043553
79.585	0.020361595	-0.000101515	-0.019743223	-4.44222507	3.560546955	2.540043553
79.59	0.019300995	-9.62698E-05	-0.018685297	-4.204191915	3.560641108	2.540043553
79.595	0.017234329	-8.59628E-05	-0.016607452	-3.73667663	3.560716178	2.540043553
79.6	0.014138553	-7.0388E-05	-0.01347014	-3.030781431	3.5607667	2.540043553
79.605	0.012246916	-6.08928E-05	-0.011558882	-2.600748369	3.560804608	2.540043553
79.61	0.00949935	-4.71079E-05	-0.008785974	-1.976844233	3.560827415	2.540043553
79.615	0.005080185	-2.51538E-05	-0.004379423	-0.985370174	3.560833938	2.540043553
79.62	0.001984791	-9.71238E-06	-0.001306266	-0.293909748	3.560834933	2.540043553
79.625	-0.000688037	3.5925E-06	0.001339992	0.301498254	3.560835053	2.540043553
79.63	-0.004368365	2.19508E-05	0.004988802	1.122480366	3.560839876	2.540043553
79.635	-0.007435642	3.72957E-05	0.008036452	1.808201781	3.56085385	2.540043553
79.64	-0.009669252	4.84742E-05	0.010255337	2.307450774	3.56087748	2.540043553
79.645	-0.011893977	5.96044E-05	0.012463573	2.804303972	3.560913234	2.540043553
79.65	-0.014203903	7.11715E-05	0.014757358	3.320405481	3.560964225	2.540043553
79.655	-0.015995248	8.01581E-05	0.016538665	3.721199549	3.561028888	2.540043553
79.66	-0.016963468	8.50013E-05	0.017498386	3.937136777	3.561101617	2.540043553
79.665	-0.018908761	9.46664E-05	0.019413013	4.367927882	3.561191982	2.540043553
79.67	-0.022833417	0.000114344	0.023308603	5.244435743	3.561323752	2.540043553
79.675	-0.028643683	0.000143708	0.029116053	6.551111851	3.561531117	2.540043553
79.68	-0.036643175	0.00018432	0.037136319	8.355671708	3.561870478	2.540043553
79.685	-0.042797995	0.000215849	0.043353732	9.754589702	3.562333416	2.540043553
79.69	-0.042921015	0.000216816	0.043529236	9.794078005	3.562799019	2.540043553
79.695	-0.040675307	0.000205586	0.041262821	9.284134622	3.563217174	2.540043553
79.7	-0.040856655	0.000206568	0.041461345	9.32880262	3.563639066	2.540043553
79.705	-0.043835979	0.000221787	0.044523791	10.01785301	3.564124732	2.540043553
79.71	-0.046877536	0.000237464	0.047611424	10.71257034	3.564680131	2.540043553
79.715	-0.045245463	0.00022949	0.046001457	10.35032787	3.565197531	2.540043553
79.72	-0.040758625	0.000207359	0.041537998	9.346049459	3.565617401	2.540043553
79.725	-0.041089665	0.00020901	0.041872759	9.421370728	3.566044119	2.540043553
79.73	-0.043286196	0.000220107	0.04411215	9.925233723	3.566517679	2.540043553
79.735	-0.039572199	0.000201945	0.04044709	9.100595321	3.566913461	2.540043553
79.74	-0.034827646	0.000178412	0.035709202	8.034570359	3.567220027	2.540043553
79.745	-0.03554306	0.000181969	0.036428196	8.196344211	3.567539317	2.540043553
79.75	-0.035841759	0.000183653	0.03676798	8.272795421	3.567863997	2.540043553
79.755	-0.03105644	0.00016003	0.032012672	7.202851151	3.568107766	2.540043553
79.76	-0.028021243	0.000144902	0.028973228	6.518976278	3.568306216	2.540043553
79.765	-0.028906058	0.000149389	0.029879464	6.722879352	3.568517396	2.540043553
79.77	-0.02542635	0.000132274	0.026438142	5.948582031	3.568680793	2.540043553
79.775	-0.019293719	0.000101696	0.02030585	4.568816297	3.568774876	2.540043553
79.78	-0.018979067	0.000100069	0.01998426	4.49645857	3.568865914	2.540043553
79.785	-0.018060842	9.56596E-05	0.019096423	4.296695181	3.568948357	2.540043553
79.79	-0.010967971	6.0304E-05	0.01201976	2.704446053	3.568978761	2.540043553
79.795	-0.006919357	3.99155E-05	0.007944329	1.787473939	3.568990861	2.540043553
79.8	-0.006301153	3.68037E-05	0.007322661	1.647598676	3.569000896	2.540043553
79.805	-0.00185125	1.45231E-05	0.00287411	0.646674755	3.569001762	2.540043553
79.81	0.001056559	-2.40906E-07	-7.11524E-05	-0.016009298	3.569002045	2.540043553
79.815	-0.000742942	8.67386E-06	0.001728686	0.388954264	3.569002184	2.540043553
79.82	0.000155723	4.18074E-06	0.00082133	0.184799351	3.56900219	2.540043553
79.825	0.00219894	-6.19997E-06	-0.00125936	-0.283355895	3.569003412	2.540043553
79.83	-0.000656727	7.97085E-06	0.001601066	0.3602398	3.569003521	2.540043553
79.835	-0.003162856	2.05734E-05	0.004142508	0.932064273	3.56900605	2.540043553
79.84	-0.001873179	1.40925E-05	0.00283393	0.63763425	3.569006936	2.540043553
79.845	-0.003478895	2.20122E-05	0.004432537	0.997320935	3.569009995	2.540043553
79.85	-0.007454961	4.17646E-05	0.008411475	1.892581936	3.569024042	2.540043553
79.855	-0.007590303	4.24955E-05	0.008557424	1.925420481	3.569038603	2.540043553
79.86	-0.008499861	4.69417E-05	0.00945358	2.12705556	3.569056863	2.540043553
79.865	-0.012325169	6.59533E-05	0.013277877	2.987522268	3.569095257	2.540043553
79.87	-0.013048811	6.96397E-05	0.014018463	3.154154279	3.569138291	2.540043553
79.875	-0.013839293	7.355E-05	0.01480487	3.331095701	3.569186698	2.540043553
79.88	-0.017101081	8.98098E-05	0.018071134	4.066005143	3.569260611	2.540043553
79.885	-0.017133942	9.01081E-05	0.018128349	4.078878583	3.569334809	2.540043553
79.89	-0.017077605	8.98515E-05	0.018076633	4.067242525	3.569408519	2.540043553
79.895	-0.019269909	0.000100838	0.020284813	4.564082951	3.56950237	2.540043553
79.9	-0.017869509	9.40514E-05	0.018914613	4.255787818	3.569583075	2.540043553
79.905	-0.016166314	8.56335E-05	0.017215948	3.873588297	3.569649129	2.540043553
79.91	-0.016659242	8.81822E-05	0.017730662	3.989398884	3.569719272	2.540043553
79.915	-0.013443979	7.23795E-05	0.014543353	3.272254417	3.569764952	2.540043553
79.92	-0.009998956	5.52779E-05	0.011098196	2.497094059	3.569790221	2.540043553
79.925	-0.009308031	5.1893E-05	0.010416697	2.34375676	3.569812119	2.540043553
79.93	-0.005155211	3.1355E-05	0.006284576	1.414029636	3.569818836	2.540043553
79.935	-0.000327946	7.26427E-06	0.001443578	0.324805004	3.569818863	2.540043553
79.94	0.000720871	1.96509E-06	0.000379544	0.085397468	3.569818994	2.540043553
79.945	0.002927088	-9.01833E-06	-0.001821215	-0.409773463	3.56982116	2.540043553
79.95	0.00582705	-2.35386E-05	-0.004714764	-1.060821957	3.569829741	2.540043553
79.955	0.006344068	-2.62009E-05	-0.005245104	-1.180148448	3.569839913	2.540043553
79.96	0.007837123	-3.36656E-05	-0.006731729	-1.514639099	3.569855437	2.540043553
79.965	0.009769244	-4.33747E-05	-0.008664601	-1.949535172	3.569879558	2.540043553
79.97	0.010012981	-4.46656E-05	-0.008921518	-2.007341659	3.569904898	2.540043553
79.975	0.011654324	-5.28599E-05	-0.010552088	-2.37421977	3.569939226	2.540043553
79.98	0.014390064	-6.65575E-05	-0.013276424	-2.987195381	3.569991562	2.540043553
79.985	0.016630105	-7.78056E-05	-0.015512347	-3.490278124	3.57006146	2.540043553
79.99	0.020078999	-9.51105E-05	-0.018950098	-4.263771999	3.570163357	2.540043553
79.995	0.021482757	-0.000102357	-0.020388926	-4.587508293	3.570279999	2.540043553
80	0.019027841	-9.03108E-05	-0.017957158	-4.040360469	3.570371506	2.540043553
80.005	0.019941083	-9.4884E-05	-0.018880811	-4.248182518	3.570472008	2.540043553
80.01	0.023944633	-0.00011503	-0.022904049	-5.153411077	3.570616916	2.540043553
80.015	0.022887746	-0.00011006	-0.021896005	-4.926601064	3.570749314	2.540043553
80.02	0.020616734	-9.88562E-05	-0.019635247	-4.417930465	3.570856742	2.540043553
80.025	0.022949709	-0.000110617	-0.022009483	-4.952133654	3.570989858	2.540043553
80.03	0.022726264	-0.00010982	-0.021847793	-4.915753358	3.571120394	2.540043553
80.035	0.018076976	-8.69599E-05	-0.017236687	-3.878254665	3.571202984	2.540043553
80.04	0.016647814	-7.99417E-05	-0.015822499	-3.560062292	3.571273031	2.540043553
80.045	0.016272119	-7.82703E-05	-0.015485795	-3.484303786	3.571339953	2.540043553
80.05	0.012561228	-6.00106E-05	-0.011809534	-2.657145241	3.571379831	2.540043553
80.055	0.010603169	-5.03333E-05	-0.009862735	-2.219115409	3.571408246	2.540043553
80.06	0.010591689	-5.04164E-05	-0.009879513	-2.222890385	3.5714366	2.540043553
80.065	0.008106217	-3.82452E-05	-0.007432403	-1.67229061	3.571453207	2.540043553
80.07	0.005265599	-2.42448E-05	-0.004619595	-1.039408964	3.571460215	2.540043553
80.075	0.002604947	-1.11644E-05	-0.001993486	-0.448534385	3.57146193	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
97.12524414	6.31628E-06	0.714663931
97.13134766	6.80004E-06	0.784753153
97.13745117	6.44199E-06	0.873783428
97.14355469	5.53467E-06	0.688697473
97.1496582	5.46734E-06	0.656124953
97.15576172	6.93958E-06	0.875708026
97.16186523	8.14468E-06	0.947537554
97.16796875	7.97852E-06	0.969698908
97.17407227	7.14737E-06	0.971547772
97.18017578	6.64182E-06	0.858512293
97.1862793	6.30444E-06	0.84681998
97.19238281	5.36032E-06	0.739274665
97.19848633	4.04362E-06	0.546690106
97.20458984	4.19573E-06	0.645760355
97.21069336	5.31278E-06	0.820791239
97.21679688	5.83815E-06	0.888289058
97.22290039	5.63186E-06	1.070191844
97.22900391	5.23249E-06	0.954603627
97.23510742	5.46035E-06	0.9333211
97.24121094	4.72541E-06	0.999039997
97.24731445	2.67928E-06	0.610216271
97.25341797	1.30808E-06	0.343625753
97.25952148	1.35723E-06	0.442095014
97.265625	2.5378E-06	0.679105432
97.27172852	4.27152E-06	1.289915058
97.27783203	5.11494E-06	1.766449574
97.28393555	5.37616E-06	1.834674681
97.29003906	5.58195E-06	3.857573706
97.29614258	4.58049E-06	2.949964716
97.30224609	2.92062E-06	1.278744454
97.30834961	2.3759E-06	1.374326545
97.31445313	2.62325E-06	1.216437901
97.32055664	2.79265E-06	1.504997094
97.32666016	2.04482E-06	1.284094262
97.33276367	7.97127E-07	0.313185742
97.33886719	2.27074E-06	0.985560914
97.3449707	3.7826E-06	1.55399817
97.35107422	3.30347E-06	1.226159805
97.35717773	1.69457E-06	0.715517235
97.36328125	7.792E-07	0.19794631
97.36938477	1.08917E-06	0.246668111
97.37548828	2.26852E-06	0.576921421
97.3815918	2.93718E-06	0.560592778
97.38769531	2.66266E-06	0.502908804
97.39379883	1.92837E-06	0.398332045
97.39990234	1.86619E-06	0.306837714
97.40600586	2.75599E-06	0.452752465
97.41210938	2.95527E-06	0.4705086
97.41821289	2.54605E-06	0.349783148
97.42431641	3.57468E-06	0.53515251
97.43041992	4.04311E-06	0.59202162
97.43652344	3.42409E-06	0.450691809
97.44262695	2.9927E-06	0.413178691
97.44873047	3.94144E-06	0.482911942
97.45483398	5.38555E-06	0.649266267
97.4609375	6.61338E-06	0.932046135
97.46704102	7.90802E-06	0.990594763
97.47314453	9.6161E-06	1.135560011
97.47924805	1.0883E-05	1.412288903
97.48535156	1.12622E-05	1.363623918
97.49145508	1.11789E-05	1.365862226
97.49755859	1.08297E-05	1.420857184
97.50366211	1.04751E-05	1.289459606
97.50976563	9.62668E-06	1.211025133
97.51586914	7.39092E-06	0.932766694
97.52197266	5.16014E-06	0.60281825
97.52807617	4.76918E-06	0.612174045
97.53417969	5.96445E-06	0.835805014
97.5402832	6.98224E-06	0.95164174
97.54638672	6.43195E-06	0.974292579
97.55249023	4.3456E-06	0.666440863
97.55859375	1.91428E-06	0.281885682
97.56469727	2.32601E-06	0.417535775
97.57080078	4.23231E-06	0.779451966
97.5769043	5.93076E-06	1.060147976
97.58300781	6.59984E-06	1.635642722
97.58911133	5.89624E-06	1.391878917
97.59521484	4.73976E-06	0.996770602
97.60131836	4.80842E-06	1.318335566
97.60742188	6.51747E-06	1.694499385
97.61352539	8.06352E-06	2.138691855
97.61962891	7.42419E-06	3.011339474
97.62573242	5.38097E-06	1.782470076
97.63183594	3.94024E-06	1.295337281
97.63793945	2.59081E-06	1.317331581
97.64404297	2.37485E-06	1.274968984
97.65014648	3.44843E-06	3.264147734
97.65625	4.60423E-06	9.058421376
97.66235352	6.42107E-06	5.723041194
97.66845703	6.44418E-06	10.12518637
97.67456055	4.30342E-06	3.674560168
97.68066406	2.6276E-06	4.305938301
97.68676758	3.08846E-06	1.738690952
97.69287109	4.25739E-06	1.771023509
97.69897461	4.40647E-06	2.097958231
97.70507813	4.07198E-06	1.319708873
97.71118164	4.62578E-06	1.293755899
97.71728516	4.96192E-06	1.544527768
97.72338867	4.03501E-06	0.96706587
97.72949219	2.53182E-06	0.57896988
97.7355957	1.7207E-06	0.407267772
97.74169922	1.44866E-06	0.291295104
97.74780273	1.81455E-06	0.361989074
97.75390625	2.10804E-06	0.425665342

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
80.08	-0.001856502	1.0967E-05	0.00244575	0.550293709	3.571462801	2.540043553
80.085	-0.005722871	3.02242E-05	0.006304457	1.418502719	3.571471079	2.540043553
80.09	-0.008755088	4.52916E-05	0.009321084	2.097243899	3.571490452	2.540043553
80.095	-0.013284763	6.78741E-05	0.013838166	3.113587298	3.571535057	2.540043553
80.1	-0.018307599	9.30152E-05	0.018861377	4.243809819	3.571619768	2.540043553
80.105	-0.023117232	0.000117154	0.023678711	5.327709955	3.571754834	2.540043553
80.11	-0.027693151	0.000140203	0.028273727	6.361588497	3.571948664	2.540043553
80.115	-0.030304515	0.000153435	0.030909372	6.954608795	3.572180772	2.540043553
80.12	-0.031942932	0.000161713	0.032557556	7.325450129	3.572438657	2.540043553
80.125	-0.035858945	0.00018141	0.036476829	8.207286474	3.572763648	2.540043553
80.13	-0.040992724	0.000207374	0.041637752	9.368494194	3.573188355	2.540043553
80.135	-0.043733464	0.000221373	0.044417942	9.994037028	3.573671751	2.540043553
80.14	-0.045104093	0.000228415	0.045815789	10.30855257	3.574185923	2.540043553
80.145	-0.048082323	0.000243537	0.048807022	10.98157985	3.574770237	2.540043553
80.15	-0.050921168	0.000258038	0.051660409	11.62359212	3.575425586	2.540043553
80.155	-0.052009525	0.000263736	0.052781074	11.87574162	3.576109249	2.540043553
80.16	-0.053043682	0.000269138	0.053843424	12.11477045	3.576820369	2.540043553
80.165	-0.053797323	0.000273144	0.05463113	12.29200416	3.57755184	2.540043553
80.17	-0.054001539	0.000274367	0.054871489	12.34608505	3.578288876	2.540043553
80.175	-0.054828098	0.000278731	0.055729303	12.53909313	3.579048646	2.540043553
80.18	-0.054728218	0.000278472	0.055671006	12.52597627	3.57980565	2.540043553
80.185	-0.053496093	0.00027247	0.054459351	12.25335392	3.580528953	2.540043553
80.19	-0.053338992	0.000271869	0.054338015	12.22605332	3.581248014	2.540043553
80.195	-0.052354854	0.000267168	0.053389236	12.01257821	3.581940785	2.540043553
80.2	-0.049267228	0.000251832	0.050296627	11.31674106	3.582554253	2.540043553
80.205	-0.047214211	0.000241642	0.048243294	10.85474125	3.583117659	2.540043553
80.21	-0.045397943	0.000232687	0.046439825	10.44896055	3.583638552	2.540043553
80.215	-0.04191164	0.000215291	0.042939196	9.661319089	3.584082513	2.540043553
80.22	-0.039606285	0.000203766	0.040621874	9.139921592	3.584478978	2.540043553
80.225	-0.038585608	0.000198731	0.03961003	8.912256818	3.584855271	2.540043553
80.23	-0.037571184	0.000193732	0.038605547	8.68624804	3.585212039	2.540043553
80.235	-0.037872867	0.000195389	0.038940311	8.761569904	3.585574559	2.540043553
80.24	-0.036878761	0.000190626	0.037981676	8.545877012	3.585918298	2.540043553
80.245	-0.032587748	0.000169354	0.033711183	7.585016091	3.586186699	2.540043553
80.25	-0.028440501	0.000148789	0.029587103	6.657098064	3.586391132	2.540043553
80.255	-0.024655122	0.000130021	0.025827065	5.811089725	3.586544767	2.540043553
80.26	-0.020443264	0.00010903	0.021625727	4.865788655	3.586650394	2.540043553
80.265	-0.018054003	9.71171E-05	0.019243312	4.329745218	3.586732775	2.540043553
80.27	-0.015664466	8.52663E-05	0.016874617	3.796788923	3.586794791	2.540043553
80.275	-0.011389226	6.39193E-05	0.012611159	2.837510675	3.586827575	2.540043553
80.28	-0.008111103	4.74935E-05	0.009333464	2.100029377	3.586844203	2.540043553
80.285	-0.005849705	3.61851E-05	0.007078355	1.592629822	3.586852852	2.540043553
80.29	-0.002832962	2.10937E-05	0.004070622	0.915889913	3.58685488	2.540043553
80.295	-0.000214789	7.97544E-06	0.001457826	0.328010848	3.586854892	2.540043553
80.3	0.002434369	-5.27775E-06	-0.0011803	-0.265567409	3.58685639	2.540043553
80.305	0.00620804	-2.41937E-05	-0.00494295	-1.112163837	3.58686613	2.540043553
80.31	0.009267678	-3.95946E-05	-0.008004084	-1.80091897	3.586887838	2.540043553
80.315	0.011090935	-4.8798E-05	-0.009832405	-2.212291108	3.586918927	2.540043553
80.32	0.013087828	-5.88647E-05	-0.011831398	-2.662064563	3.58696222	2.540043553
80.325	0.014674528	-6.69062E-05	-0.013427604	-3.021210953	3.587016646	2.540043553
80.33	0.015051157	-6.88803E-05	-0.01381936	-3.109356038	3.587073901	2.540043553
80.335	0.015157085	-6.9465E-05	-0.013935404	-3.135465851	3.587131965	2.540043553
80.34	0.015406941	-7.07548E-05	-0.014191331	-3.193049517	3.587191959	2.540043553
80.345	0.015755917	-7.25246E-05	-0.014542512	-3.272065094	3.587254702	2.540043553
80.35	0.016682535	-7.71829E-05	-0.015466673	-3.480001444	3.587325041	2.540043553
80.355	0.017685392	-8.22394E-05	-0.016469645	-3.705670183	3.587404092	2.540043553
80.36	0.018347637	-8.55806E-05	-0.017132264	-3.854759307	3.587489174	2.540043553
80.365	0.019569835	-9.17182E-05	-0.018349223	-4.128575231	3.587585968	2.540043553
80.37	0.020903857	-9.84431E-05	-0.019682234	-4.428502645	3.587696409	2.540043553
80.375	0.021578634	-0.00010186	-0.020359406	-4.580866453	3.587814094	2.540043553
80.38	0.022726745	-0.00010763	-0.02150267	-4.838100651	3.587944636	2.540043553
80.385	0.024150736	-0.000114809	-0.022924695	-5.158056327	3.58809205	2.540043553
80.39	0.024964613	-0.000118932	-0.023741207	-5.341771537	3.588249566	2.540043553
80.395	0.026177158	-0.000125039	-0.024950466	-5.61385482	3.588422755	2.540043553
80.4	0.027419761	-0.000131326	-0.026194838	-5.893838642	3.588612777	2.540043553
80.405	0.028002343	-0.000134301	-0.026783727	-6.026338678	3.588810959	2.540043553
80.41	0.028961031	-0.000139157	-0.027744596	-6.242534072	3.589022944	2.540043553
80.415	0.029121264	-0.000140041	-0.027916563	-6.281226687	3.58923728	2.540043553
80.42	0.028266774	-0.000135784	-0.027056986	-6.087821944	3.589439223	2.540043553
80.425	0.029427846	-0.000141582	-0.028224271	-6.350461084	3.589658096	2.540043553
80.43	0.03120957	-0.000150568	-0.030001644	-6.750369861	3.589904276	2.540043553
80.435	0.031016953	-0.000149663	-0.029817606	-6.708961326	3.590147426	2.540043553
80.44	0.031710275	-0.000153129	-0.030508225	-6.864350528	3.590401567	2.540043553
80.445	0.03379169	-0.000163599	-0.032578006	-7.330051453	3.590690167	2.540043553
80.45	0.034510283	-0.000167279	-0.033305365	-7.493707019	3.590991171	2.540043553
80.455	0.035076757	-0.00017016	-0.033874743	-7.621817272	3.591302139	2.540043553
80.46	0.036308564	-0.000176398	-0.035107174	-7.899114228	3.59163533	2.540043553
80.465	0.036409297	-0.000176992	-0.03522195	-7.924938856	3.591970373	2.540043553
80.47	0.036239633	-0.000176193	-0.035060555	-7.888624817	3.592302301	2.540043553
80.475	0.036870441	-0.000179408	-0.035701812	-8.0329078	3.592645885	2.540043553
80.48	0.036918469	-0.000179733	-0.03576333	-8.046749198	3.592990364	2.540043553
80.485	0.036337776	-0.000176885	-0.035188351	-7.917378999	3.593324092	2.540043553
80.49	0.036348007	-0.000176983	-0.035208159	-7.921835873	3.593658008	2.540043553
80.495	0.036421088	-0.000177423	-0.035296943	-7.941812168	3.593993268	2.540043553
80.5	0.035542802	-0.000173098	-0.034423807	-7.745356541	3.594312554	2.540043553
80.505	0.03475835	-0.000169203	-0.033637797	-7.568504376	3.594617901	2.540043553
80.51	0.035105343	-0.000170985	-0.033997605	-7.649461079	3.594929375	2.540043553
80.515	0.034911483	-0.000170107	-0.033820279	-7.609562809	3.595237419	2.540043553
80.52	0.033310452	-0.000162156	-0.032216077	-7.248617404	3.595517857	2.540043553
80.525	0.03248948	-0.000158051	-0.031388256	-7.06235759	3.595784642	2.540043553
80.53	0.033301832	-0.000162147	-0.032215312	-7.248445145	3.596064935	2.540043553
80.535	0.034112945	-0.000166292	-0.033051991	-7.436697969	3.596359048	2.540043553
80.54	0.034141955	-0.000166532	-0.033100514	-7.44761565	3.596653662	2.540043553
80.545	0.03398498	-0.000165832	-0.032959082	-7.415793468	3.596945573	2.540043553
80.55	0.034030251	-0.000166149	-0.033023034	-7.430182547	3.597238262	2.540043553
80.555	0.034021688	-0.000166206	-0.033034587	-7.432781997	3.597530803	2.540043553
80.56	0.034024232	-0.000166324	-0.033058417	-7.438143886	3.597823388	2.540043553
80.565	0.033972146	-0.00016619	-0.03303144	-7.432073962	3.598115079	2.540043553
80.57	0.032865134	-0.000160777	-0.031938514	-7.186165557	3.598388069	2.540043553
80.575	0.031629268	-0.000154668	-0.030706092	-6.908870642	3.598640914	2.540043553
80.58	0.031955622	-0.000156385	-0.031052967	-6.986917681	3.598899003	2.540043553
80.585	0.031832838	-0.000155907	-0.030956396	-6.965189175	3.599155113	2.540043553
80.59	0.030789053	-0.000150779	-0.029922154	-6.732484723	3.599394703	2.540043553
80.595	0.031543195	-0.000154648	-0.030703491	-6.908285439	3.599646174	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
97.76000977	1.73052E-06	0.290533226
97.76611328	1.42903E-06	0.23787152
97.7722168	2.10827E-06	0.335593156
97.77832031	1.78204E-06	0.263319185
97.78442383	3.21701E-06	0.528854635
97.79052734	5.09647E-06	0.803729524
97.79663086	5.15688E-06	0.708012574
97.80273438	4.74567E-06	0.666494396
97.80883789	5.65964E-06	0.744595275
97.81494141	6.92852E-06	0.866333956
97.82104492	6.92372E-06	0.993376653
97.82714844	5.2678E-06	0.74723951
97.83325195	3.56259E-06	0.486180785
97.83935547	3.09207E-06	0.475258276
97.84545898	4.24211E-06	0.595749259
97.8515625	5.23081E-06	0.709762385
97.85766602	4.55809E-06	0.750335515
97.86376953	2.99535E-06	0.480765908
97.86987305	9.6699E-07	0.161086524
97.87597656	1.6392E-06	0.329066738
97.88208008	3.23357E-06	0.570657589
97.88818359	3.37327E-06	0.633572042
97.89428711	4.04204E-06	0.904842511
97.90039063	4.77822E-06	0.947810872
97.90649414	4.41789E-06	1.048330835
97.91259766	3.97366E-06	1.098487228
97.91870117	4.38266E-06	0.992974618
97.92480469	5.21859E-06	1.281975648
97.9309082	6.98734E-06	1.889715368
97.93701172	8.78915E-06	2.426207663
97.94311523	9.41117E-06	4.287387027
97.94921875	8.53257E-06	4.520549317
97.95532227	7.07915E-06	2.877670524
97.96142578	6.8061E-06	4.417240595
97.9675293	7.61375E-06	6.734434202
97.97363281	8.38222E-06	7.401867469
97.97973633	7.99768E-06	17.7828871
97.98583984	6.54371E-06	6.778394621
97.99194336	5.09982E-06	12.6717069
97.99804688	3.84629E-06	2.795372811
98.00415039	3.49617E-06	2.398470529
98.01025391	3.84906E-06	3.23505601
98.01635742	3.97772E-06	1.779323707
98.02246094	5.0384E-06	1.919594985
98.02856445	6.01286E-06	2.212743455
98.03466797	5.69183E-06	1.742575872
98.04077148	4.55506E-06	1.610675886
98.046875	3.54155E-06	1.040515539
98.05297852	3.56171E-06	0.83730144
98.05908203	4.2065E-06	1.12887324
98.06518555	3.91848E-06	0.868519351
98.07128906	3.52017E-06	0.670095199
98.07739258	4.27664E-06	0.915232416
98.08349609	4.39839E-06	0.7611616
98.08959961	3.99544E-06	0.618887573
98.09570313	5.23471E-06	0.835796695
98.10180664	7.1277E-06	0.968199456
98.10791016	7.73594E-06	1.085593412
98.11401367	6.50861E-06	1.045384647
98.12011719	5.19103E-06	0.721272828
98.1262207	5.90891E-06	0.793299455
98.13232422	7.14244E-06	0.954691715
98.13842773	7.56962E-06	0.941404035
98.14453125	7.48523E-06	1.049332436
98.15063477	7.31318E-06	1.071704132
98.15673828	7.4499E-06	0.971574182
98.1628418	7.34324E-06	1.0044927
98.16894531	6.35961E-06	0.858545603
98.17504883	4.9083E-06	0.648241229
98.18115234	4.11165E-06	0.625728298
98.18725586	4.51036E-06	0.679411757
98.19335938	5.32152E-06	0.78305925
98.19946289	5.62582E-06	0.926490008
98.20556641	5.09758E-06	0.767493382
98.21166992	3.5916E-06	0.531251415
98.21777344	2.24067E-06	0.383994011
98.22387695	2.17052E-06	0.357818388
98.22998047	3.1893E-06	0.533948144
98.23608398	4.0367E-06	0.783095608
98.2421875	3.66452E-06	0.654492422
98.24829102	2.71733E-06	0.523310319
98.25439453	1.45723E-06	0.341545044
98.26049805	6.40656E-07	0.142913388
98.26660156	1.01039E-06	0.26287333
98.27270508	9.0155E-07	0.286903861
98.27880859	3.454E-06	0.967455586
98.28491211	4.97771E-06	1.681525904
98.29101563	4.50285E-06	1.934292698
98.29711914	3.46716E-06	1.513249384
98.30322266	2.92506E-06	2.387780816
98.30932617	2.23796E-06	1.575658252
98.31542969	2.04949E-06	1.328228926
98.3215332	3.16081E-06	2.938309832
98.32763672	4.09378E-06	3.061430883
98.33374023	4.22556E-06	5.596206706
98.33984375	3.05727E-06	1.603867187
98.34594727	2.43918E-06	0.914131126
98.35205078	2.35959E-06	1.24432459
98.3581543	1.80805E-06	0.707299506
98.36425781	2.0067E-06	0.748330163
98.37036133	2.20951E-06	0.86011866
98.37646484	2.10449E-06	0.528041255
98.38256836	2.02109E-06	0.501172187
98.38867188	2.33195E-06	0.577432977

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
80.6	0.031873221	-0.000156483	-0.031073869	-6.991620618	3.599902934	2.540043553
80.605	0.029941036	-0.000146953	-0.029151182	-6.55901597	3.600129508	2.540043553
80.61	0.029645855	-0.000145568	-0.028872727	-6.496363522	3.600351636	2.540043553
80.615	0.029649326	-0.000145775	-0.02891437	-6.505733237	3.600573816	2.540043553
80.62	0.026659556	-0.000130968	-0.025931799	-5.834654874	3.600753448	2.540043553
80.625	0.025165833	-0.000123553	-0.024439358	-5.498855484	3.600913513	2.540043553
80.63	0.025487779	-0.000125329	-0.024798131	-5.579579511	3.601077701	2.540043553
80.635	0.022491802	-0.000110532	-0.021820231	-4.909551984	3.601205558	2.540043553
80.64	0.019121356	-9.37479E-05	-0.018446955	-4.150564939	3.601297967	2.540043553
80.645	0.017482123	-8.56691E-05	-0.016824314	-3.785470592	3.601375211	2.540043553
80.65	0.013514311	-6.60244E-05	-0.012881497	-2.898336781	3.60142137	2.540043553
80.655	0.008620183	-4.16851E-05	-0.008001892	-1.80042562	3.601440151	2.540043553
80.66	0.004830422	-2.28243E-05	-0.004224684	-0.950553965	3.601446048	2.540043553
80.665	0.000659883	-2.00886E-06	-6.00408E-05	-0.013509174	3.601446158	2.540043553
80.67	-0.002229757	1.24508E-05	0.00283054	0.636871567	3.601447415	2.540043553
80.675	-0.004308467	2.27992E-05	0.004898038	1.10205859	3.601452106	2.540043553
80.68	-0.008143122	4.19425E-05	0.008720034	1.962007654	3.601468866	2.540043553
80.685	-0.011761616	6.00822E-05	0.012338557	2.776175247	3.601503829	2.540043553
80.69	-0.014686759	7.47367E-05	0.015259671	3.433425917	3.601558345	2.540043553
80.695	-0.018285205	9.27759E-05	0.018852794	4.241878627	3.601642849	2.540043553
80.7	-0.021141945	0.000107128	0.021709457	4.884627771	3.60175582	2.540043553
80.705	-0.023788522	0.000120397	0.024348961	5.478516162	3.601898844	2.540043553
80.71	-0.0275376	0.000139207	0.028087825	6.319760536	3.602090503	2.540043553
80.715	-0.030833148	0.000155792	0.031382015	7.060953279	3.60233078	2.540043553
80.72	-0.033306963	0.000168256	0.033856265	7.617659731	3.602611159	2.540043553
80.725	-0.035965654	0.000181641	0.036511726	8.215138423	3.602938087	2.540043553
80.73	-0.038820733	0.00019603	0.039364567	8.857027645	3.60331898	2.540043553
80.735	-0.041228093	0.0002082	0.041776253	9.399656982	3.603748578	2.540043553
80.74	-0.042948177	0.000216921	0.043503566	9.788302343	3.604214771	2.540043553
80.745	-0.045181454	0.000228205	0.045737623	10.29096506	3.604730707	2.540043553
80.75	-0.047390049	0.000239415	0.047956034	10.79010757	3.605298318	2.540043553
80.755	-0.047941316	0.00024232	0.048530766	10.91942238	3.60587921	2.540043553
80.76	-0.049022782	0.000247834	0.049621442	11.16482439	3.606486606	2.540043553
80.765	-0.050878131	0.000257283	0.051489859	11.5852183	3.607140848	2.540043553
80.77	-0.050537779	0.000255749	0.051177462	11.51492891	3.607786366	2.540043553
80.775	-0.050217466	0.000254237	0.050872201	11.44624525	3.608423727	2.540043553
80.78	-0.051433054	0.000260454	0.05211684	11.72628889	3.609092318	2.540043553
80.785	-0.051035112	0.000258624	0.051745207	11.64267148	3.609750603	2.540043553
80.79	-0.050385467	0.000255464	0.051107289	11.49914007	3.610392236	2.540043553
80.795	-0.051267246	0.000259999	0.052022886	11.70514941	3.611056523	2.540043553
80.8	-0.050986305	0.000258752	0.051771073	11.64849137	3.611713549	2.540043553
80.805	-0.050183126	0.000254842	0.050981649	11.47087098	3.612350039	2.540043553
80.81	-0.050364845	0.000255877	0.051190736	11.51791561	3.612991147	2.540043553
80.815	-0.049575094	0.000252077	0.05042364	11.34531896	3.613612306	2.540043553
80.82	-0.048057166	0.000244593	0.048913416	11.00551866	3.614196009	2.540043553
80.825	-0.046932043	0.000239063	0.047798153	10.75458451	3.614752701	2.540043553
80.83	-0.045434759	0.000231662	0.046306112	10.41887524	3.615274439	2.540043553
80.835	-0.044188968	0.000225489	0.045062389	10.13903751	3.615767958	2.540043553
80.84	-0.043502962	0.000222129	0.044385434	9.986722753	3.616246272	2.540043553
80.845	-0.042433038	0.000216849	0.04332211	9.747474668	3.616701349	2.540043553
80.85	-0.041294839	0.000211203	0.042185352	9.49170409	3.617132339	2.540043553
80.855	-0.040627224	0.000207906	0.041521648	9.342370855	3.617549506	2.540043553
80.86	-0.040121591	0.000205423	0.041021968	9.229942848	3.617956354	2.540043553
80.865	-0.039575298	0.000202734	0.040480779	9.10817533	3.618352198	2.540043553
80.87	-0.039236714	0.000201075	0.040147123	9.033102704	3.618741298	2.540043553
80.875	-0.039245393	0.000201156	0.04016355	9.036798658	3.61913057	2.540043553
80.88	-0.039395052	0.000201951	0.040324049	9.07291107	3.619522817	2.540043553
80.885	-0.039838291	0.000204217	0.040781661	9.17587368	3.61992394	2.540043553
80.89	-0.040669915	0.000208443	0.041634753	9.36781946	3.620341984	2.540043553
80.895	-0.041569991	0.000213037	0.042561887	9.576424685	3.620778737	2.540043553
80.9	-0.042473855	0.000217677	0.04349806	9.787063516	3.621234689	2.540043553
80.905	-0.042770678	0.000219314	0.043828171	9.861338547	3.621697037	2.540043553
80.91	-0.041739193	0.00021431	0.042817669	9.633975496	3.622137352	2.540043553
80.915	-0.039740181	0.00020444	0.040825852	9.18581661	3.622536502	2.540043553
80.92	-0.037135479	0.000191508	0.038222745	8.600117724	3.622885043	2.540043553
80.925	-0.034556434	0.000178671	0.035642468	8.019555345	3.623186853	2.540043553
80.93	-0.032489404	0.000168397	0.033578631	7.555191902	3.623453637	2.540043553
80.935	-0.029973829	0.000155888	0.031067274	6.990136652	3.623680707	2.540043553
80.94	-0.026857389	0.000140347	0.027949291	6.288590562	3.623863014	2.540043553
80.945	-0.023804876	0.000125103	0.024893581	5.601055723	3.624006235	2.540043553
80.95	-0.020602869	0.000109091	0.021686096	4.879371683	3.624113518	2.540043553
80.955	-0.017909026	9.55925E-05	0.018984225	4.271450551	3.624194581	2.540043553
80.96	-0.01602516	8.61679E-05	0.017098792	3.847228205	3.624259486	2.540043553
80.965	-0.013366975	7.28868E-05	0.014443296	3.249741693	3.624304645	2.540043553
80.97	-0.009864742	5.53355E-05	0.01093654	2.460721549	3.62432924	2.540043553
80.975	-0.007017271	4.10171E-05	0.008077853	1.817516876	3.624341686	2.540043553
80.98	-0.005009055	3.08957E-05	0.006058237	1.363103365	3.624348027	2.540043553
80.985	-0.003344834	2.24914E-05	0.004381973	0.985943833	3.624350855	2.540043553
80.99	-0.002516884	1.82571E-05	0.003537668	0.79597541	3.624352456	2.540043553
80.995	-0.003196723	2.15996E-05	0.004212652	0.947846704	3.624355038	2.540043553
81	-0.003872114	2.49919E-05	0.0048975	1.101937484	3.624358828	2.540043553
81.005	-0.002978076	2.05273E-05	0.003995953	0.899089526	3.624361069	2.540043553
81.01	-0.002351933	1.73558E-05	0.00335798	0.75554542	3.624362467	2.540043553
81.015	-0.00285416	1.98614E-05	0.003863969	0.869393079	3.624364526	2.540043553
81.02	-0.002802279	1.96225E-05	0.003815716	0.858536067	3.624366511	2.540043553
81.025	-0.002699081	1.91167E-05	0.003713553	0.83554941	3.624368352	2.540043553
81.03	-0.00273845	1.93566E-05	0.003762016	0.846453515	3.624370248	2.540043553
81.035	-0.001516499	1.32874E-05	0.002546944	0.57306239	3.624370829	2.540043553
81.04	-7.57929E-05	6.08747E-06	0.00111199	0.250197717	3.62437083	2.540043553
81.045	0.00118338	-1.94642E-07	-0.000139651	-0.031421538	3.624371184	2.540043553
81.05	0.003292353	-1.07465E-05	-0.002241189	-0.504267476	3.624373924	2.540043553
81.055	0.005001661	-1.93326E-05	-0.003950495	-0.888861402	3.624380247	2.540043553
81.06	0.006227274	-2.54745E-05	-0.005172824	-1.16388545	3.624390048	2.540043553
81.065	0.008263225	-3.56726E-05	-0.00720165	-1.620371182	3.624407305	2.540043553
81.07	0.010433523	-4.65688E-05	-0.00936834	-2.107876583	3.624434818	2.540043553
81.075	0.012788126	-5.83948E-05	-0.011718752	-2.636719142	3.62447615	2.540043553
81.08	0.015349011	-7.12915E-05	-0.014280568	-3.213127875	3.624535694	2.540043553
81.085	0.016927598	-7.92868E-05	-0.01586806	-3.570313415	3.624608115	2.540043553
81.09	0.018377087	-8.66185E-05	-0.017323314	-3.897745578	3.624693471	2.540043553
81.095	0.019923236	-9.44607E-05	-0.018879367	-4.247857616	3.624793792	2.540043553
81.1	0.020378173	-9.68398E-05	-0.019351328	-4.354048873	3.624898748	2.540043553
81.105	0.020896189	-9.95043E-05	-0.019879846	-4.472965341	3.625009108	2.540043553
81.11	0.021674933	-0.000103497	-0.020671775	-4.651149266	3.625127846	2.540043553
81.115	0.021387348	-0.00010215	-0.020399634	-4.589917706	3.625243455	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
98.39477539	3.54491E-06	0.742920699
98.40087891	4.60106E-06	1.079690025
98.40698242	4.70477E-06	0.993005562
98.41308594	4.02962E-06	0.721788439
98.41918945	3.5165E-06	0.666548776
98.42529297	4.18947E-06	0.67765181
98.43139648	4.47656E-06	0.678109635
98.4375	3.53122E-06	0.622505625
98.44360352	2.46887E-06	0.373787595
98.44970703	2.42322E-06	0.335496059
98.45581055	2.84854E-06	0.420247044
98.46191406	3.58508E-06	0.480254636
98.46801758	3.97586E-06	0.543501555
98.47412109	4.26257E-06	0.669089311
98.48022461	4.51456E-06	0.64541706
98.48632813	4.36905E-06	0.610476888
98.49243164	4.10205E-06	0.582289836
98.49853516	4.23786E-06	0.544019848
98.50463867	4.55636E-06	0.607247683
98.51074219	4.02498E-06	0.549533873
98.5168457	2.43903E-06	0.306118328
98.52294922	1.51025E-06	0.205260348
98.52905273	2.45851E-06	0.343076278
98.53515625	2.55798E-06	0.341221998
98.54125977	1.31894E-06	0.192161168
98.54736328	1.06079E-06	0.14751406
98.5534668	1.56388E-06	0.216029731
98.55957031	1.30985E-06	0.218137341
98.56567383	1.05712E-06	0.166905595
98.57177734	8.29553E-07	0.130837704
98.57788086	8.12703E-07	0.151392492
98.58398438	7.32713E-07	0.125993252
98.59008789	8.43776E-07	0.157304988
98.59619141	1.46738E-06	0.342991881
98.60229492	2.24195E-06	0.460393695
98.60839844	2.99619E-06	0.674499159
98.61450195	3.21262E-06	0.907124275
98.62060547	3.13462E-06	0.844936396
98.62670898	3.39889E-06	1.108425958
98.6328125	3.05974E-06	1.203921065
98.63891602	2.65651E-06	0.937666639
98.64501953	3.5772E-06	1.674461447
98.65112305	4.37059E-06	2.271675281
98.65722656	4.47199E-06	2.512573657
98.66333008	3.90112E-06	8.44650522
98.66943359	3.15605E-06	3.19630993
98.67553711	2.74543E-06	3.292653241
98.68164063	2.60951E-06	3.253505787
98.68774414	3.01846E-06	1.808241024
98.69384766	3.80028E-06	3.571484872
98.69995117	3.49144E-06	1.689329833
98.70605469	2.21062E-06	0.884716625
98.7121582	1.58773E-06	0.723853174
98.71826172	9.87043E-07	0.275613315
98.72436523	1.61727E-06	0.459358842
98.73046875	4.20578E-06	1.733425062
98.73657227	5.90637E-06	1.504467814
98.74267578	6.3041E-06	1.477160574
98.7487793	5.27272E-06	1.280154588
98.75488281	3.5793E-06	0.731148706
98.76098633	2.35875E-06	0.544014301
98.76708984	2.43074E-06	0.513517373
98.77319336	3.34333E-06	0.571598722
98.77929688	4.41954E-06	0.890507868
98.78540039	4.92907E-06	0.864063605
98.79150391	4.48259E-06	0.68364881
98.79760742	3.411E-06	0.613807928
98.80371094	3.00475E-06	0.498256982
98.80981445	3.01906E-06	0.455671592
98.81591797	3.32618E-06	0.529602054
98.82202148	4.34642E-06	0.603532872
98.828125	5.0567E-06	0.706304504
98.83422852	4.60829E-06	0.728826463
98.84033203	3.30495E-06	0.504379547
98.84643555	3.46525E-06	0.564492372
98.85253906	4.44074E-06	0.720487113
98.85864258	4.42907E-06	0.6231855
98.86474609	3.62559E-06	0.555990119
98.87084961	3.26988E-06	0.565650138
98.87695313	3.41607E-06	0.569535874
98.88305664	2.81466E-06	0.496201383
98.88916016	2.38532E-06	0.435537395
98.89526367	3.49302E-06	0.625266805
98.90136719	4.05194E-06	0.797266712
98.9074707	3.82708E-06	0.770487492
98.91357422	3.33361E-06	0.668749703
98.91967773	2.87077E-06	0.714369412
98.92578125	2.27091E-06	0.596727919
98.93188477	1.9162E-06	0.457792148
98.93798828	2.42692E-06	0.690433553
98.9440918	3.73932E-06	1.190671432
98.95019531	4.17839E-06	1.293158657
98.95629883	3.01916E-06	1.452727817
98.96240234	1.62821E-06	0.886724854
98.96850586	1.74878E-06	0.808968092
98.97460938	2.85668E-06	2.515981872
98.98071289	3.5336E-06	2.747318511
98.98681641	3.59437E-06	2.535799432
98.99291992	2.75236E-06	6.781547591
98.99902344	1.40249E-06	6.506403921
99.00512695	2.96855E-06	5.41285067
99.01123047	3.92643E-06	3.10153688
99.01733398	2.83964E-06	4.535432737
99.0234375	7.72997E-07	0.619936868

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
81.12	0.021109147	-0.000100809	-0.020128811	-4.528982577	3.625356075	2.540043553
81.125	0.021523931	-0.000102941	-0.020559456	-4.625877643	3.625473165	2.540043553
81.13	0.021898564	-0.000104887	-0.020947353	-4.713154524	3.625594366	2.540043553
81.135	0.022189501	-0.000106422	-0.021251777	-4.781649747	3.625718809	2.540043553
81.14	0.021940467	-0.000105257	-0.021016542	-4.728721913	3.625840475	2.540043553
81.145	0.02146096	-0.000102912	-0.020542935	-4.622160268	3.625956881	2.540043553
81.15	0.021712048	-0.000104221	-0.020807277	-4.681637278	3.626076026	2.540043553
81.155	0.022098143	-0.000106225	-0.021211874	-4.77267159	3.626199447	2.540043553
81.16	0.022522937	-0.000108429	-0.021649616	-4.871163513	3.626327658	2.540043553
81.165	0.022866178	-0.000110251	-0.022010874	-4.952446648	3.626459807	2.540043553
81.17	0.022194797	-0.000106984	-0.02135127	-4.804035735	3.626584309	2.540043553
81.175	0.021992852	-0.00010603	-0.021158505	-4.760663563	3.626706556	2.540043553
81.18	0.022817928	-0.000110257	-0.02201219	-4.952742729	3.626838148	2.540043553
81.185	0.02231851	-0.000107884	-0.021532811	-4.844882585	3.626964043	2.540043553
81.19	0.021335255	-0.000103032	-0.020553402	-4.624515386	3.627079089	2.540043553
81.195	0.021723696	-0.000105055	-0.020961947	-4.716438066	3.627198362	2.540043553
81.2	0.021629392	-0.000104713	-0.020892757	-4.700870257	3.627316602	2.540043553
81.205	0.020315105	-9.82421E-05	-0.019586665	-4.406999724	3.627420909	2.540043553
81.21	0.019055964	-9.20217E-05	-0.01833181	-4.124657159	3.627512687	2.540043553
81.215	0.017592483	-8.47717E-05	-0.016869887	-3.795724644	3.627590909	2.540043553
81.22	0.016217338	-7.79348E-05	-0.01549189	-3.485675304	3.627657381	2.540043553
81.225	0.015639545	-7.5089E-05	-0.014918483	-3.356658599	3.6277192	2.540043553
81.23	0.01504189	-7.21633E-05	-0.014329077	-3.224042348	3.627776385	2.540043553
81.235	0.014241268	-6.82122E-05	-0.013533277	-3.044987333	3.627827644	2.540043553
81.24	0.013857013	-6.63424E-05	-0.013156724	-2.960262936	3.627876175	2.540043553
81.245	0.013583098	-6.50387E-05	-0.012894202	-2.901195388	3.627922805	2.540043553
81.25	0.013371598	-6.40495E-05	-0.012695039	-2.856383761	3.627967995	2.540043553
81.255	0.013586264	-6.52136E-05	-0.012930138	-2.90928115	3.628014648	2.540043553
81.26	0.013271593	-6.37641E-05	-0.012637569	-2.843453041	3.628059165	2.540043553
81.265	0.011894308	-5.69831E-05	-0.011272563	-2.536326571	3.628094921	2.540043553
81.27	0.010794987	-5.15745E-05	-0.010184168	-2.291437865	3.628124373	2.540043553
81.275	0.009713613	-4.6291E-05	-0.009121287	-2.052289661	3.628148221	2.540043553
81.28	0.00711528	-3.34135E-05	-0.006532019	-1.469704205	3.628161016	2.540043553
81.285	0.004121922	-1.85094E-05	-0.003537513	-0.795940511	3.62816531	2.540043553
81.29	0.001511579	-5.52966E-06	-0.000931564	-0.209601805	3.628165888	2.540043553
81.295	-0.002421396	1.40161E-05	0.002989376	0.672609711	3.62816737	2.540043553
81.3	-0.007331851	3.84823E-05	0.007891948	1.775688397	3.628180956	2.540043553
81.305	-0.01161999	5.99201E-05	0.012182854	2.741142118	3.628215082	2.540043553
81.31	-0.015458415	7.91416E-05	0.016026413	3.605942851	3.628275478	2.540043553
81.315	-0.018582106	9.4826E-05	0.019160076	4.311017029	3.628362748	2.540043553
81.32	-0.020524538	0.000104609	0.021113566	4.750552431	3.628469217	2.540043553
81.325	-0.022022648	0.00011215	0.022618675	5.089201806	3.628591796	2.540043553
81.33	-0.023638437	0.000120268	0.024238373	5.453634027	3.628733021	2.540043553
81.335	-0.02568415	0.000130538	0.026286606	5.914486389	3.628899748	2.540043553
81.34	-0.027843566	0.00014141	0.028453972	6.402143744	3.62909569	2.540043553
81.345	-0.028903325	0.000146815	0.02953106	6.644488572	3.62930683	2.540043553
81.35	-0.02886587	0.000146714	0.029509832	6.639712268	3.629517424	2.540043553
81.355	-0.028801552	0.000146443	0.029455033	6.627382349	3.62972708	2.540043553
81.36	-0.029216636	0.000148555	0.029877706	6.722483953	3.629942823	2.540043553
81.365	-0.029948022	0.000152261	0.030615916	6.888581055	3.630169502	2.540043553
81.37	-0.030298937	0.000154077	0.03097764	6.969969107	3.630401525	2.540043553
81.375	-0.030285932	0.000154055	0.030973307	6.968994098	3.630633349	2.540043553
81.38	-0.030779891	0.000156552	0.031470764	7.080921821	3.630872796	2.540043553
81.385	-0.031686204	0.000161124	0.032381164	7.285761861	3.631126552	2.540043553
81.39	-0.032501175	0.00016525	0.033202717	7.470611225	3.631393529	2.540043553
81.395	-0.033189935	0.000168748	0.033898885	7.627249019	3.631671942	2.540043553
81.4	-0.033946542	0.000172575	0.034660587	7.798632083	3.631963192	2.540043553
81.405	-0.035443868	0.000180104	0.036158753	8.135719353	3.632280703	2.540043553
81.41	-0.037317961	0.000189555	0.038038748	8.558718236	3.632632678	2.540043553
81.415	-0.038452819	0.000195332	0.039187445	8.817175078	3.633006386	2.540043553
81.42	-0.039607498	0.000201193	0.040352455	9.079302359	3.633402874	2.540043553
81.425	-0.04132806	0.000209904	0.04208372	9.46883708	3.633834558	2.540043553
81.43	-0.042448213	0.000215646	0.043224338	9.725476112	3.63428996	2.540043553
81.435	-0.04308308	0.000218952	0.043881068	9.873240195	3.634759086	2.540043553
81.44	-0.043954558	0.000223446	0.044773503	10.07403813	3.635247383	2.540043553
81.445	-0.044458238	0.000226123	0.045305102	10.19364793	3.635746934	2.540043553
81.45	-0.04417587	0.000224872	0.045052361	10.13678128	3.636240161	2.540043553
81.455	-0.043412897	0.000221199	0.044310822	9.969934963	3.636716497	2.540043553
81.46	-0.04269433	0.000217726	0.043609811	9.812207545	3.637177195	2.540043553
81.465	-0.042180284	0.000215274	0.04311494	9.700861466	3.637626866	2.540043553
81.47	-0.041343666	0.00021121	0.04229494	9.516361465	3.638058876	2.540043553
81.475	-0.040452305	0.000206852	0.041415921	9.318582294	3.638472459	2.540043553
81.48	-0.039870498	0.000204045	0.040849916	9.191231067	3.63887423	2.540043553
81.485	-0.038652341	0.000198066	0.039644439	8.919998804	3.639251826	2.540043553
81.49	-0.037059255	0.000190176	0.038054523	8.562267584	3.639598938	2.540043553
81.495	-0.036248143	0.000186179	0.037249397	8.381114361	3.639931022	2.540043553
81.5	-0.035595572	0.000182996	0.036608212	8.236847613	3.640251256	2.540043553
81.505	-0.03456513	0.000177926	0.035587388	8.007162255	3.640553218	2.540043553
81.51	-0.033390795	0.000172137	0.03442216	7.744986102	3.640835011	2.540043553
81.515	-0.031903711	0.000164783	0.032942537	7.412070718	3.641092262	2.540043553
81.52	-0.03045595	0.000157622	0.031502151	7.087983881	3.641326696	2.540043553
81.525	-0.028695866	0.00014892	0.029752714	6.694360622	3.641534816	2.540043553
81.53	-0.025867514	0.000134869	0.02692972	6.059186923	3.641703933	2.540043553
81.535	-0.022954679	0.000120365	0.024017643	5.403969778	3.641837106	2.540043553
81.54	-0.019997133	0.00010564	0.021063647	4.739320641	3.641938174	2.540043553
81.545	-0.01629733	8.7184E-05	0.017364113	3.906925506	3.642005303	2.540043553
81.55	-0.013001993	7.07129E-05	0.014065343	3.164702106	3.642048029	2.540043553
81.555	-0.009959075	5.5519E-05	0.011024713	2.480560506	3.642073097	2.540043553
81.56	-0.005805402	3.47513E-05	0.006872233	1.546252519	3.642081615	2.540043553
81.565	-0.001525769	1.3264E-05	0.002580131	0.580529484	3.642082203	2.540043553
81.57	0.001682018	-2.89168E-06	-0.000644145	-0.144932678	3.642082918	2.540043553
81.575	0.004342495	-1.6303E-05	-0.003318901	-0.746752628	3.642087684	2.540043553
81.58	0.007078402	-3.01011E-05	-0.006069091	-1.365545427	3.642100347	2.540043553
81.585	0.009566961	-4.2693E-05	-0.008577384	-1.929911374	3.64212348	2.540043553
81.59	0.01085955	-4.93168E-05	-0.009896255	-2.226657416	3.642153286	2.540043553
81.595	0.01119141	-5.11056E-05	-0.010252362	-2.306781548	3.642184941	2.540043553
81.6	0.011676586	-5.36443E-05	-0.010757705	-2.420483664	3.6422194	2.540043553
81.605	0.01198082	-5.52903E-05	-0.011085317	-2.494196238	3.642255679	2.540043553
81.61	0.011604427	-5.3523E-05	-0.010728397	-2.413889401	3.642289714	2.540043553
81.615	0.011081103	-5.10032E-05	-0.010219616	-2.299413517	3.642320748	2.540043553
81.62	0.010516104	-4.82729E-05	-0.009668452	-2.175401644	3.642348698	2.540043553
81.625	0.009651495	-4.40447E-05	-0.00881512	-1.983401966	3.642372241	2.540043553
81.63	0.008268459	-3.72126E-05	-0.007436811	-1.673282406	3.642389521	2.540043553
81.635	0.006690309	-2.93749E-05	-0.005856392	-1.317688246	3.642400833	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
99.02954102	5.45946E-07	0.307817309
99.03564453	1.34278E-06	1.038852985
99.04174805	1.70874E-06	0.800187674
99.04785156	2.09385E-06	0.913613
99.05395508	2.40948E-06	1.504531739
99.06005859	1.80457E-06	0.602508938
99.06616211	1.58366E-06	0.482384413
99.07226563	2.20297E-06	0.719956872
99.07836914	1.89979E-06	0.440827122
99.08447266	1.6426E-06	0.408749428
99.09057617	4.07719E-07	0.113660093
99.09667969	1.52296E-06	0.303725649
99.1027832	1.46739E-06	0.301303422
99.10888672	1.77305E-06	0.357552042
99.11499023	3.5385E-06	0.570734183
99.12109375	2.35193E-06	0.418998148
99.12719727	2.10271E-06	0.392074466
99.13330078	5.71533E-06	0.926507591
99.1394043	7.49271E-06	1.368126365
99.14550781	7.35479E-06	1.245350176
99.15161133	6.17687E-06	0.899041907
99.15771484	5.19919E-06	0.895862305
99.16381836	4.62001E-06	0.816899295
99.16992188	5.00356E-06	0.823036395
99.17602539	6.41539E-06	1.179488936
99.18212891	7.35492E-06	1.188594452
99.18823242	7.13536E-06	1.087514317
99.19433594	6.29339E-06	1.104212081
99.20043945	5.84866E-06	0.994368912
99.20654297	5.42505E-06	1.005635879
99.21264648	4.56573E-06	0.904430429
99.21875	4.49544E-06	0.750674284
99.22485352	5.33675E-06	1.022549023
99.23095703	6.17488E-06	1.446047033
99.23706055	6.40698E-06	1.347148454
99.24316406	5.53809E-06	1.303798376
99.24926758	4.12972E-06	1.006130061
99.25537109	3.29209E-06	0.745111448
99.26147461	3.27132E-06	0.944413396
99.26757813	3.78792E-06	1.172284814
99.27368164	4.24732E-06	1.214413634
99.27978516	4.38832E-06	1.764282977
99.28588867	5.08158E-06	2.466380855
99.29199219	6.29712E-06	2.858285921
99.2980957	7.13168E-06	4.082785791
99.30419922	6.82805E-06	3.97750631
99.31030273	5.40767E-06	4.17535334
99.31640625	4.84136E-06	6.195556109
99.32250977	5.12351E-06	14.97267204
99.32861328	4.95834E-06	7.673922097
99.3347168	4.68497E-06	12.3235743
99.34082031	5.29409E-06	8.517916973
99.34692383	6.64315E-06	7.127456574
99.35302734	6.98653E-06	4.226103347
99.35913086	6.07015E-06	4.183690692
99.36523438	5.59093E-06	4.043462279
99.37133789	6.52462E-06	2.689549961
99.37744141	8.20685E-06	3.258944365
99.38354492	9.31678E-06	3.491770154
99.38964844	8.41496E-06	2.285568421
99.39575195	6.63377E-06	1.796272309
99.40185547	6.07919E-06	1.402104788
99.40795898	6.86538E-06	1.320271892
99.4140625	8.04606E-06	1.90394277
99.42016602	8.54721E-06	1.833503177
99.42626953	8.15667E-06	1.499752181
99.43237305	6.57628E-06	1.30188072
99.43847656	4.08762E-06	0.677712962
99.44458008	2.84342E-06	0.453972551
99.45068359	3.59448E-06	0.678723048
99.45678711	4.95205E-06	0.796956402
99.46289063	5.82552E-06	0.905641334
99.46899414	5.26508E-06	0.869002952
99.47509766	3.44433E-06	0.500990433
99.48120117	1.91696E-06	0.304164494
99.48730469	1.94965E-06	0.32870363
99.4934082	1.13755E-06	0.170517912
99.49951172	2.07239E-06	0.353720792
99.50561523	3.60107E-06	0.603381661
99.51171875	3.46358E-06	0.504821791
99.51782227	1.88735E-06	0.307726386
99.52392578	7.82457E-07	0.128321256
99.5300293	7.82073E-07	0.125315035
99.53613281	2.04682E-06	0.387191646
99.54223633	2.39043E-06	0.419198772
99.54833984	2.69184E-06	0.451438706
99.55444336	3.59159E-06	0.697591692
99.56054688	3.74284E-06	0.73621877
99.56665039	3.09587E-06	0.68851446
99.57275391	2.58445E-06	0.67658203
99.57885742	2.44804E-06	0.539528476
99.58496094	3.72415E-06	0.888037286
99.59106445	5.19248E-06	1.522996167
99.59716797	5.34261E-06	1.363724637
99.60327148	4.74878E-06	1.336978773
99.609375	4.74145E-06	1.710431186
99.61547852	5.18835E-06	1.701904713
99.62158203	6.15458E-06	2.494095532
99.62768555	7.03855E-06	3.300653079
99.63378906	7.57234E-06	2.90571533
99.63989258	7.19182E-06	4.680321909
99.64599609	6.01605E-06	5.635650958
99.65209961	4.964E-06	3.306812137
99.65820313	4.87233E-06	8.86670155

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
81.64	0.005687549	-2.44119E-05	-0.004856054	-1.092612234	3.642409009	2.540043553
81.645	0.004315537	-1.76206E-05	-0.003487709	-0.784734601	3.642413716	2.540043553
81.65	0.002218225	-7.16461E-06	-0.001382058	-0.310962972	3.64241496	2.540043553
81.655	0.000929569	-7.36377E-07	-8.816E-05	-0.019836008	3.642415178	2.540043553
81.66	-0.000648875	7.11624E-06	0.001491803	0.33565562	3.642415285	2.540043553
81.665	-0.003232993	2.00511E-05	0.004092826	0.920885772	3.642417926	2.540043553
81.67	-0.004458159	2.62273E-05	0.005334121	1.200177287	3.642422949	2.540043553
81.675	-0.005081681	2.9356E-05	0.005962775	1.34162446	3.642429476	2.540043553
81.68	-0.00653114	3.6644E-05	0.007426755	1.671019981	3.642440257	2.540043553
81.685	-0.006661224	3.73666E-05	0.007570774	1.703424172	3.642451472	2.540043553
81.69	-0.005724265	3.27029E-05	0.006629113	1.491550396	3.642459753	2.540043553
81.695	-0.005483697	3.1513E-05	0.006388907	1.437504157	3.642467353	2.540043553
81.7	-0.004781403	2.80299E-05	0.005685937	1.279335749	3.642473132	2.540043553
81.705	-0.003586948	2.20536E-05	0.004480159	1.008035823	3.642476383	2.540043553
81.71	-0.003004541	1.91345E-05	0.003891389	0.875562521	3.642478665	2.540043553
81.715	-0.002123107	1.47351E-05	0.003004255	0.675957428	3.642479804	2.540043553
81.72	-0.000693596	7.56942E-06	0.001559829	0.350961613	3.642479926	2.540043553
81.725	0.000375251	2.18897E-06	0.000475691	0.107030504	3.642479961	2.540043553
81.73	0.001274231	-2.34042E-06	-0.00043669	-0.09825525	3.642480372	2.540043553
81.735	0.002200107	-7.01552E-06	-0.001378166	-0.310087397	3.642481595	2.540043553
81.74	0.00277507	-9.93955E-06	-0.001966878	-0.442547531	3.642483541	2.540043553
81.745	0.003414376	-1.31773E-05	-0.002618631	-0.589191924	3.642486488	2.540043553
81.75	0.004528595	-1.88115E-05	-0.003752512	-0.844315156	3.642491671	2.540043553
81.755	0.00521737	-2.23519E-05	-0.004464843	-1.004589706	3.642498551	2.540043553
81.76	0.005027646	-2.14942E-05	-0.0042916	-0.965609967	3.64250494	2.540043553
81.765	0.004717364	-2.00247E-05	-0.003994861	-0.898843814	3.642510564	2.540043553
81.77	0.004059625	-1.68296E-05	-0.003349763	-0.753696625	3.642514729	2.540043553
81.775	0.002649104	-9.85207E-06	-0.001941543	-0.4368472	3.642516503	2.540043553
81.78	0.001354793	-3.43546E-06	-0.000647149	-0.145608497	3.642516967	2.540043553
81.785	-4.18002E-05	3.48168E-06	0.000747597	0.168209213	3.642516967	2.540043553
81.79	-0.002228636	1.43746E-05	0.002942769	0.662123063	3.642518223	2.540043553
81.795	-0.00408676	2.36637E-05	0.0048136	1.083059918	3.642522444	2.540043553
81.8	-0.0052326	2.93815E-05	0.005964668	1.342050291	3.642529364	2.540043553
81.805	-0.0066946	3.66782E-05	0.007433032	1.672432179	3.642540691	2.540043553
81.81	-0.008068193	4.35643E-05	0.008816358	1.983680578	3.642557144	2.540043553
81.815	-0.008496025	4.57197E-05	0.009249073	2.081041477	3.642575387	2.540043553
81.82	-0.00865431	4.65022E-05	0.00940615	2.116383854	3.642594317	2.540043553
81.825	-0.00903618	4.84066E-05	0.009788402	2.202390389	3.642614954	2.540043553
81.83	-0.008988643	4.817E-05	0.009740206	2.191546408	3.642635374	2.540043553
81.835	-0.008465463	4.55333E-05	0.009207753	2.071744494	3.642653486	2.540043553
81.84	-0.008089749	4.36178E-05	0.008821022	1.984729929	3.642670027	2.540043553
81.845	-0.007768113	4.19699E-05	0.008488353	1.909879387	3.642685278	2.540043553
81.85	-0.007419522	4.01734E-05	0.008125754	1.828294735	3.642699191	2.540043553
81.855	-0.007377025	3.99007E-05	0.008070732	1.815914634	3.642712946	2.540043553
81.86	-0.007363319	3.97732E-05	0.008044983	1.810121242	3.642726649	2.540043553
81.865	-0.007318028	3.94713E-05	0.007984053	1.796411948	3.642740184	2.540043553
81.87	-0.00777313	4.16597E-05	0.008426001	1.895850166	3.642755455	2.540043553
81.875	-0.008688827	4.61539E-05	0.009333348	2.100003193	3.642774536	2.540043553
81.88	-0.010056511	5.2907E-05	0.01069159	2.405607835	3.642800096	2.540043553
81.885	-0.012155802	6.33269E-05	0.01278197	2.875943236	3.642837442	2.540043553
81.89	-0.014919533	7.70884E-05	0.015541029	3.496731518	3.642893701	2.540043553
81.895	-0.018434984	9.4639E-05	0.019057041	4.287834114	3.642979594	2.540043553
81.9	-0.022298588	0.000113981	0.022928415	5.158893392	3.643105264	2.540043553
81.905	-0.025680133	0.000130947	0.026321201	5.922270328	3.643271939	2.540043553
81.91	-0.028740545	0.000146323	0.029393832	6.613612141	3.643480708	2.540043553
81.915	-0.031369623	0.000159568	0.032038849	7.208741124	3.643729419	2.540043553
81.92	-0.033026118	0.000167951	0.033712038	7.585208575	3.64400509	2.540043553
81.925	-0.034278533	0.000174295	0.034977781	7.870000821	3.644302065	2.540043553
81.93	-0.035440932	0.000180184	0.036152338	8.134276078	3.644619523	2.540043553
81.935	-0.036605372	0.000186071	0.037326326	8.398423462	3.644958184	2.540043553
81.94	-0.038398611	0.000195112	0.03912872	8.803961971	3.645330839	2.540043553
81.945	-0.040006081	0.000203264	0.04075324	9.169478964	3.645735348	2.540043553
81.95	-0.040479405	0.000205745	0.041247494	9.280686206	3.646149485	2.540043553
81.955	-0.040442315	0.000205649	0.041227829	9.276261458	3.646562864	2.540043553
81.96	-0.040093937	0.000203978	0.040890324	9.200322817	3.646969151	2.540043553
81.965	-0.039902596	0.000203067	0.040706334	9.15892508	3.64737157	2.540043553
81.97	-0.040426315	0.000205748	0.041247739	9.280741259	3.647784621	2.540043553
81.975	-0.040144611	0.000204425	0.040979947	9.220488186	3.648191936	2.540043553
81.98	-0.038892414	0.000198204	0.039723952	8.937889125	3.648574238	2.540043553
81.985	-0.038557097	0.000196545	0.039389083	8.862543765	3.648949975	2.540043553
81.99	-0.038367955	0.000195652	0.03920891	8.82200477	3.649322035	2.540043553
81.995	-0.036973824	0.000188715	0.037809384	8.507111486	3.649667549	2.540043553
82	-0.035799494	0.000182828	0.036622119	8.239976758	3.649991463	2.540043553
82.005	-0.035677734	0.000182213	0.036498256	8.212107615	3.650313177	2.540043553
82.01	-0.035331607	0.000180499	0.036152681	8.134353233	3.650628679	2.540043553
82.015	-0.034516736	0.000176417	0.035329823	7.949210153	3.650929796	2.540043553
82.02	-0.034500437	0.000176311	0.035308759	7.944470723	3.651230629	2.540043553
82.025	-0.035255894	0.000180097	0.036073248	8.116480791	3.651544781	2.540043553
82.03	-0.035553814	0.000181622	0.036381121	8.185752288	3.651864264	2.540043553
82.035	-0.035416979	0.000180965	0.036248331	8.155874565	3.652181293	2.540043553
82.04	-0.035508173	0.000181445	0.036345406	8.177716426	3.652499957	2.540043553
82.045	-0.035600185	0.000181948	0.036446929	8.200558978	3.652820274	2.540043553
82.05	-0.035190459	0.000179954	0.036044131	8.109929538	3.653133261	2.540043553
82.055	-0.034219215	0.000175138	0.035071952	7.891189106	3.653429209	2.540043553
82.06	-0.033332105	0.000170723	0.034182467	7.691055039	3.653710012	2.540043553
82.065	-0.032798821	0.000168093	0.033652626	7.571840798	3.653981902	2.540043553
82.07	-0.031701397	0.000162653	0.032556936	7.325310571	3.654235901	2.540043553
82.075	-0.030191039	0.000155117	0.031039698	6.983932117	3.654466274	2.540043553
82.08	-0.029364144	0.00015099	0.030209117	6.797051233	3.654684201	2.540043553
82.085	-0.02875072	0.000147948	0.029597005	6.659326145	3.654893118	2.540043553
82.09	-0.027953788	0.00014398	0.028798631	6.479691868	3.655090613	2.540043553
82.095	-0.027742326	0.000142933	0.028587953	6.432289388	3.655285132	2.540043553
82.1	-0.028164408	0.00014507	0.029019581	6.529405824	3.655485615	2.540043553
82.105	-0.028903435	0.000148815	0.029775639	6.699518731	3.655696757	2.540043553
82.11	-0.029692904	0.000152839	0.030587839	6.8822638	3.655919591	2.540043553
82.115	-0.030053919	0.000154727	0.030968897	6.968001718	3.656147876	2.540043553
82.12	-0.030320537	0.000156127	0.031251447	7.031575551	3.65638023	2.540043553
82.125	-0.031213101	0.000160651	0.032164096	7.236921681	3.656626465	2.540043553
82.13	-0.033215587	0.00017074	0.034198293	7.694615868	3.656905308	2.540043553
82.135	-0.03640363	0.000186817	0.037437166	8.423362356	3.657240247	2.540043553
82.14	-0.039363234	0.000201832	0.040459471	9.10338105	3.65763186	2.540043553
82.145	-0.04070457	0.000208787	0.041853376	9.417009603	3.658050617	2.540043553
82.15	-0.040364053	0.00020731	0.041554671	9.34980099	3.658462398	2.540043553
82.155	-0.03935205	0.000202414	0.040566208	9.127396695	3.658853788	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio
99.66430664	5.65347E-06	13.379199
99.67041016	5.83312E-06	7.830869376
99.67651367	5.35698E-06	22.30613569
99.68261719	5.45472E-06	6.678274271
99.6887207	6.10097E-06	10.00844039
99.69482422	7.06694E-06	5.318247173
99.70092773	8.16271E-06	4.767709637
99.70703125	8.92416E-06	5.25440543
99.71313477	8.39229E-06	3.371628797
99.71923828	6.34963E-06	2.673755863
99.7253418	4.78429E-06	1.685638755
99.73144531	5.17265E-06	1.329912034
99.73754883	6.82719E-06	1.958030955
99.74365234	7.91535E-06	2.50769457
99.74975586	7.00151E-06	1.829370624
99.75585938	5.29631E-06	1.305275037
99.76196289	3.45222E-06	0.748557753
99.76806641	4.66424E-07	0.098014918
99.77416992	2.64034E-06	0.6216348
99.78027344	2.74488E-06	0.567422951
99.78637695	1.37231E-06	0.252443374
99.79248047	1.46232E-06	0.277427367
99.79858398	3.39601E-06	0.571345542
99.8046875	6.20715E-06	0.994675303
99.81079102	7.90971E-06	1.426485145
99.81689453	9.25625E-06	1.548814931
99.82299805	1.00031E-05	1.654329253
99.82910156	9.23929E-06	1.762120467
99.83520508	7.51669E-06	1.264628805
99.84130859	6.15116E-06	1.001629588
99.84741211	6.30085E-06	1.142143729
99.85351563	8.08627E-06	1.368474699
99.85961914	9.95258E-06	1.800308364
99.86572266	1.07768E-05	2.093470314
99.87182617	1.02811E-05	1.753966466
99.87792969	8.98802E-06	1.657891834
99.8840332	7.3498E-06	1.449459104
99.89013672	6.01205E-06	1.124510761
99.89624023	6.38116E-06	1.473431779
99.90234375	7.85333E-06	1.801835079
99.90844727	8.71765E-06	1.793202199
99.91455078	9.41999E-06	2.371389056
99.9206543	9.41408E-06	2.366196146
99.92675781	8.31729E-06	2.077419856
99.93286133	7.25119E-06	2.407685416
99.93896484	7.12151E-06	2.159238572
99.94506836	7.58722E-06	2.269585495
99.95117188	7.76154E-06	2.819951477
99.95727539	7.90149E-06	2.717259692
99.96337891	8.74613E-06	3.660402834
99.96948242	9.21892E-06	7.251785893
99.97558594	8.2661E-06	4.844167618
99.98168945	6.51431E-06	4.53883488
99.98779297	5.07518E-06	7.054706954
99.99389648	4.55257E-06	4.661097285
100	4.51961E-06	3.530941823

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
82.16	-0.039893613	0.000205255	0.041139863	9.256469092	3.659256026	2.540043553
82.165	-0.042070018	0.000216351	0.043359776	9.755949584	3.659703349	2.540043553
82.17	-0.042673974	0.000219665	0.044018991	9.904272999	3.660163608	2.540043553
82.175	-0.04088286	0.00021096	0.042261647	9.508870637	3.660586041	2.540043553
82.18	-0.0390433	0.00020195	0.040443677	9.099827282	3.660971315	2.540043553
82.185	-0.038273567	0.000198299	0.03970748	8.934183006	3.661341547	2.540043553
82.19	-0.037405462	0.000194213	0.038883607	8.748811488	3.661695174	2.540043553
82.195	-0.034438774	0.000179645	0.035948078	8.088317452	3.661994932	2.540043553
82.2	-0.029814858	0.000156895	0.031368965	7.058017037	3.662219601	2.540043553
82.205	-0.025995257	0.000138077	0.027585748	6.206793318	3.662390391	2.540043553
82.21	-0.022057665	0.00011869	0.023691932	5.330684811	3.66251336	2.540043553
82.215	-0.016232529	8.98466E-05	0.017906163	4.028886574	3.662579956	2.540043553
82.22	-0.009674347	5.72297E-05	0.011373493	2.559035946	3.662603611	2.540043553
82.225	-0.003270507	2.52792E-05	0.004984261	1.12145877	3.662606314	2.540043553
82.23	0.002425433	-3.2137E-06	-0.000705434	-0.15872254	3.662607801	2.540043553
82.235	0.00729414	-2.75846E-05	-0.005566088	-1.252369748	3.662621248	2.540043553
82.24	0.013303502	-5.77049E-05	-0.01156588	-2.602322914	3.662665979	2.540043553
82.245	0.019968654	-9.12527E-05	-0.018237235	-4.103377929	3.662766759	2.540043553
82.25	0.024924053	-0.00011629	-0.023207946	-5.221787746	3.662923764	2.540043553
82.255	0.029249988	-0.000138179	-0.02754442	-6.197494559	3.663139999	2.540043553
82.26	0.03400197	-0.000162254	-0.032309464	-7.269629397	3.663432202	2.540043553
82.265	0.038414575	-0.000184663	-0.036739577	-8.266404776	3.663805167	2.540043553
82.27	0.042703257	-0.000206499	-0.041049923	-9.236232645	3.664266058	2.540043553
82.275	0.046061498	-0.000223661	-0.044434778	-9.997824976	3.664802289	2.540043553
82.28	0.048066375	-0.000233931	-0.046459187	-10.45331701	3.665386216	2.540043553
82.285	0.050978557	-0.000248757	-0.04938038	-11.11058544	3.666043043	2.540043553
82.29	0.054677681	-0.000267623	-0.053094918	-11.94635657	3.66679865	2.540043553
82.295	0.057091214	-0.000280005	-0.05553129	-12.49454036	3.667622436	2.540043553
82.3	0.058979711	-0.000289698	-0.057437653	-12.92347186	3.668501623	2.540043553
82.305	0.06123572	-0.000301257	-0.059710291	-13.43481548	3.669449355	2.540043553
82.31	0.0631339	-0.000311025	-0.061626043	-13.86585975	3.670456753	2.540043553
82.315	0.064571235	-0.000318462	-0.063084011	-14.19390243	3.671510543	2.540043553
82.32	0.065569036	-0.000323676	-0.064105794	-14.42380356	3.672597153	2.540043553
82.325	0.066159631	-0.000326817	-0.06472129	-14.56229022	3.673703425	2.540043553
82.33	0.06681764	-0.000330296	-0.065402907	-14.7156541	3.674831813	2.540043553
82.335	0.067341267	-0.000333109	-0.065954052	-14.83966176	3.675977955	2.540043553
82.34	0.067287945	-0.000333004	-0.065930807	-14.83443151	3.677122283	2.540043553
82.345	0.066747064	-0.000330417	-0.065408446	-14.71690026	3.678248287	2.540043553
82.35	0.066060752	-0.000327079	-0.064734504	-14.56526331	3.679351256	2.540043553
82.355	0.065434161	-0.000324042	-0.064121569	-14.42735311	3.680433399	2.540043553
82.36	0.064415205	-0.000319021	-0.063108428	-14.19939636	3.681482103	2.540043553
82.365	0.063074999	-0.000312352	-0.061763273	-13.89673639	3.682487622	2.540043553
82.37	0.06221508	-0.000308113	-0.06090857	-13.70442822	3.683465911	2.540043553
82.375	0.060953641	-0.000301865	-0.059649294	-13.42109113	3.684404932	2.540043553
82.38	0.058727395	-0.000290702	-0.057400444	-12.91509986	3.685276613	2.540043553
82.385	0.057101602	-0.00028255	-0.055759119	-12.54580187	3.686100699	2.540043553
82.39	0.055791274	-0.00027602	-0.05444488	-12.25009796	3.686887398	2.540043553
82.395	0.053753186	-0.000265801	-0.052389298	-11.78759201	3.687617669	2.540043553
82.4	0.051497759	-0.000254454	-0.050108075	-11.27431695	3.688287943	2.540043553
82.405	0.049384917	-0.000243806	-0.047968827	-10.79298616	3.688904346	2.540043553
82.41	0.047770802	-0.00023567	-0.046335031	-10.42538203	3.689481114	2.540043553
82.415	0.046203812	-0.000227775	-0.044750154	-10.0687846	3.690020664	2.540043553
82.42	0.044497202	-0.000219131	-0.043015645	-9.678520094	3.690521091	2.540043553
82.425	0.044573411	-0.000219488	-0.043089591	-9.695158081	3.691023235	2.540043553
82.43	0.045624766	-0.000224845	-0.044171127	-9.938503645	3.691549346	2.540043553
82.435	0.045705837	-0.000225287	-0.044260388	-9.958587203	3.692077328	2.540043553
82.44	0.047009123	-0.000231882	-0.045591146	-10.25800776	3.69263585	2.540043553
82.445	0.049579848	-0.00024496	-0.048228549	-10.85142348	3.693257128	2.540043553
82.45	0.051046084	-0.000252467	-0.049741407	-11.19181662	3.693915696	2.540043553
82.455	0.053288324	-0.000263871	-0.052038303	-11.70861808	3.694633392	2.540043553
82.46	0.05688522	-0.000282204	-0.055727707	-12.53873399	3.695451244	2.540043553
82.465	0.059266582	-0.000294437	-0.058187207	-13.09212147	3.696339004	2.540043553
82.47	0.061115765	-0.000303957	-0.060100322	-13.52257256	3.697283027	2.540043553
82.475	0.063353724	-0.000315474	-0.062413358	-14.04300565	3.698297452	2.540043553
82.48	0.064962998	-0.000323836	-0.064091969	-14.42069304	3.699364068	2.540043553
82.485	0.066186345	-0.000330253	-0.065379628	-14.71041631	3.700471234	2.540043553
82.49	0.066793528	-0.000333578	-0.066045999	-14.86034979	3.701598807	2.540043553
82.495	0.066289958	-0.00033127	-0.0655798	-14.75545502	3.702709442	2.540043553
82.5	0.065782547	-0.000328925	-0.065106376	-14.64893459	3.70380314	2.540043553
82.505	0.065249063	-0.000326484	-0.064613572	-14.53805367	3.70487917	2.540043553
82.51	0.063319037	-0.000317	-0.062699844	-14.10746499	3.705892485	2.540043553
82.515	0.059537903	-0.000298339	-0.058937976	-13.26104462	3.706788392	2.540043553
82.52	0.054587679	-0.000273976	-0.054033056	-12.15743756	3.707541514	2.540043553
82.525	0.049427753	-0.000248485	-0.04890805	-11.00431129	3.708158987	2.540043553
82.53	0.044737175	-0.000225259	-0.044244629	-9.955041588	3.708664827	2.540043553
82.535	0.04066944	-0.000205117	-0.040204941	-9.046111755	3.709082861	2.540043553
82.54	0.036134493	-0.000182641	-0.035701768	-8.032897825	3.709412866	2.540043553
82.545	0.030225452	-0.000153246	-0.029819961	-6.709491154	3.709643764	2.540043553
82.55	0.02398327	-0.000122083	-0.023593333	-5.308500033	3.70978914	2.540043553
82.555	0.01790169	-9.1651E-05	-0.017521426	-3.942320829	3.709870136	2.540043553
82.56	0.011371063	-5.8875E-05	-0.010991271	-2.473036067	3.709902816	2.540043553
82.565	0.005575448	-2.96727E-05	-0.005181162	-1.165761444	3.709910673	2.540043553
82.57	0.001450329	-8.8269E-06	-0.001038239	-0.233603877	3.709911204	2.540043553
82.575	-0.001925154	8.24631E-06	0.002352115	0.52922593	3.709912141	2.540043553
82.58	-0.004170609	1.96457E-05	0.004614383	1.038236093	3.709916537	2.540043553
82.585	-0.005301763	2.53863E-05	0.005753224	1.29447549	3.709923642	2.540043553
82.59	-0.007983684	3.88775E-05	0.008428525	1.896418155	3.709939751	2.540043553
82.595	-0.012177579	6.01188E-05	0.012637585	2.843456641	3.709977231	2.540043553
82.6	-0.014265838	7.08119E-05	0.014755029	3.319881615	3.710028667	2.540043553
82.605	-0.014247483	7.08026E-05	0.014752438	3.31929853	3.710079971	2.540043553
82.61	-0.015600962	7.76486E-05	0.016108327	3.624373542	3.710141486	2.540043553
82.615	-0.018191639	9.078E-05	0.018706564	4.208976903	3.710225127	2.540043553
82.62	-0.020019617	0.000100081	0.02054597	4.62284336	3.710326422	2.540043553
82.625	-0.022206308	0.000111172	0.022738537	5.116170913	3.710451054	2.540043553
82.63	-0.024890585	0.000124816	0.02543448	5.722758108	3.710607637	2.540043553
82.635	-0.026347659	0.000132276	0.026907845	6.054265021	3.71078309	2.540043553
82.64	-0.02833165	0.000142351	0.02889685	6.501791269	3.710985961	2.540043553
82.645	-0.031698522	0.000159465	0.032273762	7.261596502	3.711239914	2.540043553
82.65	-0.03313991	0.000166922	0.033744542	7.592522058	3.711517488	2.540043553
82.655	-0.033388105	0.000168285	0.034013316	7.652996052	3.711799235	2.540043553
82.66	-0.035536165	0.00017923	0.036170888	8.138449707	3.712118401	2.540043553
82.665	-0.037164053	0.000187636	0.037827408	8.511166705	3.712467479	2.540043553
82.67	-0.0365687	0.000184797	0.03725401	8.382152189	3.712805462	2.540043553
82.675	-0.036433583	0.000184221	0.03713784	8.356013991	3.713140952	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
82.68	-0.036737088	0.000185885	0.037473745	8.43159266	3.713482055	2.540043553
82.685	-0.035980889	0.000182191	0.036728012	8.263802601	3.71380926	2.540043553
82.69	-0.03557608	0.000180225	0.036331146	8.174507829	3.714129144	2.540043553
82.695	-0.036099179	0.000182958	0.036882961	8.298666307	3.714458503	2.540043553
82.7	-0.03609685	0.000183065	0.036904486	8.303509319	3.714787821	2.540043553
82.705	-0.035595495	0.00018063	0.036412821	8.192884659	3.715108054	2.540043553
82.71	-0.035721369	0.000181349	0.036558142	8.225581983	3.715430555	2.540043553
82.715	-0.036037079	0.00018306	0.036903506	8.303288785	3.715758783	2.540043553
82.72	-0.035418977	0.000180066	0.036299036	8.167283075	3.716075848	2.540043553
82.725	-0.034613865	0.000176099	0.035498446	7.987150365	3.716378662	2.540043553
82.73	-0.034285226	0.000174552	0.035186251	7.916906435	3.716675753	2.540043553
82.735	-0.032884245	0.000167612	0.033786323	7.601922634	3.716949061	2.540043553
82.74	-0.030875149	0.000157541	0.03175597	7.145093264	3.717189993	2.540043553
82.745	-0.030555312	0.000155986	0.031442718	7.074611476	3.717425959	2.540043553
82.75	-0.029649087	0.000151541	0.030547017	6.873078856	3.717648135	2.540043553
82.755	-0.02700048	0.000138245	0.027869455	6.270627268	3.71783239	2.540043553
82.76	-0.026148452	0.000133973	0.027009451	6.077126522	3.7180052	2.540043553
82.765	-0.025140637	0.000128991	0.026006986	5.851571938	3.718164945	2.540043553
82.77	-0.021936363	0.000112862	0.022763326	5.121748278	3.718286565	2.540043553
82.775	-0.020918106	0.000107689	0.021723519	4.88779177	3.718397156	2.540043553
82.78	-0.02087672	0.000107526	0.021690782	4.880425919	3.71850731	2.540043553
82.785	-0.019092981	9.8541E-05	0.019885584	4.474256376	3.718599445	2.540043553
82.79	-0.019339231	9.97447E-05	0.020130246	4.529305427	3.718693972	2.540043553
82.795	-0.020584343	0.000106074	0.021407964	4.816791914	3.718801062	2.540043553
82.8	-0.020414161	0.000105252	0.021241894	4.779426138	3.718906389	2.540043553
82.805	-0.021955871	0.000113048	0.022815164	5.133411949	3.719028225	2.540043553
82.81	-0.023640058	0.000121654	0.024550711	5.52390994	3.71916947	2.540043553
82.815	-0.023613738	0.000121608	0.024541387	5.521812187	3.719310401	2.540043553
82.82	-0.025091891	0.000129139	0.026059255	5.863332387	3.719469528	2.540043553
82.825	-0.026204343	0.000134909	0.027221877	6.124922327	3.719643077	2.540043553
82.83	-0.02536364	0.000130786	0.026389325	5.9375981	3.719805669	2.540043553
82.835	-0.025997208	0.000134072	0.027052793	6.086878438	3.719976485	2.540043553
82.84	-0.026609301	0.000137323	0.027708079	6.234317854	3.72015544	2.540043553
82.845	-0.025608302	0.000132411	0.026716249	6.011156114	3.720321183	2.540043553
82.85	-0.02563632	0.000132671	0.026768804	6.022980832	3.72048729	2.540043553
82.855	-0.025492864	0.000132126	0.026658799	5.998229818	3.720651543	2.540043553
82.86	-0.023918334	0.000124348	0.025088921	5.645007229	3.720796133	2.540043553
82.865	-0.022627542	0.000117991	0.023806638	5.356493636	3.720925538	2.540043553
82.87	-0.020543167	0.000107667	0.021725253	4.888181815	3.7210322	2.540043553
82.875	-0.016810448	8.8999E-05	0.017969401	4.043115292	3.721103623	2.540043553
82.88	-0.012684874	6.85692E-05	0.013869921	3.120732174	3.72114429	2.540043553
82.885	-0.008129548	4.59534E-05	0.009336765	2.100772121	3.721160994	2.540043553
82.89	-0.003082309	2.08091E-05	0.004302691	0.968105545	3.721163395	2.540043553
82.895	0.001678582	-2.97973E-06	-0.000454381	-0.102235691	3.721164107	2.540043553
82.9	0.005783015	-2.35397E-05	-0.00456147	-1.026330759	3.721172559	2.540043553
82.905	0.008617718	-3.77647E-05	-0.007400785	-1.66517673	3.721191329	2.540043553
82.91	0.01039169	-4.66517E-05	-0.009173683	-2.064078716	3.721218622	2.540043553
82.915	0.012477855	-5.70608E-05	-0.011249326	-2.531098448	3.721257973	2.540043553
82.92	0.015594856	-7.26351E-05	-0.014353109	-3.22944957	3.72131944	2.540043553
82.925	0.01884334	-8.89156E-05	-0.01759529	-3.958940182	3.721409181	2.540043553
82.93	0.020901381	-9.92527E-05	-0.019652655	-4.421847356	3.721519595	2.540043553
82.935	0.022707869	-0.000108296	-0.021451706	-4.826633773	3.721649921	2.540043553
82.94	0.025212835	-0.000120849	-0.023947946	-5.388287946	3.721810585	2.540043553
82.945	0.026781453	-0.000128742	-0.025516579	-5.74123024	3.721991862	2.540043553
82.95	0.027852559	-0.000134095	-0.02658027	-5.980560833	3.72218793	2.540043553
82.955	0.030122012	-0.000145439	-0.02883353	-6.487544138	3.722417251	2.540043553
82.96	0.032092973	-0.000155325	-0.030796234	-6.929152735	3.722677564	2.540043553
82.965	0.033731733	-0.000163518	-0.032422317	-7.295021384	3.722965141	2.540043553
82.97	0.036641078	-0.000178073	-0.03530949	-7.944635292	3.723304463	2.540043553
82.975	0.039400054	-0.000191927	-0.038055934	-8.562585183	3.723696809	2.540043553
82.98	0.041491897	-0.000202444	-0.040139641	-9.03141912	3.724131923	2.540043553
82.985	0.043812478	-0.000214115	-0.042451024	-9.551480486	3.724617068	2.540043553
82.99	0.045471434	-0.000222491	-0.044109315	-9.924595985	3.725139648	2.540043553
82.995	0.047036999	-0.000230383	-0.045671096	-10.27599669	3.725698833	2.540043553
83	0.049137856	-0.000240987	-0.047768779	-10.74797525	3.726309083	2.540043553
83.005	0.049868046	-0.000244769	-0.048516586	-10.91623182	3.726937606	2.540043553
83.01	0.049393727	-0.000242485	-0.048055291	-10.81244056	3.727554228	2.540043553
83.015	0.049153429	-0.000241345	-0.047825153	-10.76065939	3.728164866	2.540043553
83.02	0.048921433	-0.000240238	-0.047601608	-10.7103619	3.728769753	2.540043553
83.025	0.049163005	-0.000241489	-0.047854357	-10.7672303	3.729380629	2.540043553
83.03	0.049644427	-0.000243973	-0.04835595	-10.88008866	3.730003526	2.540043553
83.035	0.048968649	-0.000240674	-0.047689641	-10.73016918	3.730609582	2.540043553
83.04	0.048110226	-0.000236416	-0.046830113	-10.53677552	3.731194575	2.540043553
83.045	0.048055478	-0.000236177	-0.04678195	-10.52593875	3.731778237	2.540043553
83.05	0.047723319	-0.000234565	-0.046456637	-10.45274331	3.732353859	2.540043553
83.055	0.047183918	-0.000231893	-0.045917411	-10.33141743	3.732916542	2.540043553
83.06	0.047398335	-0.000232981	-0.046137142	-10.38085689	3.733484351	2.540043553
83.065	0.048078777	-0.00023642	-0.046831637	-10.53711822	3.734068579	2.540043553
83.07	0.048700489	-0.000239581	-0.04746961	-10.68066231	3.734668015	2.540043553
83.075	0.049366404	-0.000242967	-0.048152993	-10.83442338	3.735283956	2.540043553
83.08	0.050079159	-0.000246594	-0.048877569	-10.99745308	3.735917811	2.540043553
83.085	0.050823225	-0.000250379	-0.049625924	-11.16583289	3.736570641	2.540043553
83.09	0.052052323	-0.0002566	-0.0508555	-11.44248756	3.737255429	2.540043553
83.095	0.053284288	-0.000262868	-0.052094194	-11.72119363	3.737973016	2.540043553
83.1	0.053595984	-0.000264534	-0.052423447	-11.79527564	3.738699022	2.540043553
83.105	0.054113518	-0.0002672	-0.052950142	-11.91378192	3.739439117	2.540043553
83.11	0.05553791	-0.000274423	-0.054376845	-12.23479008	3.740218687	2.540043553
83.115	0.056497205	-0.000279351	-0.055350102	-12.45377304	3.74102542	2.540043553
83.12	0.056990707	-0.000281942	-0.055861636	-12.56886806	3.741846308	2.540043553
83.125	0.057530056	-0.00028476	-0.056418113	-12.69407535	3.742682807	2.540043553
83.13	0.057964682	-0.000287038	-0.056867741	-12.79524181	3.743531993	2.540043553
83.135	0.05962038	-0.000295418	-0.058521646	-13.16737032	3.744430384	2.540043553
83.14	0.061884451	-0.000306916	-0.060789977	-13.67774492	3.745398303	2.540043553
83.145	0.062257351	-0.000308974	-0.061195094	-13.76889605	3.746377922	2.540043553
83.15	0.062588844	-0.000310757	-0.06154749	-13.84818517	3.747368001	2.540043553
83.155	0.064868912	-0.000322316	-0.063826503	-14.36096308	3.74843153	2.540043553
83.16	0.066535671	-0.000330884	-0.065515124	-14.74090287	3.749550413	2.540043553
83.165	0.066882203	-0.000332834	-0.065899381	-14.82736082	3.750680982	2.540043553
83.17	0.067600185	-0.00033663	-0.066643773	-14.99484882	3.751835955	2.540043553
83.175	0.068351772	-0.000340617	-0.067424578	-15.17052998	3.753016753	2.540043553
83.18	0.068900762	-0.000343605	-0.06800983	-15.30221181	3.754216594	2.540043553
83.185	0.069267028	-0.000345714	-0.06842269	-15.39510532	3.755429226	2.540043553
83.19	0.06845961	-0.000341966	-0.067665768	-15.22479786	3.756613753	2.540043553
83.195	0.067054574	-0.000335209	-0.066301889	-14.91792493	3.757750157	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
83.2	0.065656171	-0.000328506	-0.064949684	-14.61367891	3.758839656	2.540043553
83.205	0.063032815	-0.000315698	-0.062367194	-14.03261874	3.759843831	2.540043553
83.21	0.059588591	-0.000298772	-0.058957728	-13.26548889	3.760741264	2.540043553
83.215	0.055669553	-0.000279588	-0.055097568	-12.39695289	3.761524534	2.540043553
83.22	0.047996893	-0.000241826	-0.047510697	-10.68990671	3.762106774	2.540043553
83.225	0.033715036	-0.000170867	-0.033293621	-7.491064701	3.762394066	2.540043553
83.23	0.017132517	-8.77727E-05	-0.016706382	-3.758936055	3.762468252	2.540043553
83.235	0.007198441	-3.75412E-05	-0.006709519	-1.509641665	3.762481348	2.540043553
83.24	0.005639729	-2.94624E-05	-0.005103774	-1.148349142	3.762489387	2.540043553
83.245	0.004623305	-2.43517E-05	-0.004088281	-0.919863142	3.762494789	2.540043553
83.25	-0.000704079	2.46192E-06	0.001235967	0.278092533	3.762494914	2.540043553
83.255	-0.005832402	2.84651E-05	0.006393417	1.438518725	3.762503512	2.540043553
83.26	-0.006411265	3.15346E-05	0.006997946	1.574537746	3.762513901	2.540043553
83.265	-0.006213377	3.05162E-05	0.006792328	1.52827377	3.762523658	2.540043553
83.27	-0.009767939	4.83897E-05	0.010341372	2.326808627	3.762547773	2.540043553
83.275	-0.014540636	7.2552E-05	0.015124565	3.403027097	3.76260121	2.540043553
83.28	-0.017261737	8.64048E-05	0.017864695	4.019556386	3.762676518	2.540043553
83.285	-0.018735836	9.39199E-05	0.019350543	4.35387215	3.762765239	2.540043553
83.29	-0.020255375	0.000101616	0.020871771	4.69614841	3.762868933	2.540043553
83.295	-0.023389104	0.000117447	0.023999207	5.399821473	3.763007195	2.540043553
83.3	-0.027799905	0.000139877	0.028426976	6.396069584	3.763202522	2.540043553
83.305	-0.029612489	0.000149217	0.030269521	6.810642235	3.763424151	2.540043553
83.31	-0.029888875	0.00015067	0.030556043	6.875109624	3.763649936	2.540043553
83.315	-0.033003017	0.000166477	0.033672572	7.576328712	3.763925221	2.540043553
83.32	-0.035962596	0.000181627	0.036657692	8.247980775	3.764252094	2.540043553
83.325	-0.035950501	0.000181698	0.03666716	8.25011107	3.764578746	2.540043553
83.33	-0.037111086	0.000187622	0.037838439	8.513648847	3.764926829	2.540043553
83.335	-0.03992199	0.000201977	0.040664512	9.149515174	3.765329639	2.540043553
83.34	-0.04095122	0.00020736	0.041723764	9.387846861	3.765753487	2.540043553
83.345	-0.04130564	0.000209275	0.042100608	9.472636698	3.766184703	2.540043553
83.35	-0.042734445	0.000216639	0.043549255	9.798582454	3.766646267	2.540043553
83.355	-0.043654167	0.000221473	0.044500081	10.01251818	3.767127912	2.540043553
83.36	-0.043232822	0.000219503	0.044102233	9.923002314	3.767600305	2.540043553
83.365	-0.042888082	0.00021788	0.043774533	9.84926999	3.768065194	2.540043553
83.37	-0.043312671	0.000220169	0.044236723	9.953262731	3.768539333	2.540043553
83.375	-0.042930217	0.000218404	0.043880293	9.873065875	3.769005136	2.540043553
83.38	-0.041355344	0.000210558	0.042296472	9.516706237	3.76943739	2.540043553
83.385	-0.040612298	0.000206885	0.041555553	9.349999461	3.769854251	2.540043553
83.39	-0.04009328	0.000204384	0.041050857	9.236442796	3.770260525	2.540043553
83.395	-0.0382486	0.000195141	0.039187147	8.817107977	3.770630274	2.540043553
83.4	-0.03737771	0.00019077	0.038306144	8.618882443	3.770983376	2.540043553
83.405	-0.037746976	0.000192725	0.038701001	8.707725146	3.771343491	2.540043553
83.41	-0.036658543	0.000187307	0.037608299	8.46186729	3.771683137	2.540043553
83.415	-0.035836661	0.000183162	0.036773316	8.273996065	3.772007723	2.540043553
83.42	-0.037124321	0.000189727	0.038098848	8.57224085	3.772356055	2.540043553
83.425	-0.037731228	0.000192903	0.038739838	8.716463615	3.772715869	2.540043553
83.43	-0.03743589	0.00019146	0.038448388	8.650887364	3.773070072	2.540043553
83.435	-0.038745855	0.000198131	0.039794675	8.953801937	3.773449497	2.540043553
83.44	-0.040402131	0.000206615	0.04150568	9.338778104	3.773862055	2.540043553
83.445	-0.041147256	0.000210475	0.042283902	9.513877843	3.77428997	2.540043553
83.45	-0.042840836	0.000219127	0.044027424	9.906170383	3.774753835	2.540043553
83.455	-0.044871196	0.000229553	0.046088747	10.36996818	3.77526271	2.540043553
83.46	-0.045002612	0.000230373	0.046245974	10.40534422	3.77577457	2.540043553
83.465	-0.044883772	0.000229865	0.046143474	10.38228159	3.776283731	2.540043553
83.47	-0.045910581	0.000235176	0.04719408	10.61866803	3.776816454	2.540043553
83.475	-0.045932816	0.00023543	0.047238361	10.62863127	3.777349693	2.540043553
83.48	-0.04524562	0.000232022	0.046550286	10.47381432	3.777867096	2.540043553
83.485	-0.046802846	0.000239952	0.048132748	10.82986839	3.778420727	2.540043553
83.49	-0.0499914	0.000256243	0.051333233	11.5499774	3.779052363	2.540043553
83.495	-0.051828792	0.000265783	0.053206477	11.9714573	3.779731282	2.540043553
83.5	-0.05120436	0.000262855	0.052615117	11.83840127	3.780393941	2.540043553
83.505	-0.049520962	0.0002545	0.050928581	11.45893066	3.781013744	2.540043553
83.51	-0.049372891	0.000253903	0.050808427	11.43189609	3.781629847	2.540043553
83.515	-0.049631273	0.00025548	0.051126755	11.5035198	3.782252415	2.540043553
83.52	-0.045585209	0.000235616	0.047120509	10.60211459	3.782777614	2.540043553
83.525	-0.037650199	0.000196435	0.039233315	8.827495786	3.783135884	2.540043553
83.53	-0.028712725	0.000152069	0.030322577	6.822579746	3.783344249	2.540043553
83.535	-0.017823913	9.77125E-05	0.019432915	4.37240577	3.783424542	2.540043553
83.54	-0.009543843	5.60306E-05	0.011101769	2.497897951	3.783447563	2.540043553
83.545	-0.009289553	5.45126E-05	0.01080629	2.431415141	3.783469374	2.540043553
83.55	-0.009311927	5.46451E-05	0.010832829	2.437386496	3.783491289	2.540043553
83.555	-0.003229961	2.41966E-05	0.004749839	1.068713797	3.783493926	2.540043553
83.56	0.001359617	9.3854E-07	0.000114939	0.025861373	3.783494393	2.540043553
83.565	0.000465243	5.23724E-06	0.000982989	0.221172616	3.783494448	2.540043553
83.57	0.000328864	5.89883E-06	0.001116382	0.25118589	3.783494475	2.540043553
83.575	0.003188938	-8.49626E-06	-0.001763862	-0.396868844	3.783497046	2.540043553
83.58	0.005099442	-1.82079E-05	-0.003696962	-0.831816435	3.783503618	2.540043553
83.585	0.005370908	-1.96459E-05	-0.00398313	-0.896204313	3.783510909	2.540043553
83.59	0.007520564	-3.04429E-05	-0.006131161	-1.379511326	3.783525203	2.540043553
83.595	0.011766809	-5.19026E-05	-0.010397473	-2.339431511	3.783560197	2.540043553
83.6	0.013723785	-6.19533E-05	-0.012394231	-2.788702022	3.783607799	2.540043553
83.605	0.013124573	-5.90729E-05	-0.01181254	-2.657821405	3.783651335	2.540043553
83.61	0.014315969	-6.51404E-05	-0.013027213	-2.931123035	3.783703134	2.540043553
83.615	0.015999819	-7.37763E-05	-0.01474196	-3.316940998	3.783767834	2.540043553
83.62	0.014647938	-6.71377E-05	-0.013401545	-3.015347614	3.783822063	2.540043553
83.625	0.013588035	-6.18626E-05	-0.012336936	-2.775810491	3.783868727	2.540043553
83.63	0.014322626	-6.56518E-05	-0.01310212	-2.947976914	3.783920574	2.540043553
83.635	0.013058314	-5.94053E-05	-0.011841162	-2.664261439	3.783963671	2.540043553
83.64	0.012378801	-5.59951E-05	-0.011153446	-2.50952539	3.7840024	2.540043553
83.645	0.015087053	-6.97081E-05	-0.01392134	-3.132301556	3.784059929	2.540043553
83.65	0.014630585	-6.7645E-05	-0.013504157	-3.038435325	3.784114029	2.540043553
83.655	0.01034596	-4.65077E-05	-0.009240262	-2.079059057	3.784141082	2.540043553
83.66	0.008934551	-3.9518E-05	-0.007831643	-1.762119602	3.784161258	2.540043553
83.665	0.007972029	-3.48412E-05	-0.006889462	-1.550129003	3.78417732	2.540043553
83.67	0.005127203	-2.07866E-05	-0.004059609	-0.913412106	3.784183964	2.540043553
83.675	0.003923771	-1.48434E-05	-0.002863658	-0.644323104	3.784187855	2.540043553
83.68	0.001788817	-4.33852E-06	-0.000750729	-0.168914013	3.784188664	2.540043553
83.685	-0.001587358	1.2411E-05	0.002615724	0.588537884	3.784189301	2.540043553
83.69	-0.002273508	1.58273E-05	0.003302003	0.742950639	3.784190607	2.540043553
83.695	-0.004430977	2.64479E-05	0.005434679	1.222802774	3.78419557	2.540043553
83.7	-0.008681915	4.76586E-05	0.009690413	2.180343016	3.78421462	2.540043553
83.705	-0.010097763	5.47854E-05	0.011119308	2.501844331	3.784240391	2.540043553
83.71	-0.012293461	6.57111E-05	0.013308872	2.994496162	3.784278587	2.540043553
83.715	-0.01641778	8.63889E-05	0.017449607	3.926161474	3.784346712	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
83.72	-0.017595801	9.24256E-05	0.018657682	4.19797841	3.784424964	2.540043553
83.725	-0.018093995	9.49919E-05	0.019171132	4.313504754	3.784507709	2.540043553
83.73	-0.019554022	0.000102397	0.020652328	4.6467737	3.784604347	2.540043553
83.735	-0.01929434	0.000101246	0.020418819	4.594234346	3.784698436	2.540043553
83.74	-0.018682277	9.82979E-05	0.019823614	4.460313254	3.784786649	2.540043553
83.745	-0.017701613	9.3538E-05	0.018862823	4.244135202	3.784865845	2.540043553
83.75	-0.014980776	8.00644E-05	0.01614493	3.632609322	3.784922566	2.540043553
83.755	-0.012678713	6.86306E-05	0.013840356	3.114080055	3.784963194	2.540043553
83.76	-0.010117	5.59236E-05	0.011281044	2.538234939	3.784989063	2.540043553
83.765	-0.006077783	3.58341E-05	0.007238675	1.628701971	3.784998399	2.540043553
83.77	-0.003335967	2.2166E-05	0.004490972	1.010468733	3.785001212	2.540043553
83.775	-0.001627569	1.36761E-05	0.002785255	0.626682404	3.785001882	2.540043553
83.78	0.001616074	-2.43887E-06	-0.000450324	-0.101322796	3.785002542	2.540043553
83.785	0.005060601	-1.96333E-05	-0.003899669	-0.87742562	3.785009014	2.540043553
83.79	0.006609192	-2.7428E-05	-0.005462373	-1.229033951	3.785020054	2.540043553
83.795	0.007663749	-3.27151E-05	-0.006521985	-1.467446635	3.785034899	2.540043553
83.8	0.01021083	-4.54306E-05	-0.009069235	-2.040577822	3.78506125	2.540043553
83.805	0.012160295	-5.52592E-05	-0.011037082	-2.483343556	3.785098623	2.540043553
83.81	0.011482316	-5.20119E-05	-0.010381311	-2.335795008	3.785131945	2.540043553
83.815	0.011154357	-5.04233E-05	-0.010060626	-2.263640842	3.785163391	2.540043553
83.82	0.012215309	-5.57718E-05	-0.011139698	-2.506432084	3.785201104	2.540043553
83.825	0.011654178	-5.31E-05	-0.010599811	-2.384957526	3.785235431	2.540043553
83.83	0.009883704	-4.43564E-05	-0.008834932	-1.987859717	3.785260121	2.540043553
83.835	0.009118972	-4.05703E-05	-0.008071061	-1.815988661	3.785281138	2.540043553
83.84	0.009073654	-4.03805E-05	-0.008032783	-1.807376098	3.785301946	2.540043553
83.845	0.008687578	-3.85248E-05	-0.007658453	-1.723151942	3.785321022	2.540043553
83.85	0.007379244	-3.20752E-05	-0.006357828	-1.430511228	3.785334784	2.540043553
83.855	0.006447776	-2.74669E-05	-0.005428857	-1.22149283	3.785345292	2.540043553
83.86	0.006337416	-2.6991E-05	-0.005332948	-1.199913219	3.785355442	2.540043553
83.865	0.003682203	-1.39217E-05	-0.002699843	-0.607464755	3.785358869	2.540043553
83.87	-0.001801454	1.32908E-05	0.002776272	0.624661255	3.785359689	2.540043553
83.875	-0.006447087	3.64843E-05	0.007437145	1.673357729	3.785370195	2.540043553
83.88	-0.009820688	5.33858E-05	0.010830004	2.436750851	3.78539457	2.540043553
83.885	-0.012469948	6.67102E-05	0.013502716	3.038111197	3.785433872	2.540043553
83.89	-0.013781732	7.33858E-05	0.014841085	3.339244228	3.785481876	2.540043553
83.895	-0.014507016	7.71273E-05	0.015591015	3.507978451	3.785535066	2.540043553
83.9	-0.014722419	7.83334E-05	0.015832691	3.56235543	3.785589848	2.540043553
83.905	-0.013915308	7.44233E-05	0.015043098	3.384697157	3.785638788	2.540043553
83.91	-0.013266313	7.12426E-05	0.014401004	3.240225825	3.785683269	2.540043553
83.915	-0.014311826	7.64707E-05	0.015456673	3.477751522	3.785735037	2.540043553
83.92	-0.017106531	9.04681E-05	0.018263833	4.109362537	3.785808998	2.540043553
83.925	-0.018583573	9.80134E-05	0.01977475	4.449318675	3.785896282	2.540043553
83.93	-0.016666789	8.86342E-05	0.017881167	4.023262481	3.785966489	2.540043553
83.935	-0.015375092	8.2243E-05	0.016591638	3.733118447	3.786026235	2.540043553
83.94	-0.016927485	9.00506E-05	0.018168008	4.08780178	3.786098656	2.540043553
83.945	-0.01697411	9.04695E-05	0.018252281	4.1067632	3.786171475	2.540043553
83.95	-0.014237017	7.69854E-05	0.015531222	3.494524954	3.786222704	2.540043553
83.955	-0.011899184	6.54142E-05	0.01319872	2.969711904	3.78625849	2.540043553
83.96	-0.010190509	5.69807E-05	0.011499738	2.587441051	3.786284736	2.540043553
83.965	-0.008079125	4.65331E-05	0.009396183	2.114141154	3.786301233	2.540043553
83.97	-0.006496171	3.87014E-05	0.007820162	1.759536438	3.786311899	2.540043553
83.975	-0.004794236	3.03238E-05	0.006135039	1.380383679	3.786317708	2.540043553
83.98	-0.000977427	1.14276E-05	0.002336981	0.525820613	3.78631795	2.540043553
83.985	0.003947869	-1.30918E-05	-0.002585652	-0.581771664	3.786321889	2.540043553
83.99	0.007985507	-3.32688E-05	-0.006631839	-1.492163763	3.786338006	2.540043553
83.995	0.011166724	-4.91868E-05	-0.009821078	-2.209742561	3.786369521	2.540043553
84	0.013831654	-6.25296E-05	-0.01249214	-2.810731457	3.786417874	2.540043553
84.005	0.017024564	-7.84977E-05	-0.015679178	-3.527815161	3.786491128	2.540043553
84.01	0.020836633	-9.78225E-05	-0.019513234	-4.390477607	3.786600859	2.540043553
84.015	0.022389899	-0.000105817	-0.021098501	-4.747162626	3.78672756	2.540043553
84.02	0.022687083	-0.000107387	-0.021409584	-4.817156438	3.786857647	2.540043553
84.025	0.02615669	-0.000124942	-0.024888351	-5.599879075	3.787030566	2.540043553
84.03	0.029687609	-0.000142988	-0.02846184	-6.403914047	3.78725332	2.540043553
84.035	0.028881827	-0.000139152	-0.027685922	-6.229332494	3.787464147	2.540043553
84.04	0.02758158	-0.000132702	-0.026384016	-5.936403652	3.787656418	2.540043553
84.045	0.027369316	-0.000131766	-0.026195053	-5.893886953	3.787845741	2.540043553
84.05	0.024691212	-0.000118379	-0.02349497	-5.286368329	3.787999826	2.540043553
84.055	0.021593566	-0.00010273	-0.020341653	-4.576871869	3.788117675	2.540043553
84.06	0.022108081	-0.000105266	-0.020854367	-4.692232463	3.788241206	2.540043553
84.065	0.024663404	-0.000118185	-0.023461535	-5.27884548	3.788394945	2.540043553
84.07	0.026802537	-0.00012907	-0.025656374	-5.772684211	3.788576508	2.540043553
84.075	0.02807466	-0.0001356	-0.026972372	-6.068783752	3.788775715	2.540043553
84.08	0.029274757	-0.000141748	-0.02821102	-6.347479493	3.788992317	2.540043553
84.085	0.032094335	-0.000156092	-0.031054802	-6.987330551	3.789252652	2.540043553
84.09	0.035539342	-0.000173727	-0.034542267	-7.772009992	3.789571875	2.540043553
84.095	0.03557912	-0.000174317	-0.034645491	-7.795235446	3.789891814	2.540043553
84.1	0.029214055	-0.000143124	-0.028354262	-6.379708963	3.790107518	2.540043553
84.105	0.019023223	-9.25925E-05	-0.018187699	-4.092232241	3.790198981	2.540043553
84.11	0.013303859	-6.40054E-05	-0.012448509	-2.800914541	3.790243714	2.540043553
84.115	0.013486495	-6.49491E-05	-0.012639703	-2.84393315	3.790289684	2.540043553
84.12	0.008497113	-4.03125E-05	-0.007698226	-1.732100774	3.790307933	2.540043553
84.125	-0.003580411	2.00673E-05	0.00438264	0.986093897	3.790311173	2.540043553
84.13	-0.009199482	4.85488E-05	0.010069289	2.265589985	3.790332562	2.540043553
84.135	-0.007040145	3.78973E-05	0.007918951	1.781763895	3.790345089	2.540043553
84.14	-0.00957285	5.04444E-05	0.010447485	2.350684041	3.79036825	2.540043553
84.145	-0.015002731	7.78604E-05	0.015913884	3.580623864	3.790425137	2.540043553
84.15	-0.013957983	7.28791E-05	0.014903567	3.353302517	3.790474378	2.540043553
84.155	-0.012110365	6.36361E-05	0.013038439	2.933648806	3.790511445	2.540043553
84.16	-0.015802089	8.21111E-05	0.016760815	3.771183287	3.790574556	2.540043553
84.165	-0.016843359	8.75634E-05	0.017841429	4.014321632	3.790646258	2.540043553
84.17	-0.012103474	6.42231E-05	0.013132346	2.954777929	3.790683283	2.540043553
84.175	-0.010726437	5.73523E-05	0.01174787	2.643270859	3.790712363	2.540043553
84.18	-0.013267543	7.00438E-05	0.014309665	3.219674698	3.790756852	2.540043553
84.185	-0.011898272	6.34576E-05	0.012979806	2.920456271	3.790792633	2.540043553
84.19	-0.008377107	4.60646E-05	0.009473673	2.131576444	3.790810369	2.540043553
84.195	-0.007924387	4.38507E-05	0.009028236	2.031352996	3.79082624	2.540043553
84.2	-0.007014656	3.94714E-05	0.008146219	1.832899324	3.790838676	2.540043553
84.205	-0.003139694	2.03176E-05	0.00429268	0.965853091	3.790841168	2.540043553
84.21	-0.00027148	6.04944E-06	0.00142471	0.320559773	3.790841186	2.540043553
84.215	0.001160282	-1.05705E-06	-2.90739E-06	-0.000654162	3.790841527	2.540043553
84.22	0.00371569	-1.37533E-05	-0.00255212	-0.574226991	3.790845016	2.540043553
84.225	0.005508023	-2.27178E-05	-0.00435105	-0.978986183	3.790852684	2.540043553
84.23	0.00547604	-2.25881E-05	-0.004324497	-0.973011816	3.790860263	2.540043553
84.235	0.00622138	-2.62929E-05	-0.005068241	-1.140354217	3.790870045	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
84.24	0.006657823	-2.85007E-05	-0.005510914	-1.239955735	3.790881248	2.540043553
84.245	0.005569358	-2.30838E-05	-0.004417112	-0.993850311	3.790889088	2.540043553
84.25	0.006182603	-2.60811E-05	-0.005022424	-1.1300453	3.790898749	2.540043553
84.255	0.007375812	-3.2036E-05	-0.006220076	-1.399516988	3.790912499	2.540043553
84.26	0.006601213	-2.81982E-05	-0.005445078	-1.225142635	3.790923512	2.540043553
84.265	0.007056674	-3.04366E-05	-0.00589714	-1.326856471	3.790936098	2.540043553
84.27	0.007207464	-3.12523E-05	-0.006060424	-1.363595434	3.790949227	2.540043553
84.275	0.003613061	-1.34192E-05	-0.002461703	-0.553883109	3.790952526	2.540043553
84.28	0.002236234	-6.43946E-06	-0.001054401	-0.237240291	3.79095379	2.540043553
84.285	0.004467512	-1.74297E-05	-0.00327308	-0.73644294	3.790958835	2.540043553
84.29	0.004500912	-1.75877E-05	-0.003304681	-0.743553305	3.790963955	2.540043553
84.295	0.005059433	-2.02587E-05	-0.003843889	-0.864875074	3.790970424	2.540043553
84.3	0.008167246	-3.56343E-05	-0.00694157	-1.561853273	3.790987283	2.540043553
84.305	0.009721133	-4.33785E-05	-0.008493951	-1.911138866	3.791011167	2.540043553
84.31	0.011278737	-5.11196E-05	-0.010045102	-2.260147855	3.791043318	2.540043553
84.315	0.012494255	-5.72532E-05	-0.011273728	-2.536588851	3.791082773	2.540043553
84.32	0.010013147	-4.50341E-05	-0.008807078	-1.981592597	3.791108114	2.540043553
84.325	0.008938673	-3.96458E-05	-0.007720098	-1.737022037	3.791128308	2.540043553
84.33	0.010473409	-4.72722E-05	-0.009259881	-2.083473261	3.791156031	2.540043553
84.335	0.009198339	-4.10198E-05	-0.007997417	-1.799418758	3.791177416	2.540043553
84.34	0.008090123	-3.54853E-05	-0.006881009	-1.548227023	3.791193958	2.540043553
84.345	0.008984918	-3.99185E-05	-0.007776217	-1.749648934	3.791214361	2.540043553
84.35	0.008052089	-3.53121E-05	-0.006846085	-1.540369065	3.791230748	2.540043553
84.355	0.008438798	-3.71692E-05	-0.007221542	-1.624846904	3.791248746	2.540043553
84.36	0.010558527	-4.77129E-05	-0.009349562	-2.103651515	3.791276923	2.540043553
84.365	0.009109779	-4.05869E-05	-0.00791077	-1.779923277	3.791297897	2.540043553
84.37	0.008828638	-3.9096E-05	-0.007610214	-1.712298086	3.791317597	2.540043553
84.375	0.012837968	-5.89803E-05	-0.011619601	-2.614410188	3.791359252	2.540043553
84.38	0.013676789	-6.32674E-05	-0.012475963	-2.807091569	3.791406528	2.540043553
84.385	0.013054732	-6.01674E-05	-0.011850049	-2.666261055	3.791449602	2.540043553
84.39	0.016577023	-7.7735E-05	-0.015373764	-3.459096887	3.791519055	2.540043553
84.395	0.017950024	-8.47725E-05	-0.016781398	-3.775814557	3.791600489	2.540043553
84.4	0.016012119	-7.51535E-05	-0.01483944	-3.338873939	3.791665289	2.540043553
84.405	0.017993286	-8.50506E-05	-0.016837218	-3.7883741	3.791747116	2.540043553
84.41	0.020407812	-9.72921E-05	-0.019284937	-4.339110912	3.791852377	2.540043553
84.415	0.018029023	-8.55707E-05	-0.016918701	-3.806707688	3.791934529	2.540043553
84.42	0.016654	-7.8708E-05	-0.015534264	-3.495209478	3.792004629	2.540043553
84.425	0.018486361	-8.79353E-05	-0.017397191	-3.914367929	3.792091002	2.540043553
84.43	0.018076393	-8.60548E-05	-0.017017224	-3.828875362	3.792173586	2.540043553
84.435	0.01539537	-7.27318E-05	-0.014329201	-3.22407024	3.79223349	2.540043553
84.44	0.014875112	-7.01134E-05	-0.013801684	-3.105378931	3.792289414	2.540043553
84.445	0.016914287	-8.03324E-05	-0.015864585	-3.569531717	3.792361722	2.540043553
84.45	0.018783099	-8.97753E-05	-0.017769455	-3.998127279	3.79245089	2.540043553
84.455	0.019975863	-9.58459E-05	-0.018993419	-4.273519265	3.792551743	2.540043553
84.46	0.022072829	-0.000106457	-0.0211166	-4.751234906	3.792674881	2.540043553
84.465	0.023574519	-0.000114185	-0.022660427	-5.098596023	3.792815343	2.540043553
84.47	0.022082252	-0.000106955	-0.021200509	-4.770114444	3.792938587	2.540043553
84.475	0.020453332	-9.89454E-05	-0.019584328	-4.406473772	3.793044318	2.540043553
84.48	0.021041122	-0.000102035	-0.020208271	-4.546860891	3.793156214	2.540043553
84.485	0.020500101	-9.95821E-05	-0.019712896	-4.435401694	3.793262429	2.540043553
84.49	0.01716708	-8.31669E-05	-0.016402959	-3.690665736	3.793336914	2.540043553
84.495	0.013003999	-6.2677E-05	-0.012276244	-2.762154888	3.793379654	2.540043553
84.5	0.008277038	-3.93358E-05	-0.007581162	-1.705761394	3.793396969	2.540043553
84.505	0.002229572	-9.33978E-06	-0.001556171	-0.350138474	3.793398225	2.540043553
84.51	-0.004366417	2.3537E-05	0.005036754	1.133269758	3.793403044	2.540043553
84.515	-0.009463852	4.90957E-05	0.010154714	2.284810599	3.793425681	2.540043553
84.52	-0.010588864	5.48541E-05	0.011306918	2.544056614	3.793454019	2.540043553
84.525	-0.0091753	4.78045E-05	0.009883543	2.223797286	3.793475296	2.540043553
84.53	-0.009880162	5.12343E-05	0.010576181	2.379640695	3.793499968	2.540043553
84.535	-0.012452776	6.40404E-05	0.013144356	2.957479998	3.793539161	2.540043553
84.54	-0.014533268	7.44015E-05	0.015215831	3.423561897	3.793592544	2.540043553
84.545	-0.018008998	9.17479E-05	0.018680283	4.203063714	3.793674514	2.540043553
84.55	-0.022017607	0.000111939	0.022699373	5.107359005	3.793797037	2.540043553
84.555	-0.02307423	0.000117323	0.023770323	5.348322621	3.793931601	2.540043553
84.56	-0.024361058	0.000123746	0.025047849	5.635765982	3.794081593	2.540043553
84.565	-0.028905278	0.000146605	0.029591184	6.6580164	3.794292762	2.540043553
84.57	-0.032452498	0.00016459	0.033162643	7.461594627	3.79455894	2.540043553
84.575	-0.033367311	0.000169297	0.034096822	7.671784868	3.794840337	2.540043553
84.58	-0.034842849	0.000176761	0.035577915	8.005030951	3.79514717	2.540043553
84.585	-0.037484194	0.000190111	0.038225877	8.60082239	3.795502288	2.540043553
84.59	-0.040294663	0.000204354	0.041049145	9.236057513	3.795912654	2.540043553
84.595	-0.042382497	0.000214993	0.043156993	9.710323484	3.796366646	2.540043553
84.6	-0.043371233	0.000220075	0.04416338	9.936760507	3.796842069	2.540043553
84.605	-0.045478113	0.000230755	0.046278008	10.41255177	3.797364803	2.540043553
84.61	-0.048266386	0.000244952	0.049087256	11.04463252	3.7979536	2.540043553
84.615	-0.0481503	0.000244552	0.048998992	11.02477317	3.798539568	2.540043553
84.62	-0.047499397	0.00024134	0.048350412	10.87884274	3.7991098	2.540043553
84.625	-0.049750095	0.000252739	0.05062753	11.39119429	3.799735353	2.540043553
84.63	-0.05139209	0.000261175	0.05229555	11.76649881	3.800402879	2.540043553
84.635	-0.051140344	0.000260041	0.052066439	11.71494875	3.801063882	2.540043553
84.64	-0.052110735	0.000265024	0.053056364	11.93768183	3.801750208	2.540043553
84.645	-0.053198133	0.000270653	0.054162492	12.18656073	3.802465476	2.540043553
84.65	-0.053105225	0.000270337	0.054098445	12.1721501	3.803178247	2.540043553
84.655	-0.05343679	0.000272156	0.054457355	12.25290486	3.803899947	2.540043553
84.66	-0.052709972	0.000268688	0.053757119	12.09535175	3.804602148	2.540043553
84.665	-0.050255444	0.000256465	0.051290226	11.54030084	3.805240474	2.540043553
84.67	-0.049458667	0.000252535	0.050497552	11.36194914	3.805858719	2.540043553
84.675	-0.049342833	0.000252122	0.050414428	11.3432464	3.806474071	2.540043553
84.68	-0.046019937	0.000235714	0.047107122	10.59910253	3.807009335	2.540043553
84.685	-0.042989092	0.000220716	0.044086887	9.919549589	3.807476417	2.540043553
84.69	-0.043031602	0.000221009	0.044146522	9.932967344	3.807944422	2.540043553
84.695	-0.040863529	0.000210429	0.042017008	9.453826775	3.808366456	2.540043553
84.7	-0.036346581	0.00018804	0.037515771	8.441048462	3.808700346	2.540043553
84.705	-0.034093267	0.000176841	0.035266316	7.934921167	3.80899412	2.540043553
84.71	-0.032139204	0.000167186	0.033328229	7.498851437	3.809255183	2.540043553
84.715	-0.028678519	0.000149996	0.029879619	6.722914363	3.809463052	2.540043553
84.72	-0.026704231	0.00014013	0.027901799	6.277904743	3.809643286	2.540043553
84.725	-0.026580806	0.000139502	0.027776159	6.249635754	3.809821858	2.540043553
84.73	-0.026356539	0.000138418	0.027558588	6.200682299	3.809997428	2.540043553
84.735	-0.025570617	0.000134544	0.026782228	6.026001215	3.810162685	2.540043553
84.74	-0.024758377	0.000130524	0.025976871	5.844795985	3.810317609	2.540043553
84.745	-0.024293827	0.000128234	0.025518188	5.741592235	3.810466775	2.540043553
84.75	-0.02373569	0.000125486	0.024967784	5.617751369	3.810609165	2.540043553
84.755	-0.023153018	0.000122612	0.024392152	5.488234143	3.81074465	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
84.76	-0.022523287	0.000119514	0.023771881	5.348673279	3.810872865	2.540043553
84.765	-0.02113612	0.000112629	0.02239366	5.038573592	3.810985773	2.540043553
84.77	-0.020484235	0.000109359	0.021739062	4.891288855	3.811091825	2.540043553
84.775	-0.021110945	0.000112489	0.022371257	5.033532907	3.811204464	2.540043553
84.78	-0.020497279	0.000109483	0.021764107	4.896924025	3.81131065	2.540043553
84.785	-0.019387295	0.000103947	0.020656262	4.647658972	3.811405648	2.540043553
84.79	-0.020043825	0.000107195	0.021312004	4.795201012	3.811507188	2.540043553
84.795	-0.021247945	0.000113225	0.022529241	5.069079262	3.811621294	2.540043553
84.8	-0.021979033	0.000116933	0.023277614	5.237463219	3.811743388	2.540043553
84.805	-0.022184623	0.000118058	0.023504506	5.288513858	3.811867776	2.540043553
84.81	-0.021467638	0.000114609	0.022808034	5.131807739	3.811984254	2.540043553
84.815	-0.020071209	0.000107781	0.02142984	4.821713968	3.812086072	2.540043553
84.82	-0.017591974	9.55623E-05	0.01897898	4.270270415	3.812164289	2.540043553
84.825	-0.01458356	8.06696E-05	0.016001632	3.600367207	3.812218043	2.540043553
84.83	-0.012159219	6.8672E-05	0.013604585	3.061031513	3.812255409	2.540043553
84.835	-0.009133246	5.36873E-05	0.010612616	2.387838578	3.812276492	2.540043553
84.84	-0.005894841	3.76074E-05	0.007404293	1.665965951	3.812285275	2.540043553
84.845	-0.003384352	2.51618E-05	0.004922697	1.107606888	3.81228817	2.540043553
84.85	0.000652843	5.03152E-06	0.000911802	0.205155375	3.812288277	2.540043553
84.855	0.005714395	-2.04323E-05	-0.004156615	-0.93523846	3.81229653	2.540043553
84.86	0.008955035	-3.68167E-05	-0.007414804	-1.66833079	3.812316798	2.540043553
84.865	0.010850592	-4.64358E-05	-0.009326563	-2.098476676	3.812346555	2.540043553
84.87	0.011612228	-5.03582E-05	-0.010105905	-2.273828724	3.812380635	2.540043553
84.875	0.011273079	-4.86891E-05	-0.009768809	-2.197981999	3.812412754	2.540043553
84.88	0.012457275	-5.46195E-05	-0.010952421	-2.464294661	3.812451976	2.540043553
84.885	0.014906981	-6.69715E-05	-0.013405282	-3.016188386	3.812508139	2.540043553
84.89	0.015862618	-7.18645E-05	-0.014376573	-3.234728949	3.812571735	2.540043553
84.895	0.015582882	-7.05109E-05	-0.014103198	-3.173219625	3.812633107	2.540043553
84.9	0.015686318	-7.10408E-05	-0.01421022	-3.197299476	3.812695297	2.540043553
84.905	0.01680435	-7.66741E-05	-0.015331109	-3.449499427	3.812766667	2.540043553
84.91	0.018041265	-8.29605E-05	-0.016578437	-3.730148252	3.812848931	2.540043553
84.915	0.017458013	-8.01279E-05	-0.016006248	-3.601405869	3.812925962	2.540043553
84.92	0.015306414	-6.93564E-05	-0.013832194	-3.112243642	3.812985176	2.540043553
84.925	0.013554416	-6.05264E-05	-0.012051246	-2.711530362	3.81303161	2.540043553
84.93	0.012962401	-5.75108E-05	-0.011443245	-2.574730054	3.813074077	2.540043553
84.935	0.012827851	-5.68101E-05	-0.011301999	-2.542949748	3.813115666	2.540043553
84.94	0.012464954	-5.49623E-05	-0.010929519	-2.459141691	3.813154936	2.540043553
84.945	0.012379621	-5.44997E-05	-0.010836337	-2.438175856	3.81319367	2.540043553
84.95	0.01236936	-5.44278E-05	-0.010821816	-2.434908604	3.813232339	2.540043553
84.955	0.011833347	-5.16868E-05	-0.010269365	-2.310607166	3.81326773	2.540043553
84.96	0.012743185	-5.61669E-05	-0.011174037	-2.514158393	3.813308772	2.540043553
84.965	0.015414662	-6.95555E-05	-0.013875745	-3.122042557	3.813368827	2.540043553
84.97	0.017271477	-7.89032E-05	-0.015760554	-3.546124681	3.81344422	2.540043553
84.975	0.018981872	-8.74936E-05	-0.017477676	-3.932477142	3.813535286	2.540043553
84.98	0.021530442	-0.000100323	-0.020021772	-4.504898723	3.813652447	2.540043553
84.985	0.023384315	-0.000109689	-0.021878159	-4.922585794	3.813790652	2.540043553
84.99	0.025334353	-0.000119507	-0.023823164	-5.360211917	3.813952869	2.540043553
84.995	0.028837451	-0.000137144	-0.027315586	-6.146006937	3.814163048	2.540043553
85	0.032804127	-0.000157302	-0.0313038	-7.043354978	3.814435025	2.540043553
85.005	0.035329206	-0.000170248	-0.033863389	-7.619262634	3.814750485	2.540043553
85.01	0.0353449	-0.000170497	-0.033907735	-7.629240335	3.815066225	2.540043553
85.015	0.035387442	-0.000170791	-0.033967029	-7.642581448	3.815382725	2.540043553
85.02	0.03765693	-0.00018236	-0.036256805	-8.157781234	3.815741123	2.540043553
85.025	0.038682678	-0.000187739	-0.037319495	-8.396886283	3.816119312	2.540043553
85.03	0.037138719	-0.000180082	-0.03577347	-8.049030829	3.816467914	2.540043553
85.035	0.036491919	-0.000176875	-0.035126273	-7.903411371	3.81680448	2.540043553
85.04	0.036975224	-0.000179397	-0.03563553	-8.017994264	3.817150019	2.540043553
85.045	0.037299353	-0.000181132	-0.03598593	-8.096834241	3.817501643	2.540043553
85.05	0.037324499	-0.000181368	-0.036033499	-8.107537188	3.817853741	2.540043553
85.055	0.036130849	-0.000175425	-0.034833647	-7.837570503	3.818183679	2.540043553
85.06	0.035650363	-0.000173012	-0.03434686	-7.728043607	3.8185049	2.540043553
85.065	0.037485841	-0.000182342	-0.036230418	-8.151844107	3.818860049	2.540043553
85.07	0.037793641	-0.000184038	-0.036572537	-8.228820928	3.819221054	2.540043553
85.075	0.036250509	-0.000176308	-0.035011903	-7.877678132	3.819553181	2.540043553
85.08	0.037005063	-0.000180138	-0.035785419	-8.051719337	3.819899278	2.540043553
85.085	0.038591662	-0.000188265	-0.0374233	-8.42024251	3.82027569	2.540043553
85.09	0.03829763	-0.000186911	-0.037149003	-8.358525666	3.820646388	2.540043553
85.095	0.038071776	-0.000185863	-0.036937352	-8.310904154	3.821012726	2.540043553
85.1	0.038505192	-0.000188176	-0.037404477	-8.416007274	3.821387452	2.540043553
85.105	0.038290362	-0.00018725	-0.037217379	-8.373910361	3.821758009	2.540043553
85.11	0.037504353	-0.000183457	-0.03645163	-8.201616671	3.822113509	2.540043553
85.115	0.035364996	-0.000172862	-0.034313417	-7.720518911	3.822429608	2.540043553
85.12	0.030880449	-0.000150625	-0.029830905	-6.711953571	3.822670622	2.540043553
85.125	0.025291376	-0.000122998	-0.024270146	-5.46078293	3.822832289	2.540043553
85.13	0.018710648	-9.03643E-05	-0.017712503	-3.985313133	3.822920771	2.540043553
85.135	0.010028967	-4.71212E-05	-0.009040077	-2.034017434	3.822946192	2.540043553
85.14	0.000336651	1.42476E-06	0.000673842	0.15161436	3.82294622	2.540043553
85.145	-0.007154718	3.92304E-05	0.008223185	1.8502166	3.822959158	2.540043553
85.15	-0.008831025	4.80047E-05	0.009973415	2.244018349	3.822978869	2.540043553
85.155	-0.004935298	2.88543E-05	0.006108559	1.374425719	3.822985025	2.540043553
85.16	-0.00133756	1.10113E-05	0.002512049	0.565210985	3.822985477	2.540043553
85.165	-0.002759887	1.80004E-05	0.00392322	0.882724552	3.822987402	2.540043553
85.17	-0.006919578	3.8701E-05	0.008098633	1.822192511	3.822999503	2.540043553
85.175	-0.008338492	4.59478E-05	0.009559023	2.150780236	3.823017077	2.540043553
85.18	-0.005743818	3.32274E-05	0.006991226	1.573025803	3.823025415	2.540043553
85.185	-0.003938562	2.42712E-05	0.005184717	1.166561414	3.823029335	2.540043553
85.19	-0.006199192	3.54992E-05	0.00745138	1.676560506	3.823039048	2.540043553
85.195	-0.008057522	4.4894E-05	0.009346527	2.102968646	3.823055457	2.540043553
85.2	-0.005408399	3.19346E-05	0.006730511	1.514364983	3.82306285	2.540043553
85.205	-0.002644525	1.82504E-05	0.003970899	0.893452233	3.823064618	2.540043553
85.21	-0.003657384	2.33119E-05	0.004992932	1.12340965	3.823067998	2.540043553
85.215	-0.003349523	2.19709E-05	0.004721974	1.0624442	3.823070834	2.540043553
85.22	0.001241188	-6.97074E-07	0.000154181	0.034690786	3.823071223	2.540043553
85.225	0.003644382	-1.26753E-05	-0.002256377	-0.507684781	3.82307458	2.540043553
85.23	0.002695908	-7.9139E-06	-0.001294916	-0.291356125	3.823076417	2.540043553
85.235	0.004908025	-1.87682E-05	-0.003481926	-0.783433462	3.823082505	2.540043553
85.24	0.007738595	-3.28406E-05	-0.00631092	-1.419956929	3.823097641	2.540043553
85.245	0.006247987	-2.54381E-05	-0.004816305	-1.083668652	3.823107507	2.540043553
85.25	0.006049662	-2.43021E-05	-0.004587348	-1.03215322	3.823116757	2.540043553
85.255	0.008755197	-3.76613E-05	-0.007279552	-1.637899157	3.823136131	2.540043553
85.26	0.008861696	-3.81779E-05	-0.007381389	-1.660812447	3.823155978	2.540043553
85.265	0.008628509	-3.69087E-05	-0.007125149	-1.603158535	3.823174795	2.540043553
85.27	0.010921426	-4.82187E-05	-0.009399967	-2.114992555	3.823204942	2.540043553
85.275	0.011588632	-5.15422E-05	-0.010066805	-2.265031205	3.823238884	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
85.28	0.010649687	-4.6829E-05	-0.009115096	-2.05089659	3.823267549	2.540043553
85.285	0.011485848	-5.0907E-05	-0.00993859	-2.236182708	3.823300891	2.540043553
85.29	0.012670758	-5.67902E-05	-0.011120686	-2.502154418	3.823341468	2.540043553
85.295	0.012260844	-5.47822E-05	-0.010715157	-2.410910247	3.823379463	2.540043553
85.3	0.010815072	-4.76121E-05	-0.009267693	-2.085230967	3.823409025	2.540043553
85.305	0.008865648	-3.79147E-05	-0.007311256	-1.645032493	3.82342889	2.540043553
85.31	0.006920474	-2.82065E-05	-0.005353904	-1.204628331	3.823440995	2.540043553
85.315	0.005140838	-1.93094E-05	-0.003561117	-0.801251229	3.823447674	2.540043553
85.32	0.002864357	-7.93309E-06	-0.001270166	-0.28578739	3.823449748	2.540043553
85.325	0.000446856	4.2094E-06	0.001173418	0.264019078	3.823449798	2.540043553
85.33	-0.00041586	8.69049E-06	0.002074783	0.46682615	3.823449842	2.540043553
85.335	0.000685509	3.40118E-06	0.001006742	0.226517005	3.823449961	2.540043553
85.34	0.002403727	-4.98123E-06	-0.000684949	-0.154113612	3.823451421	2.540043553
85.345	0.004500539	-1.52396E-05	-0.002753888	-0.619624744	3.82345654	2.540043553
85.35	0.007580324	-3.04028E-05	-0.005809598	-1.307159467	3.823471063	2.540043553
85.355	0.011105437	-4.78139E-05	-0.009314893	-2.095850886	3.823502234	2.540043553
85.36	0.014876016	-6.64566E-05	-0.013060271	-2.938560932	3.823558164	2.540043553
85.365	0.019011868	-8.70434E-05	-0.017187914	-3.867280726	3.823649518	2.540043553
85.37	0.022743112	-0.000105654	-0.020915772	-4.706048696	3.823780248	2.540043553
85.375	0.026237347	-0.000123069	-0.024400908	-5.490204281	3.823954235	2.540043553
85.38	0.030400427	-0.000143855	-0.028556967	-6.425317528	3.824187814	2.540043553
85.385	0.035178943	-0.000167799	-0.033339332	-7.501349685	3.824500596	2.540043553
85.39	0.04086907	-0.000196444	-0.039038564	-8.783676917	3.824922745	2.540043553
85.395	0.046905619	-0.000227173	-0.045102046	-10.14796038	3.82547881	2.540043553
85.4	0.050985408	-0.000248085	-0.049224275	-11.07546182	3.826135814	2.540043553
85.405	0.053285298	-0.000259941	-0.051559642	-11.60091942	3.826853427	2.540043553
85.41	0.056220945	-0.000274999	-0.054524228	-12.26795129	3.82765229	2.540043553
85.415	0.059269243	-0.000290688	-0.05761113	-12.96250434	3.82854013	2.540043553
85.42	0.06082087	-0.000298805	-0.059207435	-13.32167297	3.829475065	2.540043553
85.425	0.062155098	-0.0003058	-0.060582734	-13.63111509	3.830451468	2.540043553
85.43	0.063751544	-0.000314171	-0.062228042	-14.00130943	3.831478674	2.540043553
85.435	0.063328434	-0.000312343	-0.061854056	-13.91716256	3.83249229	2.540043553
85.44	0.060928399	-0.000300443	-0.059452141	-13.37673177	3.833430533	2.540043553
85.445	0.058825199	-0.000290006	-0.057347375	-12.90315928	3.834305119	2.540043553
85.45	0.056267483	-0.000277296	-0.054785965	-12.32684214	3.835105305	2.540043553
85.455	0.051317746	-0.000252942	-0.049883609	-11.22381199	3.835770902	2.540043553
85.46	0.045771424	-0.000225492	-0.044365852	-9.982316717	3.8363004	2.540043553
85.465	0.040826708	-0.000200953	-0.039439981	-8.873995645	3.836721674	2.540043553
85.47	0.035838555	-0.000176113	-0.034460174	-7.753539182	3.837046296	2.540043553
85.475	0.032139183	-0.000157612	-0.030755071	-6.919890915	3.837307359	2.540043553
85.48	0.030488107	-0.00014932	-0.029095518	-6.546491517	3.837542288	2.540043553
85.485	0.030576047	-0.000149704	-0.029175156	-6.564410014	3.837778574	2.540043553
85.49	0.033407504	-0.000163821	-0.032024361	-7.20548117	3.838060649	2.540043553
85.495	0.03710031	-0.00018225	-0.035739865	-8.041469527	3.83840853	2.540043553
85.5	0.03838092	-0.000188767	-0.037052708	-8.336859318	3.838780842	2.540043553
85.505	0.039941731	-0.00019661	-0.038631944	-8.692187359	3.83918405	2.540043553
85.51	0.044695046	-0.000220419	-0.043421816	-9.769908608	3.839688938	2.540043553
85.515	0.048547162	-0.000239992	-0.047354935	-10.65486032	3.840284605	2.540043553
85.52	0.045492426	-0.000225355	-0.044400415	-9.990093333	3.840807668	2.540043553
85.525	0.036040479	-0.000178756	-0.035013262	-7.877984036	3.841135958	2.540043553
85.53	0.028432069	-0.000140909	-0.027412798	-6.167879634	3.841340269	2.540043553
85.535	0.027426711	-0.000135924	-0.026417458	-5.943927959	3.841530387	2.540043553
85.54	0.027258555	-0.000135333	-0.026298057	-5.917062797	3.841718181	2.540043553
85.545	0.021897054	-0.00010887	-0.021009337	-4.72710083	3.841839366	2.540043553
85.55	0.011437464	-5.66563E-05	-0.010594239	-2.383703763	3.841872428	2.540043553
85.555	-0.00101096	5.95163E-06	0.001862084	0.418968796	3.841872686	2.540043553
85.56	-0.008569915	4.43467E-05	0.009484193	2.133943482	3.841891249	2.540043553
85.565	-0.006789027	3.56714E-05	0.007729931	1.739234394	3.841902898	2.540043553
85.57	-0.001799672	1.09252E-05	0.002739984	0.616496368	3.841903716	2.540043553
85.575	-0.001848968	1.09884E-05	0.002754622	0.61978988	3.84190458	2.540043553
85.58	-0.006187294	3.24115E-05	0.007076541	1.592221613	3.841914256	2.540043553
85.585	-0.009756624	5.01585E-05	0.010636855	2.393292463	3.841938315	2.540043553
85.59	-0.010720457	5.49862E-05	0.01159411	2.608674659	3.841967362	2.540043553
85.595	-0.010892048	5.58035E-05	0.01175614	2.645131462	3.841997346	2.540043553
85.6	-0.012736868	6.4866E-05	0.013552492	3.049310775	3.842038348	2.540043553
85.605	-0.016726775	8.48044E-05	0.017502233	3.938002418	3.842109061	2.540043553
85.61	-0.019919596	0.000100978	0.020703675	4.65832685	3.842209346	2.540043553
85.615	-0.020667372	0.000104776	0.021455116	4.827401198	3.842317302	2.540043553
85.62	-0.022855503	0.000115757	0.023627202	5.316120493	3.842449328	2.540043553
85.625	-0.027412239	0.000138826	0.028187086	6.342094266	3.842639245	2.540043553
85.63	-0.029922472	0.000151634	0.03071697	6.911318188	3.842865538	2.540043553
85.635	-0.030996155	0.000157111	0.031798214	7.154598224	3.843108362	2.540043553
85.64	-0.033297478	0.00016878	0.034101358	7.672805499	3.843388582	2.540043553
85.645	-0.035746777	0.000181233	0.036558003	8.225550743	3.843711542	2.540043553
85.65	-0.038452056	0.000195005	0.039273458	8.836527973	3.844085235	2.540043553
85.655	-0.040102272	0.000203498	0.040947334	9.213150147	3.844491692	2.540043553
85.66	-0.039162851	0.000198825	0.040003641	9.000819252	3.844879328	2.540043553
85.665	-0.040675037	0.00020645	0.041528993	9.34402345	3.845297478	2.540043553
85.67	-0.044927476	0.00022815	0.04580238	10.30553556	3.84580763	2.540043553
85.675	-0.045129637	0.000229372	0.046028659	10.35644823	3.846322384	2.540043553
85.68	-0.043801219	0.000222651	0.044671945	10.05118766	3.84680728	2.540043553
85.685	-0.046856082	0.000238053	0.047751455	10.74407739	3.847362171	2.540043553
85.69	-0.050395752	0.000256195	0.051319931	11.54698445	3.848004066	2.540043553
85.695	-0.050911809	0.000258984	0.051868238	11.67035356	3.848659174	2.540043553
85.7	-0.051360426	0.00026134	0.052331518	11.7745916	3.849325878	2.540043553
85.705	-0.054058591	0.00027513	0.055041052	12.3842367	3.850064471	2.540043553
85.71	-0.057199546	0.000291275	0.058208509	13.09691452	3.850891387	2.540043553
85.715	-0.057567542	0.000293368	0.058612779	13.18787529	3.851728976	2.540043553
85.72	-0.056902936	0.000290102	0.057953423	13.03952016	3.852547338	2.540043553
85.725	-0.059262909	0.000302192	0.060348909	13.57850441	3.853434988	2.540043553
85.73	-0.061621969	0.000314413	0.06274428	14.11746303	3.854394714	2.540043553
85.735	-0.060358277	0.000308212	0.061492112	13.83572518	3.85531548	2.540043553
85.74	-0.059582113	0.000304359	0.06071442	13.66074443	3.856212718	2.540043553
85.745	-0.061701824	0.000315256	0.062909409	14.15461708	3.857174933	2.540043553
85.75	-0.062906738	0.000321607	0.064153632	14.4345672	3.858175095	2.540043553
85.755	-0.061851828	0.000316444	0.063111055	14.19998732	3.859141994	2.540043553
85.76	-0.061459957	0.000314584	0.062735585	14.11550654	3.860096679	2.540043553
85.765	-0.062448088	0.000319775	0.063783701	14.35133264	3.86108231	2.540043553
85.77	-0.062259027	0.000319032	0.06363355	14.31754882	3.862061982	2.540043553
85.775	-0.060983911	0.000312725	0.06236039	14.03108786	3.863001935	2.540043553
85.78	-0.061055873	0.000313253	0.062467138	14.05510608	3.863944109	2.540043553
85.785	-0.060644044	0.000311397	0.062092267	13.9707601	3.864873615	2.540043553
85.79	-0.057555049	0.000295899	0.058966425	13.26744573	3.865710841	2.540043553
85.795	-0.055706142	0.000286597	0.057091821	12.84565963	3.866495141	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
85.8	-0.056348756	0.00029003	0.057785	13.00162498	3.86729764	2.540043553
85.805	-0.054628375	0.00028154	0.05607308	12.61644298	3.868051885	2.540043553
85.81	-0.05116761	0.000264121	0.052566336	11.82742566	3.868713593	2.540043553
85.815	-0.049411194	0.000255342	0.050800304	11.43006839	3.869330652	2.540043553
85.82	-0.0468218	0.000242393	0.048197013	10.8443279	3.869884731	2.540043553
85.825	-0.042417225	0.000220618	0.043823438	9.860273637	3.870339468	2.540043553
85.83	-0.039376916	0.000205584	0.040806725	9.181513172	3.870731354	2.540043553
85.835	-0.036264233	0.000190239	0.037729736	8.489190595	3.871063732	2.540043553
85.84	-0.031484615	0.000166495	0.032973495	7.419036294	3.87131427	2.540043553
85.845	-0.027952829	0.000148897	0.029451967	6.626692664	3.871511752	2.540043553
85.85	-0.025557813	0.000137023	0.027077537	6.092445764	3.871676843	2.540043553
85.855	-0.021600656	0.000117336	0.023143507	5.207289151	3.871794769	2.540043553
85.86	-0.01767958	9.77319E-05	0.019229828	4.326711252	3.871873767	2.540043553
85.865	-0.015195915	8.53345E-05	0.016756651	3.77024654	3.871932129	2.540043553
85.87	-0.0118379	6.85861E-05	0.013417716	3.018986104	3.871967548	2.540043553
85.875	-0.00804427	4.95563E-05	0.009627002	2.16607535	3.871983902	2.540043553
85.88	-0.00562411	3.7415E-05	0.007210171	1.622288416	3.871991897	2.540043553
85.885	-0.002255698	2.05514E-05	0.003855484	0.867483854	3.871993183	2.540043553
85.89	0.002293463	-2.3823E-06	-0.000702761	-0.158121232	3.871994512	2.540043553
85.895	0.004026585	-1.12236E-05	-0.002458811	-0.553232492	3.87199861	2.540043553
85.9	0.003652213	-9.35982E-06	-0.002082413	-0.468542916	3.872001981	2.540043553
85.905	0.005427687	-1.82412E-05	-0.003852174	-0.866739192	3.872009427	2.540043553
85.91	0.008923021	-3.58453E-05	-0.007345616	-1.652763543	3.87202955	2.540043553
85.915	0.011616663	-4.94701E-05	-0.010047599	-2.260709799	3.872063657	2.540043553
85.92	0.013850106	-6.07759E-05	-0.01228848	-2.764907973	3.872112139	2.540043553
85.925	0.016122083	-7.22995E-05	-0.014571452	-3.278576793	3.872177832	2.540043553
85.93	0.017352992	-7.86052E-05	-0.015820201	-3.559545304	3.872253939	2.540043553
85.935	0.018031492	-8.20892E-05	-0.016510015	-3.714753333	3.872336114	2.540043553
85.94	0.019951075	-9.18051E-05	-0.018433203	-4.147470761	3.872436716	2.540043553
85.945	0.022025315	-0.000102364	-0.020522397	-4.617539237	3.872559325	2.540043553
85.95	0.022207372	-0.000103412	-0.020726941	-4.6635618	3.872683968	2.540043553
85.955	0.021864033	-0.000101744	-0.020390235	-4.587802821	3.872804788	2.540043553
85.96	0.022608973	-0.000105519	-0.021146332	-4.757924664	3.87293398	2.540043553
85.965	0.024356549	-0.000114332	-0.022889134	-5.150055077	3.873083917	2.540043553
85.97	0.027789304	-0.000131646	-0.026311276	-5.920037152	3.873279095	2.540043553
85.975	0.031565951	-0.000150906	-0.030114846	-6.775840381	3.873530929	2.540043553
85.98	0.032653312	-0.000156592	-0.031237222	-7.028374911	3.873800411	2.540043553
85.985	0.032570634	-0.000156261	-0.0311704	-7.013340036	3.87406853	2.540043553
85.99	0.034585146	-0.000166504	-0.033193227	-7.468476131	3.874370842	2.540043553
85.995	0.037712038	-0.000182437	-0.036335667	-8.175525116	3.87473029	2.540043553
86	0.040363995	-0.000196001	-0.039009172	-8.777063719	3.875142069	2.540043553
86.005	0.042922533	-0.000209108	-0.041591304	-9.358043418	3.875607705	2.540043553
86.01	0.04498243	-0.000219726	-0.043682013	-9.828453018	3.876119106	2.540043553
86.015	0.045824929	-0.000224181	-0.044559077	-10.02579226	3.876649844	2.540043553
86.02	0.046276145	-0.000226615	-0.045038164	-10.13358679	3.877191084	2.540043553
86.025	0.047527901	-0.000233091	-0.046312365	-10.4202822	3.877762001	2.540043553
86.03	0.049012473	-0.000240784	-0.047825984	-10.76084634	3.878369142	2.540043553
86.035	0.049342286	-0.00024265	-0.048193001	-10.84342524	3.878984481	2.540043553
86.04	0.049105588	-0.000241619	-0.047984658	-10.79654813	3.87959393	2.540043553
86.045	0.049146831	-0.000241993	-0.048060257	-10.81355782	3.880204404	2.540043553
86.05	0.048556128	-0.000239178	-0.047491873	-10.68567135	3.880800291	2.540043553
86.055	0.047686047	-0.000234923	-0.046632734	-10.49236516	3.881375014	2.540043553
86.06	0.047285651	-0.00023306	-0.046256752	-10.40776915	3.881940126	2.540043553
86.065	0.045754215	-0.000225503	-0.044732052	-10.06471167	3.882469227	2.540043553
86.07	0.043256902	-0.000213014	-0.042214001	-9.498150195	3.882942146	2.540043553
86.075	0.041396665	-0.000203749	-0.040347338	-9.078151042	3.883375264	2.540043553
86.08	0.038192256	-0.000187715	-0.037119018	-8.351778944	3.883743925	2.540043553
86.085	0.033744884	-0.000165722	-0.032695898	-7.356577085	3.884031725	2.540043553
86.09	0.030317991	-0.000148797	-0.029295483	-6.591483649	3.88426404	2.540043553
86.095	0.024507618	-0.000120005	-0.023517977	-5.291544758	3.884415842	2.540043553
86.1	0.016248932	-7.87976E-05	-0.015263414	-3.434268256	3.884482573	2.540043553
86.105	0.010723941	-5.10741E-05	-0.009719249	-2.186831074	3.884511639	2.540043553
86.11	0.006533956	-3.00467E-05	-0.005519008	-1.241776805	3.884522429	2.540043553
86.115	0.001604517	-5.23222E-06	-0.000567574	-0.127704169	3.88452308	2.540043553
86.12	-0.000718011	6.59064E-06	0.001789563	0.402651586	3.88452321	2.540043553
86.125	-0.000712449	6.66732E-06	0.00180424	0.405953925	3.884523338	2.540043553
86.13	-0.001474178	1.05312E-05	0.00257492	0.579357048	3.884523888	2.540043553
86.135	-0.002783608	1.71621E-05	0.003896132	0.876629632	3.884525846	2.540043553
86.14	-0.003302982	1.98491E-05	0.004431421	0.997069785	3.884528603	2.540043553
86.145	-0.002747903	1.71229E-05	0.003880867	0.873194998	3.884530512	2.540043553
86.15	-0.002545782	1.61182E-05	0.003678024	0.827555297	3.88453215	2.540043553
86.155	-0.003352231	2.01907E-05	0.004499452	1.012376726	3.88453499	2.540043553
86.16	-0.002912558	1.80507E-05	0.004066551	0.914973958	3.884537134	2.540043553
86.165	-0.001423995	1.05961E-05	0.002561726	0.57638843	3.884537647	2.540043553
86.17	-0.001195449	9.43181E-06	0.002326815	0.523533466	3.884538008	2.540043553
86.175	-0.000937503	8.16621E-06	0.002071392	0.466063152	3.88453823	2.540043553
86.18	0.000797627	-5.13135E-07	0.000320654	0.072147249	3.884538391	2.540043553
86.185	0.002717553	-1.01724E-05	-0.001626586	-0.365981796	3.884540257	2.540043553
86.19	0.003675141	-1.50319E-05	-0.00260578	-0.586300428	3.884543671	2.540043553
86.195	0.00393209	-1.63512E-05	-0.002871556	-0.646100005	3.884547579	2.540043553
86.2	0.005184651	-2.2634E-05	-0.004137024	-0.930830294	3.884554372	2.540043553
86.205	0.007339201	-3.34953E-05	-0.006323583	-1.422806108	3.884567986	2.540043553
86.21	0.007903198	-3.64213E-05	-0.006912395	-1.55528886	3.884583772	2.540043553
86.215	0.008064386	-3.72715E-05	-0.007083482	-1.593783442	3.884600209	2.540043553
86.22	0.009919767	-4.66426E-05	-0.008968538	-2.017921054	3.884625079	2.540043553
86.225	0.010268146	-4.85495E-05	-0.00935093	-2.103959194	3.884651727	2.540043553
86.23	0.008061963	-3.75946E-05	-0.007139592	-1.606408112	3.884668154	2.540043553
86.235	0.007160706	-3.31147E-05	-0.006235819	-1.403059303	3.884681114	2.540043553
86.24	0.006925515	-3.20409E-05	-0.006019225	-1.354325618	3.884693236	2.540043553
86.245	0.004297867	-1.89892E-05	-0.003387827	-0.762260982	3.884697904	2.540043553
86.25	0.0007257	-1.13036E-06	0.000209305	0.047093538	3.884698037	2.540043553
86.255	-0.002480178	1.49303E-05	0.003441069	0.774240536	3.884699592	2.540043553
86.26	-0.005477811	2.99849E-05	0.006449987	1.451247181	3.884707176	2.540043553
86.265	-0.007292068	3.91175E-05	0.008267987	1.860297085	3.884720615	2.540043553
86.27	-0.00948407	5.01036E-05	0.010453988	2.352147227	3.884743349	2.540043553
86.275	-0.013040515	6.79808E-05	0.014008887	3.15199966	3.884786329	2.540043553
86.28	-0.014883045	7.73257E-05	0.015866045	3.569860186	3.884842312	2.540043553
86.285	-0.015548079	8.07014E-05	0.016536704	3.720758313	3.88490341	2.540043553
86.29	-0.017927612	9.26444E-05	0.018908732	4.254464741	3.884984641	2.540043553
86.295	-0.020730647	0.000106745	0.021707684	4.884228856	3.885093259	2.540043553
86.3	-0.024281126	0.000124636	0.025256679	5.682752763	3.885242268	2.540043553
86.305	-0.030138986	0.000154303	0.031135501	7.005487725	3.885471848	2.540043553
86.31	-0.034491035	0.000176534	0.035536022	7.99560506	3.885772517	2.540043553
86.315	-0.035464449	0.000181674	0.03655294	8.224411506	3.886090396	2.540043553

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
86.32	-0.037173265	0.00190441	0.038286688	8.614504843	3.886439647	2.540043553
86.325	-0.040710948	0.000208491	0.041854637	9.417293312	3.886858535	2.540043553
86.33	-0.043174711	0.000221192	0.044363506	9.981788946	3.887329659	2.540043553
86.335	-0.044145402	0.000226332	0.045378522	10.21016736	3.887822205	2.540043553
86.34	-0.04578158	0.000234805	0.047051136	10.58650559	3.888351939	2.540043553
86.345	-0.048136929	0.000246976	0.049452886	11.12689939	3.888937581	2.540043553
86.35	-0.048292036	0.000248096	0.049666567	11.17497759	3.889527004	2.540043553
86.355	-0.04649134	0.00023926	0.047882993	10.77367347	3.89007329	2.540043553
86.36	-0.046430197	0.000239164	0.047863877	10.76937225	3.89061814	2.540043553
86.365	-0.046663573	0.000240657	0.048165209	10.83717208	3.891168481	2.540043553
86.37	-0.043654291	0.00022578	0.045163887	10.16187458	3.891650129	2.540043553
86.375	-0.040269959	0.000208903	0.04176295	9.396663662	3.892059992	2.540043553
86.38	-0.038401492	0.00019971	0.039912016	8.980203617	3.892432703	2.540043553
86.385	-0.034337618	0.000179656	0.035877337	8.072400891	3.892730703	2.540043553
86.39	-0.029519727	0.000155848	0.031093241	6.995979317	3.892950945	2.540043553
86.395	-0.027232908	0.000144639	0.028842929	6.48965907	3.893138386	2.540043553
86.4	-0.023681733	0.000127212	0.02534682	5.703034558	3.893280129	2.540043553
86.405	-0.017794388	9.80522E-05	0.019503935	4.388385428	3.893360157	2.540043553
86.41	-0.012183026	7.02135E-05	0.013933471	3.135030873	3.89339767	2.540043553
86.415	-0.004229057	3.06301E-05	0.00602556	1.355751032	3.893402191	2.540043553
86.42	0.006562082	-2.34113E-05	-0.00474746	-1.068178492	3.893413074	2.540043553
86.425	0.015880589	-7.0321E-05	-0.014077677	-3.167477235	3.893476813	2.540043553
86.43	0.023606918	-0.000109348	-0.021825556	-4.910750097	3.893617663	2.540043553
86.435	0.029615599	-0.000139862	-0.027874226	-6.271700795	3.893839338	2.540043553
86.44	0.031093027	-0.000147519	-0.02939092	-6.612956932	3.894083682	2.540043553
86.445	0.031502346	-0.000149606	-0.029804142	-6.705931976	3.894334502	2.540043553
86.45	0.036172478	-0.000173163	-0.034466623	-7.754990273	3.8946652	2.540043553
86.455	0.042641453	-0.00020601	-0.040960064	-9.216014459	3.895124758	2.540043553
86.46	0.046602522	-0.0002263	-0.044966785	-10.11752668	3.89567366	2.540043553
86.465	0.047731622	-0.00023224	-0.046139001	-10.38127534	3.896249482	2.540043553
86.47	0.047602645	-0.000231731	-0.046036218	-10.35814901	3.896822196	2.540043553
86.475	0.048984714	-0.000238812	-0.047435722	-10.67303749	3.897428649	2.540043553
86.48	0.052219401	-0.00025535	-0.050690233	-11.40530243	3.89811784	2.540043553
86.485	0.052854204	-0.000258824	-0.051366745	-11.5575176	3.89882389	2.540043553
86.49	0.050278976	-0.000245947	-0.048767443	-10.97267475	3.899462813	2.540043553
86.495	0.050076892	-0.000244961	-0.048569205	-10.92807118	3.900096611	2.540043553
86.5	0.052744628	-0.000258599	-0.051321618	-11.54736411	3.900799735	2.540043553
86.505	0.052995944	-0.000260109	-0.051615623	-11.61351514	3.901509577	2.540043553
86.51	0.050641475	-0.000248344	-0.049241023	-11.0792301	3.902157746	2.540043553
86.515	0.049774538	-0.000244019	-0.048368509	-10.88291462	3.902783913	2.540043553
86.52	0.050992019	-0.000250289	-0.049634461	-11.16775369	3.903441087	2.540043553
86.525	0.051389785	-0.000252489	-0.050078629	-11.26769146	3.904108554	2.540043553
86.53	0.049546073	-0.000243312	-0.048225835	-10.85081281	3.904728986	2.540043553
86.535	0.048480358	-0.000237978	-0.047150364	-10.60883196	3.905323015	2.540043553
86.54	0.050038332	-0.000245976	-0.048765181	-10.97216582	3.905955837	2.540043553
86.545	0.049655214	-0.000244258	-0.048418056	-10.8940626	3.906579006	2.540043553
86.55	0.046188027	-0.000226822	-0.044901959	-10.10294071	3.907118187	2.540043553
86.555	0.045949808	-0.000225628	-0.0446627	-10.04910744	3.907651821	2.540043553
86.56	0.047355219	-0.000232899	-0.04613046	-10.37935346	3.908218597	2.540043553
86.565	0.044541432	-0.00021882	-0.043290016	-9.740253601	3.90872002	2.540043553
86.57	0.042897715	-0.000210503	-0.041615535	-9.363495427	3.909185118	2.540043553
86.575	0.044628934	-0.000219358	-0.043403391	-9.765762954	3.909688513	2.540043553
86.58	0.043053048	-0.000211545	-0.04182596	-9.410841061	3.910156985	2.540043553
86.585	0.041145246	-0.000201907	-0.039885822	-8.974309935	3.910584858	2.540043553
86.59	0.042840565	-0.000210543	-0.041629422	-9.366619921	3.911048718	2.540043553
86.595	0.042727861	-0.000210123	-0.0415442	-9.347445094	3.91151014	2.540043553
86.6	0.041494967	-0.000203945	-0.04029704	-9.066834014	3.911945318	2.540043553
86.605	0.042598453	-0.0002096	-0.041438883	-9.323748705	3.912403949	2.540043553
86.61	0.042870043	-0.000211114	-0.041744496	-9.392511614	3.912868447	2.540043553
86.615	0.042086164	-0.000207248	-0.040963871	-9.216871003	3.913316113	2.540043553
86.62	0.042113816	-0.000207479	-0.041010545	-9.227372566	3.913764368	2.540043553
86.625	0.042132431	-0.000207685	-0.041052038	-9.236708447	3.914213019	2.540043553
86.63	0.042137978	-0.00020784	-0.041083415	-9.243768463	3.914661789	2.54021039
86.635	0.041322517	-0.000203859	-0.04027974	-9.062941466	3.915093357	2.540370295
86.64	0.039922051	-0.000196886	-0.038875736	-8.747040698	3.915496168	2.540457322
86.645	0.039158608	-0.000193159	-0.038126264	-8.578409333	3.915883721	2.540473403
86.65	0.036408463	-0.000179406	-0.035361864	-7.95641942	3.916218748	2.540473403
86.655	0.032354173	-0.000159294	-0.03132266	-7.047598504	3.916483316	2.540473403
86.66	0.030427508	-0.000149749	-0.029407256	-6.616632637	3.916717312	2.540473403
86.665	0.027602245	-0.000135781	-0.026605893	-5.986325926	3.916909871	2.540473403
86.67	0.023800398	-0.000116833	-0.022808839	-5.13198877	3.917053039	2.540473403
86.675	0.021984765	-0.000107788	-0.020997548	-4.724448205	3.917175196	2.540473403
86.68	0.01887307	-9.23294E-05	-0.017903829	-4.028361423	3.917265221	2.540473403
86.685	0.014379042	-6.98267E-05	-0.01340439	-3.015987687	3.917317477	2.540473403
86.69	0.012079735	-5.82497E-05	-0.011091444	-2.495574905	3.917354357	2.540473403
86.695	0.010209827	-4.88547E-05	-0.00921533	-2.073449328	3.917380703	2.540473403
86.7	0.008517916	-4.03165E-05	-0.00751104	-1.689984111	3.91739904	2.540473403
86.705	0.008494084	-4.01551E-05	-0.00747984	-1.682963929	3.917417275	2.540473403
86.71	0.007442577	-3.49193E-05	-0.006434049	-1.447661119	3.917431275	2.540473403
86.715	0.005103871	-2.32031E-05	-0.004097077	-0.921842215	3.917437859	2.540473403
86.72	0.003612045	-1.57041E-05	-0.00260192	-0.585432003	3.917441156	2.540473403
86.725	0.001870341	-6.9842E-06	-0.000864007	-0.194401588	3.917442041	2.540473403
86.73	-0.000643935	5.62337E-06	0.00164754	0.370696389	3.917442145	2.540473403
86.735	-0.002812438	1.65278E-05	0.003818668	0.859200388	3.917444145	2.540473403
86.74	-0.004781525	2.64312E-05	0.005789566	1.302652272	3.917449923	2.540473403
86.745	-0.007045875	3.78198E-05	0.008054957	1.812365323	3.91746247	2.540473403
86.75	-0.009221567	4.88012E-05	0.010238282	2.303613344	3.917483963	2.540473403
86.755	-0.010122876	5.34311E-05	0.011158495	2.510661408	3.917509862	2.540473403
86.76	-0.009814125	5.19643E-05	0.010862243	2.444004736	3.917534205	2.540473403
86.765	-0.010134489	5.35916E-05	0.011190379	2.517835375	3.917560163	2.540473403
86.77	-0.011613384	6.10168E-05	0.012665769	2.849798058	3.917594251	2.540473403
86.775	-0.013652933	7.12703E-05	0.014702336	3.308025636	3.917641362	2.540473403
86.78	-0.015810364	8.21451E-05	0.016861314	3.793795665	3.917704539	2.540473403
86.785	-0.017411009	9.02489E-05	0.018469514	4.155640715	3.917781156	2.540473403
86.79	-0.019237397	9.94658E-05	0.020297919	4.567031884	3.91787469	2.540473403
86.795	-0.02218819	0.000114346	0.023248284	5.230863977	3.917999118	2.540473403
86.8	-0.024550072	0.000126365	0.025629981	5.766745638	3.918151447	2.540473403
86.805	-0.024739762	0.000127548	0.025861141	5.818756784	3.918306139	2.540473403
86.81	-0.023014428	0.00011912	0.02415964	5.435918941	3.918440007	2.540473403
86.815	-0.020428297	0.000106321	0.021577838	4.855013474	3.918545479	2.540473403
86.82	-0.01870508	9.77827E-05	0.019856549	4.467723449	3.918633908	2.540473403
86.825	-0.018296295	9.58301E-05	0.019463058	4.379188034	3.918718515	2.540473403
86.83	-0.017853169	9.37532E-05	0.019044581	4.285030666	3.918799072	2.540473403
86.835	-0.016058327	8.49406E-05	0.017269472	3.8856311	3.918864246	2.540473403

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
86.84	-0.012495811	6.72473E-05	0.013708294	3.084366045	3.918903711	2.540473403
86.845	-0.008857972	4.90918E-05	0.010057731	2.262989552	3.918923542	2.540473403
86.85	-0.006758202	3.85964E-05	0.007949032	1.788532273	3.918935085	2.540473403
86.855	-0.005547483	3.25689E-05	0.006738544	1.516172438	3.918942863	2.540473403
86.86	-0.004180514	2.57903E-05	0.00537766	1.209973524	3.91894728	2.540473403
86.865	-0.001308799	1.14835E-05	0.002506979	0.564070258	3.918947713	2.540473403
86.87	0.002107773	-5.64875E-06	-0.000927894	-0.208776139	3.918948836	2.540473403
86.875	0.002450609	-7.45532E-06	-0.001287691	-0.289730375	3.918950354	2.540473403
86.88	0.00147501	-2.56101E-06	-0.000299518	-0.067391477	3.918950904	2.540473403
86.885	0.002900972	-9.66026E-06	-0.001731743	-0.389642234	3.918953031	2.540473403
86.89	0.004062841	-1.55304E-05	-0.002907754	-0.654244762	3.918957203	2.540473403
86.895	0.002926558	-9.89278E-06	-0.001769395	-0.398113823	3.918959367	2.540473403
86.9	0.001629524	-3.38463E-06	-0.0004559	-0.102577423	3.918960039	2.540473403
86.905	0.001239462	-1.39426E-06	-5.43221E-05	-0.012222471	3.918960427	2.540473403
86.91	0.001478594	-2.57395E-06	-0.000292574	-0.065829206	3.918960979	2.540473403
86.915	0.000875575	4.34525E-07	0.000314608	0.070786689	3.918961173	2.540473403
86.92	-0.000560059	7.66388E-06	0.001772575	0.398829275	3.918961252	2.540473403
86.925	-0.000163938	5.76795E-06	0.001389511	0.312639941	3.918961259	2.540473403
86.93	0.001148217	-7.6897E-07	6.98878E-05	0.015724766	3.918961592	2.540473403
86.935	0.001608368	-3.0518E-06	-0.000390797	-0.087929414	3.918962246	2.540473403
86.94	0.002741363	-8.68792E-06	-0.001527873	-0.343771532	3.918964146	2.540473403
86.945	0.003982458	-1.48999E-05	-0.002780633	-0.62564236	3.918968154	2.540473403
86.95	0.004727817	-1.86186E-05	-0.0035263	-0.793417567	3.918973803	2.540473403
86.955	0.006399793	-2.6968E-05	-0.005198145	-1.169582589	3.918984155	2.540473403
86.96	0.008215768	-3.60682E-05	-0.007019574	-1.579404179	3.919001215	2.540473403
86.965	0.010157893	-4.5796E-05	-0.008965721	-2.017287245	3.919027293	2.540473403
86.97	0.012797844	-5.9046E-05	-0.011615077	-2.613392353	3.919068688	2.540473403
86.975	0.014782022	-6.90427E-05	-0.013612829	-3.06288654	3.919123914	2.540473403
86.98	0.01711789	-8.07877E-05	-0.015958766	-3.590722427	3.919197973	2.540473403
86.985	0.019891368	-9.47836E-05	-0.018752634	-4.219342711	3.919297974	2.540473403
86.99	0.020571031	-9.83275E-05	-0.019459776	-4.378449604	3.919404926	2.540473403
86.995	0.021122751	-0.000101161	-0.020025011	-4.505627534	3.919517692	2.540473403
87	0.023387575	-0.000112592	-0.022304963	-5.018616628	3.919655936	2.540473403
87.005	0.024473866	-0.000118193	-0.023421557	-5.269850324	3.91980732	2.540473403
87.01	0.024088922	-0.000116395	-0.023058567	-5.188177539	3.91995398	2.540473403
87.015	0.024512071	-0.000118603	-0.023503358	-5.288255659	3.920105837	2.540473403
87.02	0.025737316	-0.000124852	-0.024748827	-5.568486009	3.920273255	2.540473403
87.025	0.026335199	-0.000128001	-0.025376337	-5.70967586	3.920448542	2.540473403
87.03	0.025909181	-0.000126013	-0.02497475	-5.619318652	3.920618204	2.540473403
87.035	0.02614682	-0.000127316	-0.025237892	-5.678525778	3.920790992	2.540473403
87.04	0.026958432	-0.000131541	-0.026081535	-5.868345265	3.920974673	2.540473403
87.045	0.026050729	-0.000127192	-0.02520348	-5.670783084	3.921146193	2.540473403
87.05	0.024630697	-0.000120228	-0.023797813	-5.354507938	3.921299524	2.540473403
87.055	0.024132619	-0.000117878	-0.023323677	-5.247827313	3.921446716	2.540473403
87.06	0.023037398	-0.000112566	-0.022252052	-5.006711666	3.921580852	2.540473403
87.065	0.021645885	-0.000105759	-0.020879634	-4.697917654	3.921699272	2.540473403
87.07	0.020242605	-9.89073E-05	-0.019498617	-4.387188766	3.921802836	2.540473403
87.075	0.018116721	-8.84354E-05	-0.017389136	-3.912555712	3.92188579	2.540473403
87.08	0.016060928	-7.83153E-05	-0.015351739	-3.454141329	3.921950985	2.540473403
87.085	0.013033571	-6.33652E-05	-0.012344125	-2.777428224	3.921993919	2.540473403
87.09	0.008188538	-3.94122E-05	-0.007530451	-1.694351517	3.922010866	2.540473403
87.095	0.003023908	-1.3781E-05	-0.002386227	-0.536901166	3.922013177	2.540473403
87.1	-0.002467693	1.35702E-05	0.003095834	0.69656268	3.922014716	2.540473403
87.105	-0.006865948	3.55681E-05	0.007499569	1.687402966	3.922026631	2.540473403
87.11	-0.009195403	4.7213E-05	0.009828841	2.211489325	3.922048001	2.540473403
87.115	-0.012377212	6.30866E-05	0.013001906	2.925428798	3.92208672	2.540473403
87.12	-0.015131017	7.68959E-05	0.015760394	3.546088658	3.922144585	2.540473403
87.125	-0.015424102	7.83697E-05	0.016054696	3.612306589	3.922204712	2.540473403
87.13	-0.017354166	8.79392E-05	0.017965087	4.042144475	3.92228083	2.540473403
87.135	-0.020749274	0.00010491	0.021350921	4.803957279	3.922389643	2.540473403
87.14	-0.022024067	0.000111317	0.022628605	5.091436213	3.922512238	2.540473403
87.145	-0.023236215	0.000117353	0.02383188	5.362173039	3.922648698	2.540473403
87.15	-0.025225484	0.000127302	0.025814384	5.808236461	3.922809523	2.540473403
87.155	-0.026174617	0.000132066	0.026759233	6.0208275	3.922982679	2.540473403
87.16	-0.027204295	0.000137198	0.027775552	6.249499254	3.923169726	2.540473403
87.165	-0.028637436	0.000144364	0.029194456	6.568752661	3.923377	2.540473403
87.17	-0.029600923	0.00014919	0.030149683	6.783678718	3.923598455	2.540473403
87.175	-0.030806018	0.000155209	0.031340778	7.051675138	3.923838309	2.540473403
87.18	-0.032148	0.000161928	0.03267014	7.35078144	3.924099516	2.540473403
87.185	-0.033218647	0.000167299	0.033732399	7.589789764	3.92437841	2.540473403
87.19	-0.034460014	0.000173524	0.034963415	7.866768265	3.924678538	2.540473403
87.195	-0.03576073	0.000180065	0.036256545	8.157722605	3.925001751	2.540473403
87.2	-0.0365841	0.000184244	0.03708245	8.343551186	3.925340019	2.540473403
87.205	-0.036391203	0.000183344	0.03689983	8.302461689	3.925674729	2.540473403
87.21	-0.035947934	0.000181154	0.036457654	8.202972068	3.926001335	2.540473403
87.215	-0.036378272	0.000183322	0.036895465	8.301479625	3.926335807	2.540473403
87.22	-0.036485901	0.000183898	0.037011856	8.327667516	3.926672261	2.540473403
87.225	-0.036115691	0.000182057	0.036639978	8.243995029	3.927001922	2.540473403
87.23	-0.036717568	0.000185065	0.037244618	8.380039113	3.927342663	2.540473403
87.235	-0.037011588	0.000186571	0.037541738	8.446891105	3.927688882	2.540473403
87.24	-0.036194126	0.000182491	0.036718007	8.261551576	3.928019977	2.540473403
87.245	-0.036047898	0.000181703	0.036558784	8.225726354	3.928348402	2.540473403
87.25	-0.037507555	0.000188906	0.038003734	8.550840222	3.928703962	2.540473403
87.255	-0.041442216	0.00020864	0.041901358	9.427805536	3.929138034	2.540473403
87.26	-0.047790666	0.000240846	0.048255672	10.8575261	3.929715282	2.540473403
87.265	-0.053457936	0.000269802	0.05396165	12.14137121	3.930437553	2.540473403
87.27	-0.055878982	0.000282378	0.056437847	12.69851558	3.931226727	2.540473403
87.275	-0.054452085	0.000275411	0.055031081	12.38199319	3.931976112	2.540473403
87.28	-0.050115725	0.00025382	0.050676081	11.40211833	3.932610893	2.540473403
87.285	-0.047277672	0.00023971	0.047833504	10.76253833	3.933175815	2.540473403
87.29	-0.049248349	0.00024942	0.049793798	11.20360445	3.933788813	2.540473403
87.295	-0.054110053	0.000273594	0.0546684	12.30039	3.934528813	2.540473403
87.3	-0.057818833	0.000292327	0.058395696	13.13903165	3.935373731	2.540473403
87.305	-0.05726568	0.000289822	0.057882354	13.02352966	3.93620256	2.540473403
87.31	-0.054953655	0.000278402	0.055577577	12.50495483	3.936965814	2.540473403
87.315	-0.055370838	0.000280522	0.056006042	12.60135944	3.9377407	2.540473403
87.32	-0.058029635	0.000293876	0.058700469	13.20760557	3.938591791	2.540473403
87.325	-0.061484868	0.000311282	0.062124022	13.97790497	3.93954725	2.540473403
87.33	-0.063875395	0.000323475	0.064519554	14.5168997	3.940578451	2.540473403
87.335	-0.063018234	0.000319458	0.063708377	14.33438475	3.941582161	2.540473403
87.34	-0.062227933	0.000315653	0.062940232	14.16155211	3.942560855	2.540473403
87.345	-0.0647535	0.000328409	0.06548592	14.73433208	3.943620602	2.540473403
87.35	-0.066998254	0.000339895	0.067734042	15.24015947	3.944755098	2.540473403
87.355	-0.066692365	0.000338675	0.067484085	15.1839192	3.945879258	2.540473403

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
87.36	-0.065250424	0.000331747	0.06608547	14.86923086	3.946955333	2.540473403
87.365	-0.063460962	0.00032304	0.064328597	14.47393432	3.947973196	2.540473403
87.37	-0.063323144	0.000322555	0.064231118	14.45200156	3.948986642	2.540473403
87.375	-0.063770802	0.000325098	0.064744628	14.56754123	3.950014469	2.540695296
87.38	-0.060464674	0.000309019	0.061501826	13.83791083	3.950938484	2.541152926
87.385	-0.055387802	0.000284038	0.056471521	12.70609221	3.951713846	2.541538716
87.39	-0.052580451	0.000270275	0.053702978	12.08317012	3.9524126	2.541850161
87.395	-0.050072691	0.000258082	0.051252281	11.53176329	3.953046291	2.542085556
87.4	-0.044433904	0.000230268	0.045667286	10.27513933	3.953545296	2.542243548
87.405	-0.038066214	0.000198607	0.039319678	8.846927474	3.953911528	2.542322315
87.41	-0.0369473	0.000193053	0.03820943	8.597121686	3.954256545	2.542331434
87.415	-0.038861893	0.000202847	0.040186496	9.041961502	3.954638247	2.542331434
87.42	-0.036559984	0.000191752	0.037946785	8.538026666	3.954976069	2.542331434
87.425	-0.031051366	0.000164583	0.032509395	7.314613832	3.955219759	2.542331434
87.43	-0.022962552	0.000124479	0.024496417	5.511693793	3.955353024	2.542331434
87.435	-0.008467747	5.20013E-05	0.010052124	2.261727911	3.955371146	2.542331434
87.44	0.0058863	-2.03995E-05	-0.004330473	-0.97435638	3.955379903	2.542331434
87.445	0.010877402	-4.58825E-05	-0.009382072	-2.11096616	3.955409807	2.542331434
87.45	0.00998735	-4.15022E-05	-0.008497541	-1.911946692	3.955435017	2.542331434
87.455	0.010400269	-4.34997E-05	-0.008900989	-2.002722454	3.955462355	2.542331434
87.46	0.014208936	-6.26036E-05	-0.012693795	-2.856103987	3.955513382	2.542331434
87.465	0.020077101	-9.22322E-05	-0.018556218	-4.175148939	3.955615259	2.542331434
87.47	0.024739374	-0.000115899	-0.023233754	-5.227594555	3.955769946	2.542331434
87.475	0.026980849	-0.000127322	-0.025489844	-5.735214815	3.955953933	2.542331434
87.48	0.028540494	-0.000135236	-0.027052251	-6.08675638	3.956159806	2.542331434
87.485	0.031011072	-0.000147728	-0.029517486	-6.641434456	3.956402863	2.542331434
87.49	0.034493804	-0.000165379	-0.032998548	-7.424673219	3.956703581	2.542331434
87.495	0.037076061	-0.000178526	-0.035589686	-8.007679446	3.957051007	2.542331434
87.5	0.038396154	-0.000185253	-0.036914965	-8.305867067	3.957423615	2.542331434
87.505	0.040631341	-0.000196583	-0.039146387	-8.807937179	3.957840866	2.542331434
87.51	0.043162786	-0.000209459	-0.041681037	-9.378233297	3.95831173	2.542331434
87.515	0.04479259	-0.000217774	-0.043317189	-9.74636757	3.958818823	2.542331434
87.52	0.046715426	-0.00022756	-0.045242007	-10.17945166	3.959370388	2.542331434
87.525	0.048396671	-0.000236152	-0.046931319	-10.55954689	3.959962368	2.542331434
87.53	0.049334839	-0.00024097	-0.047878394	-10.77263874	3.960577521	2.542331434
87.535	0.050648156	-0.00024767	-0.049195174	-11.06891413	3.961225862	2.542331434
87.54	0.051902919	-0.000254081	-0.050454681	-11.35230327	3.961906724	2.542331434
87.545	0.053350537	-0.000261452	-0.051902449	-11.67805095	3.962626096	2.542331434
87.55	0.055528472	-0.000272539	-0.05407946	-12.16787849	3.963405401	2.542331434
87.555	0.057134313	-0.000280752	-0.055691368	-12.53055788	3.964230432	2.542331434
87.56	0.058941079	-0.000289957	-0.057497491	-12.93693543	3.965108467	2.542331434
87.565	0.061705546	-0.000304042	-0.060259697	-13.55843194	3.966070798	2.542331434
87.57	0.063718888	-0.00031436	-0.062282399	-14.01353973	3.967096951	2.542331434
87.575	0.065684357	-0.000324417	-0.064252872	-14.4568961	3.968187386	2.542331434
87.58	0.068406613	-0.000338332	-0.066978167	-15.0700875	3.96937008	2.542331434
87.585	0.070447367	-0.00034883	-0.069033286	-15.5324893	3.970624391	2.542331434
87.59	0.072381712	-0.000358783	-0.070980372	-15.97058368	3.97194853	2.542331434
87.595	0.074441654	-0.000369401	-0.073048596	-16.43593409	3.97334911	2.542331434
87.6	0.075606432	-0.000375494	-0.074235198	-16.70291953	3.974793863	2.542331434
87.605	0.07691203	-0.000382284	-0.075556971	-17.00031851	3.976288943	2.542331434
87.61	0.078175278	-0.000388883	-0.076841278	-17.28928746	3.977833538	2.542331434
87.615	0.078671148	-0.000391579	-0.077365938	-17.40733615	3.979397791	2.542331434
87.62	0.080160955	-0.000399282	-0.078864624	-17.74454039	3.98102185	2.542331434
87.625	0.082145605	-0.000409538	-0.08085941	-18.19336732	3.982727322	2.542331434
87.63	0.083165239	-0.000414916	-0.081905183	-18.42866619	3.984475395	2.542886327
87.635	0.084671833	-0.000422745	-0.083427054	-18.77108723	3.986287377	2.543636294
87.64	0.08639104	-0.000431699	-0.085167003	-19.16257556	3.988173688	2.544310542
87.645	0.086897996	-0.000434531	-0.085717213	-19.28637291	3.990082202	2.544907393
87.65	0.087155146	-0.000436074	-0.086016992	-19.35382329	3.992002029	2.545425192
87.655	0.087493743	-0.000438034	-0.086397871	-19.43952099	3.993936801	2.545862501
87.66	0.087547673	-0.000438559	-0.086499718	-19.46243645	3.99587396	2.546218204
87.665	0.087448798	-0.000438315	-0.086449888	-19.45122487	3.997806745	2.546491444
87.67	0.086838471	-0.000435479	-0.085877157	-19.32236026	3.999712646	2.546681621
87.675	0.086326854	-0.000433126	-0.085402044	-19.21545986	4.001596155	2.546788341
87.68	0.085987823	-0.000431673	-0.085108736	-19.14946556	4.003464899	2.547351138
87.685	0.084478421	-0.0004243	-0.083620908	-18.8147043	4.005268612	2.548407916
87.69	0.082998457	-0.000417025	-0.082153661	-18.48457365	4.007009681	2.5493895
87.695	0.082816194	-0.000416338	-0.082015204	-18.45342087	4.008743112	2.550292528
87.7	0.081866846	-0.000411824	-0.081105014	-18.24862812	4.010437028	2.551114206
87.705	0.079828406	-0.00040178	-0.079081012	-17.79322764	4.01204764	2.551851869
87.71	0.078179992	-0.000393704	-0.077454439	-17.42724874	4.013592422	2.552502878
87.715	0.076012154	-0.000383034	-0.075306537	-16.94397088	4.015052722	2.553064943
87.72	0.072755991	-0.000366844	-0.072050144	-16.21128246	4.01639059	2.553535943
87.725	0.069869846	-0.000352516	-0.069170551	-15.56337408	4.017624421	2.553913822
87.73	0.0666997	-0.000336803	-0.066015079	-14.85339282	4.018748828	2.554196894
87.735	0.061388464	-0.000310682	-0.060775311	-13.674445	4.019701294	2.554383678
87.74	0.053977445	-0.000274025	-0.05343335	-12.02250385	4.020437671	2.554472436
87.745	0.043756254	-0.000223195	-0.04327439	-9.736737665	4.020921572	2.554479423
87.75	0.030618288	-0.000157469	-0.030173303	-6.788993114	4.021158512	2.554479423
87.755	0.017266862	-9.02873E-05	-0.016821753	-3.784894353	4.021233865	2.554479423
87.76	0.005610836	-3.13243E-05	-0.005135358	-1.155455559	4.021241822	2.554479423
87.765	-0.003201641	1.35218E-05	0.00373366	0.840073393	4.021244412	2.554479423
87.77	-0.00688187	3.24985E-05	0.007481649	1.683371038	4.021256382	2.554479423
87.775	-0.005840876	2.74719E-05	0.006466635	1.454992813	4.021265005	2.554479423
87.78	-0.003946495	1.7951E-05	0.004545216	1.022673565	4.021268941	2.554479423
87.785	-0.00438986	2.01546E-05	0.004990418	1.12284402	4.021273812	2.554479423
87.79	-0.00785801	3.75883E-05	0.008486406	1.909441367	4.021289418	2.554479423
87.795	-0.01153937	5.63262E-05	0.012183576	2.741304569	4.021323072	2.554479423
87.8	-0.013249427	6.50978E-05	0.013913331	3.130499457	4.02136744	2.554479423
87.805	-0.01410932	6.95094E-05	0.014783064	3.326189383	4.021417754	2.554479423
87.81	-0.015717365	7.76647E-05	0.016390452	3.687851622	4.02148019	2.554479423
87.815	-0.019169433	9.5171E-05	0.019839086	4.463794453	4.021573064	2.554479423
87.82	-0.023264934	0.00011608	0.023954925	5.389858148	4.021709862	2.554479423
87.825	-0.025039859	0.000125259	0.025760585	5.796131591	4.02186833	2.554479423
87.83	-0.025298848	0.00012667	0.02603807	5.858565761	4.022030092	2.554479423
87.835	-0.026914469	0.000134929	0.027662247	6.224005484	4.022213175	2.554479423
87.84	-0.029277658	0.000147035	0.030041863	6.759419211	4.02242982	2.554479423
87.845	-0.03052721	0.000153517	0.031315374	7.045959233	4.022665352	2.554479423
87.85	-0.030737354	0.000154684	0.0315448	7.097579923	4.022904138	2.554479423
87.855	-0.031505363	0.00015863	0.03231986	7.27196855	4.023155006	2.554479423
87.86	-0.034080205	0.000171759	0.034898111	7.852075016	4.023448555	2.554479423
87.865	-0.03710299	0.000187239	0.037936165	8.535637084	4.023796486	2.554479423
87.87	-0.038770378	0.000195869	0.039629255	8.916582452	4.024176392	2.554479423
87.875	-0.039636521	0.000200411	0.040519993	9.116998323	4.024573462	2.554479423

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
87.88	-0.040327796	0.000204056	0.041234808	9.277831794	4.024984503	2.554479423
87.885	-0.040527477	0.000205196	0.041458226	9.32810092	4.025399624	2.554479423
87.89	-0.040550023	0.000205403	0.041498877	9.337247406	4.025815207	2.554479423
87.895	-0.041389259	0.000209728	0.042346783	9.528026143	4.026248171	2.554479423
87.9	-0.043565898	0.000220869	0.044530249	10.01930595	4.02672787	2.554479423
87.905	-0.045490721	0.000230804	0.046476581	10.45723063	4.027250894	2.554479423
87.91	-0.045386693	0.000230446	0.046397902	10.43952793	4.027771529	2.554479423
87.915	-0.04458678	0.000226489	0.045599078	10.25979246	4.028273973	2.554479423
87.92	-0.044551218	0.000226385	0.045578012	10.25505259	4.028775617	2.554479423
87.925	-0.044879804	0.000228127	0.045929827	10.33421107	4.029284687	2.554479423
87.93	-0.045748142	0.000232613	0.046831003	10.53697564	4.029813647	2.554479423
87.935	-0.046584982	0.000236974	0.047684991	10.72912291	4.030362136	2.554479423
87.94	-0.046377732	0.000236025	0.047493418	10.68601909	4.030905755	2.554479423
87.945	-0.046496168	0.000236691	0.04762784	10.71626394	4.031452155	2.554479423
87.95	-0.047410304	0.000241419	0.048555304	10.92494337	4.03202025	2.554479423
87.955	-0.047711255	0.000243054	0.048875546	10.99699774	4.032595581	2.554479423
87.96	-0.047805143	0.00024362	0.048986258	11.02190803	4.033173178	2.554479423
87.965	-0.048213924	0.000245793	0.049411664	11.11762439	4.033760696	2.554479423
87.97	-0.048208353	0.000245878	0.049426294	11.12091617	4.034348078	2.554479423
87.975	-0.047842325	0.000244126	0.049072596	11.04133409	4.034926574	2.554479423
87.98	-0.0472725	0.000241333	0.048508638	10.91444352	4.035491372	2.554479423
87.985	-0.04670546	0.000238545	0.047945781	10.78780081	4.036042701	2.554479423
87.99	-0.046320204	0.000236693	0.047571968	10.70369275	4.036584973	2.554479423
87.995	-0.045084477	0.000230527	0.046327944	10.42378735	4.037098697	2.554479423
88	-0.043655403	0.000223331	0.044876648	10.09724579	4.03758037	2.554785139
88.005	-0.043617422	0.000223202	0.044850878	10.0914476	4.038061204	2.555124464
88.01	-0.043063864	0.000220504	0.044306722	9.969012393	4.038529912	2.555356791
88.015	-0.041599879	0.000213148	0.042824006	9.635401266	4.038967293	2.555481755
88.02	-0.041267295	0.000211531	0.042498207	9.56209667	4.039397709	2.555503897
88.025	-0.040008086	0.000205257	0.041234487	9.277759535	4.039802258	2.555503897
88.03	-0.037376478	0.000191951	0.038555546	8.674997835	4.040155337	2.555503897
88.035	-0.03631286	0.000186572	0.037473245	8.431480075	4.040488608	2.555503897
88.04	-0.034873328	0.000179321	0.036014709	8.10330958	4.040795979	2.555503897
88.045	-0.032981993	0.000169703	0.034081011	7.668227519	4.041070914	2.555503897
88.05	-0.033706169	0.000173362	0.0348199	7.834477478	4.041358054	2.555503897
88.055	-0.034108059	0.000175468	0.035245012	7.93012771	4.041652083	2.555503897
88.06	-0.033502852	0.000172412	0.034627856	7.791267573	4.04193577	2.555503897
88.065	-0.035038313	0.000180229	0.03620586	8.146318522	4.042246056	2.555503897
88.07	-0.035957927	0.000185006	0.037169803	8.363205575	4.042572844	2.555503897
88.075	-0.035390299	0.000182193	0.036601702	8.23538306	4.042889395	2.555503897
88.08	-0.03618915	0.000186313	0.037433369	8.422508068	4.043220399	2.555503897
88.085	-0.036245862	0.000186727	0.037516583	8.441231226	4.04355244	2.555503897
88.09	-0.035027193	0.000180622	0.036284069	8.163915502	4.04386253	2.555503897
88.095	-0.034982649	0.000180466	0.036252602	8.15683545	4.044171831	2.555503897
88.1	-0.034602345	0.000178651	0.035886229	8.074401527	4.044474443	2.555503897
88.105	-0.033591325	0.000173609	0.034868856	7.845492532	4.044759631	2.555503897
88.11	-0.033672808	0.000174127	0.034973615	7.869063266	4.045046203	2.555503897
88.115	-0.033154708	0.000171679	0.034479576	7.757904543	4.045324025	2.555503897
88.12	-0.030442763	0.000158118	0.031753006	7.144426295	4.045558256	2.555503897
88.125	-0.025462788	0.000133507	0.02681236	6.032781023	4.045722121	2.555503897
88.13	-0.017740583	9.51131E-05	0.019117209	4.301371935	4.045801666	2.555503897
88.135	-0.008490947	4.88503E-05	0.009863963	2.219391692	4.045819888	2.555503897
88.14	-0.001140891	1.18451E-05	0.002476871	0.557296041	4.045820217	2.555503897
88.145	0.002214684	-5.23789E-06	-0.000929041	-0.209034223	4.045821456	2.555503897
88.15	0.001919494	-3.97044E-06	-0.000669701	-0.150682628	4.045822388	2.555503897
88.155	-0.000433126	7.72909E-06	0.001691636	0.380618086	4.045822435	2.555503897
88.16	-0.001808763	1.46694E-05	0.003091489	0.695585014	4.045823262	2.555503897
88.165	0.000847894	1.41933E-06	0.000416823	0.093785106	4.045823444	2.555503897
88.17	0.005317449	-2.09809E-05	-0.00406547	-0.914730816	4.04583059	2.555503897
88.175	0.007022294	-2.96857E-05	-0.005798758	-1.30472056	4.045843053	2.555503897
88.18	0.006988355	-2.96017E-05	-0.005781796	-1.300904014	4.045855396	2.555503897
88.185	0.007540388	-3.24141E-05	-0.00634188	-1.426923102	4.045869767	2.555503897
88.19	0.008838278	-3.89645E-05	-0.007645582	-1.72025597	4.04588951	2.555503897
88.195	0.010875303	-4.92627E-05	-0.00969442	-2.181244487	4.045919402	2.555503897
88.2	0.011455362	-5.23004E-05	-0.010297811	-2.317007587	4.045952568	2.555503897
88.205	0.010142507	-4.57632E-05	-0.008977898	-2.020027029	4.045978567	2.555503897
88.21	0.010956398	-4.98248E-05	-0.009798092	-2.20457066	4.046008907	2.555503897
88.215	0.01369678	-6.36407E-05	-0.012553391	-2.824513077	4.046056322	2.555503897
88.22	0.014683903	-6.87256E-05	-0.013564052	-3.051911703	4.046110817	2.555503897
88.225	0.014085613	-6.58211E-05	-0.012977498	-2.919937101	4.046160962	2.555503897
88.23	0.013162029	-6.1242E-05	-0.012053073	-2.711941445	4.046204747	2.555503897
88.235	0.012894188	-5.99163E-05	-0.011785545	-2.651747737	4.046246767	2.555503897
88.24	0.014065613	-6.58424E-05	-0.012982108	-2.920974357	4.04629677	2.555503897
88.245	0.014302445	-6.71465E-05	-0.013245235	-2.98017792	4.046348471	2.555503897
88.25	0.012493613	-5.81517E-05	-0.011429395	-2.571613965	4.046387921	2.555503897
88.255	0.010980443	-5.05775E-05	-0.009901345	-2.227802564	4.046418394	2.555503897
88.26	0.01025306	-4.69369E-05	-0.009167144	-2.062607469	4.046444964	2.555503897
88.265	0.010201803	-4.66863E-05	-0.009116801	-2.05128031	4.046471268	2.555503897
88.27	0.01103423	-5.09081E-05	-0.00996928	-2.243087996	4.046502041	2.555503897
88.275	0.010803349	-4.98447E-05	-0.00975446	-2.194753592	4.046531539	2.555503897
88.28	0.008942943	-4.05663E-05	-0.007882821	-1.773634784	4.046551752	2.555503897
88.285	0.00771459	-3.43967E-05	-0.006639488	-1.493884813	4.046566794	2.555503897
88.29	0.008033608	-3.60006E-05	-0.006963415	-1.566768475	4.046583105	2.555503897
88.295	0.00861535	-3.89723E-05	-0.007563456	-1.70177762	4.046601865	2.555503897
88.3	0.008312001	-3.75208E-05	-0.007270314	-1.635820708	4.046619327	2.555503897
88.305	0.007578179	-3.38884E-05	-0.006537089	-1.470844917	4.046633841	2.555503897
88.31	0.007057666	-3.13212E-05	-0.006019896	-1.354476589	4.04664643	2.555503897
88.315	0.006170474	-2.69107E-05	-0.005131518	-1.154591525	4.046656053	2.555503897
88.32	0.005552457	-2.38164E-05	-0.004508402	-1.014390466	4.046663845	2.555503897
88.325	0.006294704	-2.7569E-05	-0.005266191	-1.184893022	4.04667386	2.555503897
88.33	0.00609443	-2.66543E-05	-0.005081397	-1.143314285	4.046683247	2.555503897
88.335	0.003782361	-1.50792E-05	-0.002749544	-0.618647321	4.046686863	2.555503897
88.34	0.003422316	-1.3201E-05	-0.002372707	-0.533858987	4.046689823	2.555503897
88.345	0.005839156	-2.53377E-05	-0.004822423	-1.085045166	4.046698441	2.555503897
88.35	0.006235885	-2.74166E-05	-0.005241523	-1.179342615	4.046708269	2.555503897
88.355	0.005498079	-2.3698E-05	-0.004490681	-1.010403249	4.046715909	2.555503897
88.36	0.008239104	-3.74244E-05	-0.007259967	-1.633492518	4.046733066	2.555503897
88.365	0.01120856	-5.2442E-05	-0.010285988	-2.314347272	4.046764818	2.555503897
88.37	0.011017729	-5.15893E-05	-0.010113379	-2.27551023	4.046795498	2.555503897
88.375	0.011781595	-5.54442E-05	-0.0108906	-2.450384951	4.04683058	2.555503897
88.38	0.014094664	-6.714E-05	-0.013244996	-2.980124124	4.04688079	2.555503897
88.385	0.014722618	-7.04189E-05	-0.013900562	-3.127626464	4.046935573	2.555503897
88.39	0.014990391	-7.18551E-05	-0.014185961	-3.191841264	4.046992367	2.555503897
88.395	0.015605444	-7.50557E-05	-0.014821895	-3.334926482	4.047053917	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
88.4	0.015376251	-7.40223E-05	-0.014613195	-3.287968941	4.047113672	2.555503897
88.405	0.015411978	-7.43103E-05	-0.014671356	-3.301055171	4.047173705	2.555503897
88.41	0.015262472	-7.37098E-05	-0.014550081	-3.273768209	4.04723258	2.555503897
88.415	0.013829143	-6.6673E-05	-0.013129449	-2.954125993	4.047280915	2.555503897
88.42	0.011795891	-5.66285E-05	-0.011102893	-2.498150887	4.047316082	2.555503897
88.425	0.007954168	-3.76517E-05	-0.007277803	-1.637505754	4.047332073	2.555503897
88.43	0.001904998	-7.70831E-06	-0.001251023	-0.281480118	4.04733299	2.555503897
88.435	-0.004506086	2.41814E-05	0.005156571	1.160228379	4.047338122	2.555503897
88.44	-0.010359998	5.34367E-05	0.011025478	2.480732492	4.047365249	2.555503897
88.445	-0.013604242	6.97711E-05	0.014298568	3.21717783	4.047412025	2.555503897
88.45	-0.013995503	7.17991E-05	0.014704758	3.308570549	4.04746153	2.555503897
88.455	-0.015714841	8.03581E-05	0.016418576	3.694179624	4.047523946	2.555503897
88.46	-0.019340866	9.84793E-05	0.020044772	4.510073654	4.047618489	2.555503897
88.465	-0.021915942	0.000111399	0.022628131	5.091329445	4.047739883	2.555503897
88.47	-0.024427946	0.000123967	0.025139682	5.656428425	4.047890699	2.555503897
88.475	-0.028441739	0.000144098	0.029159628	6.560916358	4.04809515	2.555503897
88.48	-0.031971093	0.000161919	0.032715014	7.36087813	4.048353489	2.555503897
88.485	-0.033770024	0.000171085	0.03454262	7.772089429	4.048641719	2.555503897
88.49	-0.035145538	0.000178107	0.035942217	8.086998761	4.048953907	2.555503897
88.495	-0.036496879	0.000185023	0.037320246	8.397055428	4.049290564	2.555503897
88.5	-0.036755458	0.00018648	0.037610156	8.462285081	4.049632008	2.555503897
88.505	-0.036145217	0.000183559	0.037020332	8.329574698	4.049962208	2.555503897
88.51	-0.035399809	0.000179938	0.036289217	8.165073922	4.05027893	2.555503897
88.515	-0.034497378	0.000175508	0.035395168	7.963912726	4.05057971	2.555503897
88.52	-0.03413392	0.000173763	0.035043046	7.884685396	4.050874184	2.555503897
88.525	-0.033951927	0.000172956	0.034880272	7.848061206	4.051165528	2.555503897
88.53	-0.032794288	0.00016726	0.033731404	7.589566003	4.051437342	2.555503897
88.535	-0.032021223	0.00016347	0.03296697	7.41756822	4.051696492	2.555503897
88.54	-0.030968784	0.000158336	0.031932038	7.184708633	4.051938887	2.555503897
88.545	-0.026994745	0.000138643	0.027965025	6.292130716	4.052123064	2.555503897
88.55	-0.023402869	0.00012077	0.024368674	5.482951604	4.052261489	2.555503897
88.555	-0.022804889	0.000117779	0.02376728	5.347637953	4.05239293	2.555503897
88.56	-0.021741622	0.000112549	0.022715684	5.111029009	4.0525124	2.555503897
88.565	-0.019661034	0.000102239	0.020643727	4.644838515	4.052610099	2.555503897
88.57	-0.017816315	9.30929E-05	0.018806474	4.231456599	4.052690324	2.555503897
88.575	-0.015180324	8.00043E-05	0.016178917	3.640256302	4.052748567	2.555503897
88.58	-0.012807316	6.81664E-05	0.013803954	3.105889581	4.052790023	2.555503897
88.585	-0.011641861	6.23258E-05	0.012632717	2.842361288	4.052824278	2.555503897
88.59	-0.010401352	5.61253E-05	0.011389692	2.562680777	4.052851622	2.555503897
88.595	-0.009317022	5.06808E-05	0.010298536	2.317170606	4.052873561	2.555503897
88.6	-0.008957862	4.88392E-05	0.009929525	2.234143024	4.052893842	2.555503897
88.605	-0.008747137	4.77523E-05	0.009711733	2.185139962	4.05291318	2.555503897
88.61	-0.008241349	4.5204E-05	0.009201202	2.070270529	4.052930346	2.555503897
88.615	-0.007592167	4.19179E-05	0.008542951	1.922163863	4.052944914	2.555503897
88.62	-0.007892886	4.33317E-05	0.008828744	1.986467443	4.052960659	2.555503897
88.625	-0.009029678	4.89359E-05	0.009960191	2.241042955	4.052981267	2.555503897
88.63	-0.009554181	5.15203E-05	0.010481798	2.35840458	4.053004337	2.555503897
88.635	-0.009884455	5.31168E-05	0.010803971	2.430893471	4.053029031	2.555503897
88.64	-0.010850155	5.78688E-05	0.011762698	2.646606973	4.053058785	2.555503897
88.645	-0.012213132	6.46074E-05	0.013121699	2.952382227	4.053096484	2.555503897
88.65	-0.013828162	7.26141E-05	0.014735676	3.315527143	4.053144813	2.555503897
88.655	-0.015334025	8.0098E-05	0.01624356	3.654801038	4.05320424	2.555503897
88.66	-0.016813138	8.746E-05	0.017726214	3.988398235	4.053275686	2.555503897
88.665	-0.017916142	9.29732E-05	0.018836101	4.238122801	4.053356813	2.555503897
88.67	-0.018275396	9.47688E-05	0.019197523	4.319442762	4.053441226	2.555503897
88.675	-0.019935002	0.000103002	0.020854179	4.692190215	4.053541666	2.555503897
88.68	-0.022210288	0.000114373	0.023140968	5.206717708	4.053666342	2.555503897
88.685	-0.022083822	0.00011383	0.023030324	5.181822965	4.053789603	2.555503897
88.69	-0.021943022	0.000113135	0.02289	5.150249928	4.053911297	2.555503897
88.695	-0.023597164	0.000121381	0.02454962	5.523664454	4.05405203	2.555503897
88.7	-0.024441354	0.00012565	0.025407563	5.716701726	4.054203012	2.555503897
88.705	-0.02487851	0.000127877	0.025854944	5.817362332	4.054359444	2.555503897
88.71	-0.025612064	0.000131598	0.026602271	5.985510958	4.054525236	2.555503897
88.715	-0.025450259	0.000130877	0.02645665	5.95274625	4.054688941	2.555503897
88.72	-0.025390581	0.00013065	0.02641076	5.942420917	4.054851878	2.555503897
88.725	-0.024928057	0.000128452	0.025966883	5.84254877	4.055008934	2.555503897
88.73	-0.023200043	0.000119939	0.0242486	5.455935108	4.05514497	2.555503897
88.735	-0.02227819	0.000115397	0.023332368	5.249782801	4.05527041	2.555503897
88.74	-0.021318484	0.000110707	0.022386409	5.036941927	4.055385275	2.555503897
88.745	-0.019184204	0.000100154	0.020259144	4.558307419	4.055478292	2.555503897
88.75	-0.018239354	9.54796E-05	0.019317209	4.346372024	4.055562372	2.555503897
88.755	-0.017511903	9.19445E-05	0.018605103	4.186148118	4.05563988	2.555503897
88.76	-0.015045809	7.97729E-05	0.016154362	3.634731431	4.055697094	2.555503897
88.765	-0.012447565	6.69002E-05	0.013564342	3.0519769	4.055736255	2.555503897
88.77	-0.009876081	5.41527E-05	0.011001314	2.475295671	4.055760906	2.555503897
88.775	-0.007208159	4.08913E-05	0.008337317	1.875896383	4.055774038	2.555503897
88.78	-0.005797672	3.38657E-05	0.006930404	1.559340949	4.055782533	2.555503897
88.785	-0.00436357	2.6759E-05	0.005507738	1.239241014	4.055787346	2.555503897
88.79	-0.002053445	1.52723E-05	0.003209287	0.722089608	4.055788411	2.555503897
88.795	-0.000939492	9.68882E-06	0.002092502	0.470812913	4.055788635	2.555503897
88.8	-0.000962932	9.79347E-06	0.002113639	0.475568818	4.055788869	2.555503897
88.805	-0.000291056	6.47653E-06	0.001450132	0.326279631	4.05578889	2.555503897
88.81	0.001000452	6.19439E-08	0.000167683	0.037728659	4.055789143	2.555503897
88.815	0.00202619	-5.05952E-06	-0.000855957	-0.192590265	4.055790181	2.555503897
88.82	0.00229557	-6.43457E-06	-0.001130749	-0.254418481	4.055791513	2.555503897
88.825	0.001666203	-3.32562E-06	-0.000502915	-0.113155885	4.055792214	2.555503897
88.83	0.001007199	-2.70587E-08	0.000163022	0.036679879	4.055792471	2.555503897
88.835	0.001378858	-1.83732E-06	-0.000202572	-0.045578618	4.055792951	2.555503897
88.84	0.002158175	-5.71234E-06	-0.000984956	-0.221615098	4.055794129	2.555503897
88.845	0.001805773	-3.98725E-06	-0.000636554	-0.143224739	4.055794953	2.555503897
88.85	0.000520454	2.41251E-06	0.000655428	0.147471334	4.055795021	2.555503897
88.855	-6.01169E-05	5.34785E-06	0.001247786	0.280751763	4.055795022	2.555503897
88.86	0.000150722	4.32521E-06	0.001041248	0.234280872	4.055795028	2.555503897
88.865	-0.000634234	8.22122E-06	0.001827517	0.411191241	4.055795129	2.555503897
88.87	-0.002625823	1.8158E-05	0.003831491	0.862085371	4.055796872	2.555503897
88.875	-0.003628066	2.32303E-05	0.00485394	1.092136433	4.055800199	2.555503897
88.88	-0.003865952	2.44729E-05	0.005104362	1.148481358	4.055803976	2.555503897
88.885	-0.005512771	3.27262E-05	0.006767216	1.522623496	4.055811657	2.555503897
88.89	-0.006361522	3.71011E-05	0.007648338	1.72087605	4.055821885	2.555503897
88.895	-0.004632684	2.86416E-05	0.00594037	1.336583183	4.05582731	2.555503897
88.9	-0.003743218	2.42858E-05	0.005061382	1.138811018	4.055830851	2.555503897
88.905	-0.003551712	2.34599E-05	0.004894751	1.101319004	4.055834039	2.555503897
88.91	-0.000857257	1.02119E-05	0.002223097	0.500196868	4.055834225	2.555503897
88.915	0.002407569	-5.96119E-06	-0.001035421	-0.232969645	4.05583569	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
88.92	0.004294157	-1.52997E-05	-0.002901943	-0.652937171	4.05584035	2.555503897
88.925	0.006606624	-2.67267E-05	-0.005183903	-1.166378264	4.055851382	2.555503897
88.93	0.009867352	-4.28974E-05	-0.008411124	-1.892502991	4.05587599	2.555503897
88.935	0.012808916	-5.7526E-05	-0.011328503	-2.548913078	4.055917457	2.555503897
88.94	0.014909816	-6.79774E-05	-0.013411631	-3.017617085	4.055973642	2.555503897
88.945	0.017524961	-8.09573E-05	-0.01599429	-3.598715164	4.056051265	2.555503897
88.95	0.021795525	-0.00010236	-0.020243512	-4.5547901	4.056171328	2.555503897
88.955	0.025445268	-0.000120881	-0.023917429	-5.381421521	4.056334968	2.555503897
88.96	0.026621675	-0.00012695	-0.025120804	-5.652181007	4.056514089	2.555503897
88.965	0.027210708	-0.000130001	-0.025725617	-5.788263865	4.056701225	2.555503897
88.97	0.028625313	-0.000137198	-0.027151907	-6.109179015	4.056908323	2.555503897
88.975	0.030210204	-0.000145281	-0.028753284	-6.469488866	4.057138989	2.555503897
88.98	0.031061406	-0.000149689	-0.029626316	-6.665921095	4.057382836	2.555503897
88.985	0.031045246	-0.000149697	-0.029627187	-6.666116968	4.05762643	2.555503897
88.99	0.031743618	-0.000153272	-0.030335814	-6.825558093	4.057881106	2.555503897
88.995	0.032836611	-0.00015888	-0.031446235	-7.075402769	4.058153623	2.555503897
89	0.032335011	-0.000156445	-0.030954408	-6.964741698	4.058417877	2.555503897
89.005	0.032707258	-0.000158333	-0.031335855	-7.050567393	4.05868825	2.555503897
89.01	0.03534649	-0.000171706	-0.033984634	-7.646542541	4.059004019	2.555503897
89.015	0.036338532	-0.000176859	-0.03500421	-7.875947191	4.059337761	2.555503897
89.02	0.036055113	-0.000175525	-0.034734683	-7.815303642	4.059666317	2.555503897
89.025	0.03724047	-0.000181592	-0.035940272	-8.08656113	4.060016831	2.555503897
89.03	0.037433193	-0.00018271	-0.036157376	-8.135409684	4.060370983	2.555503897
89.035	0.036437555	-0.000177774	-0.035160657	-7.911147769	4.060706547	2.555503897
89.04	0.037437281	-0.000182863	-0.036188321	-8.142372117	4.061060776	2.555503897
89.045	0.038919184	-0.000190457	-0.03769337	-8.481008256	4.061443604	2.555503897
89.05	0.039013199	-0.000191055	-0.037811021	-8.507479778	4.061828283	2.555503897
89.055	0.039932335	-0.000195776	-0.038744814	-8.7175831	4.062231302	2.555503897
89.06	0.041990189	-0.000206299	-0.040824423	-9.18549527	4.062676929	2.555503897
89.065	0.042691403	-0.000210051	-0.041565625	-9.352265571	4.063137564	2.555503897
89.07	0.041784114	-0.000205684	-0.04068379	-9.153852777	4.063578828	2.555503897
89.075	0.040667334	-0.000200254	-0.03958775	-8.907243688	4.063996819	2.555503897
89.08	0.038403736	-0.000189072	-0.037332064	-8.399714314	4.064369574	2.555503897
89.085	0.033896312	-0.000166887	-0.032861523	-7.393842668	4.064659963	2.555503897
89.09	0.029449341	-0.000144889	-0.028434231	-6.397701946	4.064879156	2.555503897
89.095	0.026007573	-0.000127866	-0.025012078	-5.627717562	4.065050109	2.555503897
89.1	0.022006356	-0.000108046	-0.021031511	-4.732089895	4.065172506	2.555503897
89.105	0.01750159	-8.56409E-05	-0.016536749	-3.720768441	4.065249922	2.555503897
89.11	0.013264065	-6.4503E-05	-0.012300773	-2.767674001	4.065294388	2.555503897
89.115	0.009628283	-4.63341E-05	-0.008663298	-1.949242076	4.065317818	2.555503897
89.12	0.006637879	-3.13872E-05	-0.005673276	-1.276487203	4.065328955	2.555503897
89.125	0.003248823	-1.4466E-05	-0.002286897	-0.514551921	4.065331622	2.555503897
89.13	-1.78064E-05	1.93607E-06	0.000985177	0.221664906	4.065331622	2.555503897
89.135	-0.001883099	1.13432E-05	0.002862969	0.644168112	4.065332518	2.555503897
89.14	-0.003090569	1.7463E-05	0.00408415	0.91893371	4.065334933	2.555503897
89.145	-0.002894582	1.65886E-05	0.003905059	0.878638247	4.06533705	2.555503897
89.15	-0.001054747	7.43556E-06	0.002057421	0.462919667	4.065337331	2.555503897
89.155	-0.000606313	5.15137E-06	0.001596599	0.359234754	4.065337424	2.555503897
89.16	-0.001298751	8.58422E-06	0.002289809	0.515207125	4.065337851	2.555503897
89.165	-0.00180959	1.10971E-05	0.002797109	0.629349623	4.065338678	2.555503897
89.17	-0.003937978	2.16898E-05	0.004927376	1.108659641	4.065342598	2.555503897
89.175	-0.005561514	2.98486E-05	0.00655456	1.474775977	4.065350415	2.555503897
89.18	-0.00507563	2.74325E-05	0.006066618	1.364989066	4.065356926	2.555503897
89.185	-0.006754718	3.5763E-05	0.007733741	1.740091714	4.065368458	2.555503897
89.19	-0.009676497	5.04112E-05	0.01065288	2.396898003	4.065392123	2.555503897
89.195	-0.009579464	5.00362E-05	0.010572349	2.378778467	4.065415316	2.555503897
89.2	-0.00851883	4.47667E-05	0.009508495	2.139411416	4.065433658	2.555503897
89.205	-0.008706792	4.57081E-05	0.009698647	2.182195578	4.065452818	2.555503897
89.21	-0.009232208	4.83574E-05	0.01023361	2.3025622	4.06547436	2.555503897
89.215	-0.009481612	4.96483E-05	0.01049423	2.361201732	4.065497081	2.555503897
89.22	-0.008763065	4.61016E-05	0.009778024	2.200055349	4.06551649	2.555503897
89.225	-0.008167417	4.31193E-05	0.009176012	2.064602733	4.065533349	2.555503897
89.23	-0.008909482	4.68231E-05	0.009923943	2.232887075	4.065553411	2.555503897
89.235	-0.009058082	4.76026E-05	0.010081286	2.268289279	4.065574149	2.555503897
89.24	-0.008474166	4.4688E-05	0.009492727	2.135863514	4.065592298	2.555503897
89.245	-0.009048056	4.75281E-05	0.010066271	2.264910966	4.06561299	2.555503897
89.25	-0.010147684	5.30194E-05	0.011172441	2.513799235	4.065639016	2.555503897
89.255	-0.01102269	5.73973E-05	0.012044412	2.709992777	4.065669724	2.555503897
89.26	-0.012053867	6.25536E-05	0.013071182	2.941015953	4.065706446	2.555503897
89.265	-0.01335231	6.90415E-05	0.014362788	3.231627246	4.065751506	2.555503897
89.27	-0.015287953	7.87249E-05	0.016289864	3.66521932	4.065810577	2.555503897
89.275	-0.016972022	8.72E-05	0.017975787	4.044552085	4.065883379	2.555503897
89.28	-0.017355312	8.91741E-05	0.018368402	4.132890381	4.065959506	2.555503897
89.285	-0.018206062	9.34325E-05	0.019215211	4.3234224	4.06604328	2.555503897
89.29	-0.0203642	0.000104245	0.021364635	4.807042828	4.066148092	2.555503897
89.295	-0.021849127	0.000111743	0.022854474	5.142256585	4.066268746	2.555503897
89.3	-0.022755546	0.000116326	0.02376502	5.347129389	4.066399619	2.555503897
89.305	-0.02484168	0.000126798	0.025844602	5.81503543	4.066555588	2.555503897
89.31	-0.026915823	0.000137273	0.027923954	6.282889658	4.066738689	2.555503897
89.315	-0.027422179	0.000139929	0.028450972	6.401468663	4.066928745	2.555503897
89.32	-0.028068839	0.000143244	0.029108744	6.549467343	4.067127869	2.555503897
89.325	-0.029576648	0.000150881	0.030623804	6.890355845	4.067348962	2.555503897
89.33	-0.030222629	0.000154248	0.031291538	7.04059595	4.067579817	2.555503897
89.335	-0.030474101	0.000155625	0.031564588	7.10203231	4.067814531	2.555503897
89.34	-0.031127023	0.000159017	0.032237213	7.253372881	4.068059409	2.555503897
89.345	-0.030937098	0.000158219	0.032074955	7.216864856	4.068301309	2.555503897
89.35	-0.030630059	0.000156811	0.031790617	7.152888871	4.068538431	2.555503897
89.355	-0.030866875	0.000158141	0.032059359	7.21335588	4.068779233	2.555503897
89.36	-0.02978122	0.000152898	0.03100073	6.975164191	4.069003395	2.555503897
89.365	-0.028002836	0.000144158	0.02923699	6.57832278	4.069201584	2.555503897
89.37	-0.026746755	0.000138025	0.02799991	6.299979685	4.069382392	2.555503897
89.375	-0.02464853	0.000127705	0.025919601	5.831910143	4.069535945	2.555503897
89.38	-0.021893075	0.000114078	0.02317475	5.214318716	4.069657086	2.555503897
89.385	-0.018998034	9.97439E-05	0.020289611	4.565162487	4.069748306	2.555503897
89.39	-0.015393493	8.18431E-05	0.016689941	3.755236694	4.069808196	2.555503897
89.395	-0.012142738	6.56632E-05	0.013439317	3.023846309	4.069845461	2.555503897
89.4	-0.009687672	5.34534E-05	0.010988117	2.472326357	4.069869181	2.555503897
89.405	-0.007195032	4.10624E-05	0.008502151	1.912983886	4.069882265	2.555503897
89.41	-0.004600866	2.81626E-05	0.005915745	1.331042528	4.069887615	2.555503897
89.415	-0.001594426	1.31929E-05	0.0029164	0.656189914	4.069888258	2.555503897
89.42	0.001065466	-8.66701E-08	0.000257544	0.0579473	4.069888545	2.555503897
89.425	0.002518761	-7.33257E-06	-0.001192519	-0.268316843	4.069890148	2.555503897
89.43	0.004519153	-1.72742E-05	-0.003181242	-0.715779469	4.06989531	2.555503897
89.435	0.007147676	-3.0383E-05	-0.005802063	-1.305464229	4.069908222	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
89.44	0.008993312	-3.95947E-05	-0.007642778	-1.719625042	4.069928664	2.555503897
89.445	0.011179047	-5.04894E-05	-0.009818766	-2.209222331	4.069960249	2.555503897
89.45	0.013503853	-6.21119E-05	-0.012138906	-2.731253795	4.070006338	2.555503897
89.455	0.014922768	-6.92046E-05	-0.013554181	-3.049690622	4.07006262	2.555503897
89.46	0.017318968	-8.11506E-05	-0.015936834	-3.585787558	4.070138429	2.555503897
89.465	0.02054917	-9.7327E-05	-0.019161175	-4.311264426	4.070245154	2.555503897
89.47	0.021988607	-0.000104612	-0.020612398	-4.637789642	4.070367354	2.555503897
89.475	0.022314549	-0.000106292	-0.020947194	-4.713118648	4.070493203	2.555503897
89.48	0.023539667	-0.000112444	-0.022172218	-4.988748974	4.070633251	2.555503897
89.485	0.024819068	-0.000118914	-0.023460381	-5.278585779	4.070788936	2.555503897
89.49	0.024393629	-0.000116885	-0.02305007	-5.186265754	4.07093933	2.555503897
89.495	0.023304704	-0.000111477	-0.021958284	-4.940613917	4.071076596	2.555503897
89.5	0.023657489	-0.00011324	-0.022314432	-5.020747246	4.071218049	2.555503897
89.505	0.024209762	-0.000116043	-0.022880366	-5.148082317	4.071366184	2.555503897
89.51	0.023746203	-0.000113757	-0.022418608	-5.044186712	4.0715087	2.555503897
89.515	0.024268389	-0.000116353	-0.022942969	-5.162168026	4.071657553	2.555503897
89.52	0.02574135	-0.000123737	-0.024420244	-5.494554793	4.071825024	2.555503897
89.525	0.026506786	-0.000127611	-0.025191242	-5.668029546	4.072002602	2.555503897
89.53	0.027284754	-0.000131537	-0.025972422	-5.843794906	4.072190757	2.555503897
89.535	0.028140859	-0.000135874	-0.026835033	-6.03788252	4.072390905	2.555503897
89.54	0.02841965	-0.000137327	-0.027124153	-6.102934325	4.072595038	2.555503897
89.545	0.02874657	-0.000139006	-0.027458057	-6.178062732	4.072803895	2.555503897
89.55	0.029108574	-0.000140856	-0.027826006	-6.260851325	4.073018044	2.555503897
89.555	0.029880261	-0.000144736	-0.028597521	-6.434442264	4.073243699	2.555503897
89.56	0.031403842	-0.000152394	-0.030119844	-6.776964803	4.073492953	2.555503897
89.565	0.032142192	-0.000156161	-0.030868482	-6.94540851	4.073754065	2.555503897
89.57	0.032511539	-0.000158049	-0.03124366	-7.0298234	4.074021212	2.555503897
89.575	0.033973727	-0.00016539	-0.032702248	-7.358005708	4.07431293	2.555503897
89.58	0.035218446	-0.000171683	-0.033952161	-7.639236221	4.074626414	2.555503897
89.585	0.036045567	-0.000175877	-0.034785066	-7.826639884	4.074954797	2.555503897
89.59	0.037614368	-0.000183777	-0.036353505	-8.179538733	4.075312385	2.555503897
89.595	0.038845816	-0.000190031	-0.03759455	-8.458773717	4.075693771	2.555503897
89.6	0.039307838	-0.000192435	-0.038071708	-8.566134289	4.076084283	2.555503897
89.605	0.040140034	-0.000196675	-0.038912799	-8.755379856	4.076491505	2.555503897
89.61	0.041256696	-0.000202354	-0.040039375	-9.008859437	4.076921699	2.555503897
89.615	0.042020595	-0.000206296	-0.040821192	-9.18476831	4.077367972	2.555503897
89.62	0.042176834	-0.000207215	-0.041003437	-9.225773327	4.077817569	2.555503897
89.625	0.041751397	-0.000205229	-0.040602358	-9.135530512	4.078258143	2.555503897
89.63	0.040856004	-0.000200901	-0.039728379	-8.938885202	4.078680021	2.555503897
89.635	0.039004006	-0.000191799	-0.037891768	-8.525647765	4.07906452	2.555503897
89.64	0.035837927	-0.000176108	-0.034728014	-7.813803174	4.079389129	2.555503897
89.645	0.0318007	-0.000156047	-0.030687767	-6.904747679	4.079644723	2.555503897
89.65	0.028625451	-0.000140208	-0.027500961	-6.187716307	4.079851823	2.555503897
89.655	0.029306588	-0.000143475	-0.028161716	-6.336386169	4.080068896	2.555503897
89.66	0.033357257	-0.000163578	-0.032217421	-7.248919636	4.080350123	2.555503897
89.665	0.036259648	-0.000178136	-0.035151075	-7.908991917	4.080682417	2.555503897
89.67	0.035626641	-0.000175217	-0.034561251	-7.776281496	4.081003211	2.555503897
89.675	0.032185093	-0.000158316	-0.031150899	-7.008952224	4.08126502	2.555503897
89.68	0.028590858	-0.000140552	-0.027570595	-6.203383905	4.08147162	2.555503897
89.685	0.027258049	-0.000133999	-0.026252561	-5.906826334	4.081659407	2.555503897
89.69	0.024857717	-0.000122262	-0.023893718	-5.376086513	4.081815578	2.555503897
89.695	0.017859179	-8.75109E-05	-0.016918081	-3.806568131	4.08189619	2.555503897
89.7	0.010724333	-5.18044E-05	-0.009763517	-2.196791328	4.081925258	2.555503897
89.705	0.008282418	-3.94362E-05	-0.007288205	-1.639846107	4.081942595	2.555503897
89.71	0.008393105	-3.9914E-05	-0.007384711	-1.661560082	4.081960399	2.555503897
89.715	0.007066149	-3.32866E-05	-0.006058009	-1.36305202	4.081973019	2.555503897
89.72	0.004479868	-2.03137E-05	-0.003464021	-0.779404783	4.081978091	2.555503897
89.725	0.004011087	-1.7859E-05	-0.00297507	-0.669390802	4.081982158	2.555503897
89.73	0.005372204	-2.46282E-05	-0.004341752	-0.976894302	4.081989452	2.555503897
89.735	0.004689764	-2.12553E-05	-0.003660612	-0.823637666	4.081995011	2.555503897
89.74	0.003199769	-1.37698E-05	-0.002156137	-0.485130714	4.081997598	2.555503897
89.745	0.004064698	-1.80395E-05	-0.003018338	-0.67912609	4.082001774	2.555503897
89.75	0.004596916	-2.07356E-05	-0.00356258	-0.801580592	4.082007115	2.555503897
89.755	0.003441714	-1.49764E-05	-0.002399693	-0.539930978	4.082010109	2.555503897
89.76	0.0037131	-1.63045E-05	-0.002667969	-0.600292926	4.082013593	2.555503897
89.765	0.004285365	-1.92098E-05	-0.003254589	-0.732282517	4.082018235	2.555503897
89.77	0.002610414	-1.08861E-05	-0.001579915	-0.355480895	4.082019957	2.555503897
89.775	0.001747607	-6.53222E-06	-0.000710085	-0.159769094	4.082020729	2.555503897
89.78	0.003002372	-1.28005E-05	-0.00197576	-0.444545961	4.082023007	2.555503897
89.785	0.002560086	-1.06637E-05	-0.001544167	-0.347437628	4.082024664	2.555503897
89.79	0.000755021	-1.64746E-06	0.000265601	0.059760286	4.082024808	2.555503897
89.795	0.001058008	-3.12076E-06	-3.36121E-05	-0.007562727	4.08202509	2.555503897
89.8	0.001896616	-7.33984E-06	-0.000885421	-0.199219751	4.082026	2.555503897
89.805	0.001441155	-5.09683E-06	-0.000432439	-0.097298877	4.082026525	2.555503897
89.81	0.0017359	-6.5722E-06	-0.000730409	-0.16434199	4.082027286	2.555503897
89.815	0.002398838	-9.93498E-06	-0.001409225	-0.317075714	4.082028741	2.555503897
89.82	0.001824238	-7.12029E-06	-0.000840807	-0.18918161	4.082029582	2.555503897
89.825	0.00185434	-7.28428E-06	-0.000873978	-0.196644996	4.082030451	2.555503897
89.83	0.002968485	-1.29042E-05	-0.002008412	-0.451892738	4.082032678	2.555503897
89.835	0.003025102	-1.32877E-05	-0.002085627	-0.469265985	4.082034991	2.555503897
89.84	0.002429756	-1.03878E-05	-0.001500059	-0.337513262	4.082036483	2.555503897
89.845	0.002588316	-1.12606E-05	-0.001676333	-0.377175023	4.082038176	2.555503897
89.85	0.001971134	-8.31345E-06	-0.001081267	-0.243284989	4.082039158	2.555503897
89.855	-0.000617164	4.50714E-06	0.001494608	0.336286789	4.082039254	2.555503897
89.86	-0.0025162	1.39596E-05	0.003381475	0.760831815	4.082040854	2.555503897
89.865	-0.003002935	1.63093E-05	0.003850397	0.866339269	4.082043134	2.555503897
89.87	-0.005844239	3.0372E-05	0.006655734	1.497540229	4.082051766	2.555503897
89.875	-0.009933419	5.08698E-05	0.010741561	2.416851151	4.082076705	2.555503897
89.88	-0.011443414	5.84617E-05	0.012253889	2.757124935	4.082109802	2.555503897
89.885	-0.013348776	6.79571E-05	0.014144687	3.182554641	4.082154837	2.555503897
89.89	-0.017142214	8.69845E-05	0.017931165	4.034512088	4.082229107	2.555503897
89.895	-0.018973975	9.6231E-05	0.019770079	4.448267699	4.082320097	2.555503897
89.9	-0.020278568	0.000102765	0.021069079	4.74054282	4.082424029	2.555503897
89.905	-0.02320164	0.000117445	0.023986166	5.396887453	4.082560084	2.555503897
89.91	-0.024766154	0.000125365	0.025559266	5.750834937	4.082715105	2.555503897
89.915	-0.025602481	0.00012958	0.026396147	5.939132978	4.082880774	2.555503897
89.92	-0.027673379	0.000139997	0.028464091	6.404420431	4.083074327	2.555503897
89.925	-0.028765759	0.00014555	0.029566017	6.652353918	4.083283463	2.555503897
89.93	-0.029151911	0.000147516	0.029956036	6.740108058	4.083498251	2.555503897
89.935	-0.0306746	0.000155177	0.031475545	7.081997611	4.083736063	2.555503897
89.94	-0.031925942	0.000161516	0.032732541	7.364821794	4.083993673	2.555503897
89.945	-0.032476928	0.000164327	0.033289795	7.490203783	4.084260252	2.555503897
89.95	-0.033535762	0.00016967	0.034348833	7.728487471	4.084544496	2.555503897
89.955	-0.034861371	0.000176371	0.035676776	8.027274598	4.084851657	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
89.96	-0.035839272	0.000181342	0.036661408	8.248816905	4.085176291	2.555503897
89.965	-0.036588498	0.000185157	0.037417209	8.418872135	4.08551464	2.555503897
89.97	-0.037596028	0.000190266	0.038428884	8.646498923	4.08587188	2.555503897
89.975	-0.038639796	0.000195576	0.039480223	8.883050213	4.086249231	2.555503897
89.98	-0.039157963	0.000198252	0.040009816	9.00220869	4.08663677	2.555503897
89.985	-0.039785313	0.000201462	0.040645337	9.145200796	4.087036827	2.555503897
89.99	-0.040406566	0.000204661	0.041278304	9.287618435	4.087449475	2.555503897
89.995	-0.040302108	0.00020421	0.04118707	9.267090734	4.087859992	2.555503897
90	-0.040674502	0.00020612	0.041567116	9.352601111	4.088278131	2.555503897
90.005	-0.041640767	0.000211033	0.042539226	9.57132576	4.088716372	2.555503897
90.01	-0.042083392	0.000213329	0.042993251	9.673481534	4.08916398	2.555503897
90.015	-0.043054605	0.000218263	0.043969221	9.893074825	4.089632486	2.555503897
90.02	-0.044381481	0.000225029	0.045307347	10.19415317	4.090130314	2.555503897
90.025	-0.044276254	0.000224638	0.045225048	10.17563574	4.090625785	2.555503897
90.03	-0.0437051	0.000221876	0.04466736	10.05015597	4.091108554	2.555503897
90.035	-0.043457541	0.000220749	0.044439922	9.998982434	4.091585871	2.555503897
90.04	-0.042118019	0.000214169	0.043111761	9.700146134	4.092034215	2.555503897
90.045	-0.039533403	0.000201308	0.040517868	9.11652031	4.092429222	2.555503897
90.05	-0.036867906	0.000187994	0.037834737	8.512815925	4.092772758	2.555503897
90.055	-0.034498918	0.000176141	0.03544782	7.975759486	4.093073564	2.555503897
90.06	-0.032339171	0.000165304	0.033267065	7.485089632	4.093337887	2.555503897
90.065	-0.031358581	0.000160351	0.032270668	7.260900369	4.093586422	2.555503897
90.07	-0.031858272	0.000162855	0.032776341	7.374676725	4.093842942	2.555503897
90.075	-0.031899311	0.000163111	0.03282801	7.386302249	4.094100123	2.555503897
90.08	-0.030984021	0.000158556	0.031909636	7.17966801	4.094342757	2.555503897
90.085	-0.030595302	0.00015662	0.031520301	7.092067722	4.094579341	2.555503897
90.09	-0.030734613	0.000157348	0.031667291	7.125140485	4.094818084	2.555503897
90.095	-0.031062927	0.000159044	0.032009946	7.202237834	4.095061955	2.555503897
90.1	-0.031066878	0.000159156	0.032032399	7.20728978	4.095305889	2.555503897
90.105	-0.029351325	0.000150647	0.030319542	6.821897024	4.095523625	2.555503897
90.11	-0.02713235	0.000139545	0.028088482	6.319908473	4.095709684	2.555503897
90.115	-0.026308955	0.000135421	0.027259954	6.133489712	4.095884622	2.555503897
90.12	-0.025827941	0.000133043	0.026782488	6.026059816	4.096053221	2.555503897
90.125	-0.025114449	0.000129505	0.02607193	5.866184264	4.096212634	2.555503897
90.13	-0.024224014	0.000125088	0.025185251	5.666681572	4.096360943	2.555503897
90.135	-0.022472575	0.000116334	0.023428161	5.271336121	4.096488581	2.555503897
90.14	-0.021504121	0.000111446	0.022447581	5.050705715	4.096605456	2.555503897
90.145	-0.022563838	0.000116756	0.023519868	5.291970229	4.096734133	2.555503897
90.15	-0.023143384	0.000119731	0.024120289	5.42706499	4.096869505	2.555503897
90.155	-0.022328528	0.000115692	0.023304686	5.243554398	4.096995513	2.555503897
90.16	-0.022379822	0.000115958	0.023358393	5.25563837	4.0971221	2.555503897
90.165	-0.023378958	0.000121019	0.02438019	5.485542838	4.097260242	2.555503897
90.17	-0.023393716	0.000121181	0.024412814	5.492883067	4.097398559	2.555503897
90.175	-0.022636154	0.000117444	0.023658251	5.32310638	4.097528062	2.555503897
90.18	-0.022304641	0.000115832	0.023332716	5.249861058	4.0976538	2.555503897
90.185	-0.021927174	0.00011401	0.022964942	5.167111875	4.097775318	2.555503897
90.19	-0.021007842	0.000109472	0.022051655	4.961622426	4.09788686	2.555503897
90.195	-0.019715185	0.000103058	0.0207652	4.672169954	4.097985098	2.555503897
90.2	-0.017876717	9.38945E-05	0.018928222	4.258849947	4.098065868	2.555503897
90.205	-0.016068892	8.48596E-05	0.017117785	3.85150166	4.098131128	2.555503897
90.21	-0.014560801	7.73321E-05	0.015610025	3.512255688	4.098184714	2.555503897
90.215	-0.012449215	6.67788E-05	0.013497137	3.036855855	4.098223884	2.555503897
90.22	-0.010334312	5.61782E-05	0.01137586	2.559568529	4.098250876	2.555503897
90.225	-0.008785576	4.84214E-05	0.009824338	2.210475975	4.098270385	2.555503897
90.23	-0.006839214	3.86774E-05	0.00787615	1.772133675	4.098282206	2.555503897
90.235	-0.005086185	2.98847E-05	0.006118925	1.37675816	4.098288745	2.555503897
90.24	-0.003674108	2.28282E-05	0.004709214	1.059573242	4.098292156	2.555503897
90.245	-0.00105444	9.72424E-06	0.002092591	0.470832911	4.098292437	2.555503897
90.25	0.001849457	-4.85593E-06	-0.000816934	-0.183810177	4.098293302	2.555503897
90.255	0.003827305	-1.47999E-05	-0.002800175	-0.630039335	4.098297004	2.555503897
90.26	0.005929123	-2.53494E-05	-0.004903199	-1.103219693	4.098305889	2.555503897
90.265	0.008301254	-3.72675E-05	-0.007277835	-1.63751293	4.098323306	2.555503897
90.27	0.010676457	-4.92137E-05	-0.009656801	-2.172780135	4.098352115	2.555503897
90.275	0.01291834	-6.05164E-05	-0.011906469	-2.678955555	4.098394293	2.555503897
90.28	0.014174652	-6.68829E-05	-0.013173123	-2.963952621	4.098445074	2.555503897
90.285	0.015272143	-7.24184E-05	-0.014274185	-3.211691636	4.098504023	2.555503897
90.29	0.017210603	-8.21777E-05	-0.016214705	-3.648308564	4.098578886	2.555503897
90.295	0.01901522	-9.12976E-05	-0.018027346	-4.056152929	4.098670272	2.555503897
90.3	0.020428273	-9.84625E-05	-0.019450923	-4.376457616	4.098775745	2.555503897
90.305	0.02149991	-0.000103929	-0.02053681	-4.620782155	4.098892573	2.555503897
90.31	0.021889303	-0.000105975	-0.020943047	-4.712185494	4.099013672	2.555503897
90.315	0.022102484	-0.000107131	-0.021172579	-4.763830244	4.099137141	2.555503897
90.32	0.021762632	-0.000105521	-0.020847488	-4.690684911	4.099256842	2.555503897
90.325	0.020751088	-0.000100516	-0.019837076	-4.463342123	4.099365674	2.555503897
90.33	0.020207148	-9.78448E-05	-0.019297836	-4.342013155	4.099468876	2.555503897
90.335	0.019127137	-9.25107E-05	-0.018221534	-4.099845069	4.099561341	2.555503897
90.34	0.01680486	-8.09125E-05	-0.015882615	-3.573588343	4.099632716	2.555503897
90.345	0.015037182	-7.20527E-05	-0.014097088	-3.17184481	4.099689865	2.555503897
90.35	0.013386208	-6.37887E-05	-0.012432511	-2.797314912	4.099735153	2.555503897
90.355	0.011223604	-5.29271E-05	-0.010245927	-2.305333494	4.099766991	2.555503897
90.36	0.010047742	-4.69914E-05	-0.009051551	-2.036599013	4.099792507	2.555503897
90.365	0.008882834	-4.11339E-05	-0.00787331	-1.771494697	4.09981245	2.555503897
90.37	0.007279688	-3.30423E-05	-0.006246323	-1.405422666	4.099825843	2.555503897
90.375	0.007105419	-3.20987E-05	-0.00605712	-1.362852003	4.099838603	2.555503897
90.38	0.00719278	-3.25121E-05	-0.006140602	-1.381635536	4.099851679	2.555503897
90.385	0.006455175	-2.87713E-05	-0.005387813	-1.212257877	4.099862211	2.555503897
90.39	0.006591253	-2.93768E-05	-0.005510699	-1.239907301	4.099873191	2.555503897
90.395	0.007719903	-3.49776E-05	-0.00664151	-1.494339696	4.099888254	2.555503897
90.4	0.009123363	-4.19756E-05	-0.00805372	-1.812086934	4.099909291	2.555503897
90.405	0.010681726	-4.97618E-05	-0.00962418	-2.165440393	4.099938128	2.555503897
90.41	0.012483696	-5.87658E-05	-0.01143928	-2.573838002	4.099977516	2.555503897
90.415	0.015365685	-7.32026E-05	-0.014347482	-3.228183444	4.100037189	2.555503897
90.42	0.018152614	-8.72279E-05	-0.017170443	-3.863349768	4.100120472	2.555503897
90.425	0.019655641	-9.48117E-05	-0.018695937	-4.206585925	4.100218117	2.555503897
90.43	0.022023572	-0.000106709	-0.021087751	-4.744743989	4.100340706	2.555503897
90.435	0.024795133	-0.000120699	-0.023866228	-5.369901193	4.100496091	2.555503897
90.44	0.025646162	-0.000125078	-0.024735267	-5.565435175	4.100662325	2.555503897
90.445	0.026340897	-0.000128633	-0.025440631	-5.724141987	4.100837688	2.555503897
90.45	0.02725114	-0.000133295	-0.026365411	-5.932217394	4.10102538	2.555503897
90.455	0.026678008	-0.000130511	-0.025803227	-5.805725986	4.10120526	2.555503897
90.46	0.026092726	-0.000127612	-0.025217928	-5.674033824	4.101377333	2.555503897
90.465	0.026097234	-0.000127666	-0.025228853	-5.67649184	4.101549467	2.555503897
90.47	0.026010886	-0.000127242	-0.025143124	-5.657202788	4.101720463	2.555503897
90.475	0.027527241	-0.000134833	-0.026670421	-6.000844778	4.101911977	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
90.48	0.030451243	-0.000149562	-0.029590885	-6.657949189	4.102146339	2.555503897
90.485	0.031870257	-0.000156826	-0.031030639	-6.98189384	4.102403051	2.555503897
90.49	0.030879213	-0.000151989	-0.030053774	-6.762099197	4.102644046	2.555503897
90.495	0.02925548	-0.000143892	-0.028419618	-6.394414138	4.102860363	2.555503897
90.5	0.029759979	-0.000146422	-0.028930788	-6.509427325	4.103084205	2.555503897
90.505	0.032078098	-0.000158137	-0.031290419	-7.040344257	4.103344277	2.555503897
90.51	0.032184738	-0.000158849	-0.031423971	-7.070393509	4.10360608	2.555503897
90.515	0.030080093	-0.0001484	-0.029314855	-6.595842483	4.103834764	2.555503897
90.52	0.029863325	-0.000147361	-0.029105509	-6.548739601	4.104060163	2.555503897
90.525	0.030773855	-0.00015207	-0.030056391	-6.762687949	4.104299516	2.555503897
90.53	0.029026579	-0.000143507	-0.028327841	-6.373764315	4.104512461	2.555503897
90.535	0.025712842	-0.000127022	-0.025004396	-5.625989141	4.104679561	2.555503897
90.54	0.023022943	-0.000113662	-0.022313653	-5.020571814	4.104813528	2.555503897
90.545	0.018021272	-8.88803E-05	-0.017327766	-3.898747421	4.10489561	2.555503897
90.55	0.010177316	-4.98631E-05	-0.009491395	-2.135563828	4.104921788	2.555503897
90.555	0.004661399	-2.22439E-05	-0.003953752	-0.889594271	4.10492728	2.555503897
90.56	0.001377294	-5.76194E-06	-0.000652756	-0.146870016	4.104927759	2.555503897
90.565	-0.001734633	9.90619E-06	0.002482801	0.558630219	4.10492852	2.555503897
90.57	-0.001064193	6.73686E-06	0.001839846	0.413965407	4.104928806	2.555503897
90.575	0.001638692	-6.74393E-06	-0.000880391	-0.198087884	4.104929485	2.555503897
90.58	0.000382246	-5.37998E-07	0.00037269	0.083855196	4.104929522	2.555503897
90.585	-0.0018314	1.05754E-05	0.002615179	0.588415185	4.104930369	2.555503897
90.59	-0.001027237	6.64836E-06	0.001822157	0.409985324	4.104930636	2.555503897
90.595	0.000358316	-2.58244E-07	0.000428085	0.096319207	4.104930669	2.555503897
90.6	0.000761564	-2.29388E-06	1.73354E-05	0.003900457	4.104930815	2.555503897
90.605	9.06405E-05	1.0385E-06	0.000690282	0.155313509	4.104930817	2.555503897
90.61	-0.000467671	3.86991E-06	0.001261908	0.283929372	4.104930872	2.555503897
90.615	0.00114402	-4.13425E-06	-0.000353963	-0.079641653	4.104931203	2.555503897
90.62	0.002146132	-9.18877E-06	-0.001373453	-0.309026882	4.104932367	2.555503897
90.625	0.000984439	-3.40072E-06	-0.000204729	-0.046064072	4.104932612	2.555503897
90.63	0.0018381	-7.60586E-06	-0.001053889	-0.237125084	4.104933466	2.555503897
90.635	0.003674487	-1.68182E-05	-0.002911608	-0.655111888	4.104936879	2.555503897
90.64	0.00248678	-1.09581E-05	-0.001728355	-0.388879925	4.104938442	2.555503897
90.645	0.001570817	-6.34772E-06	-0.000797816	-0.179508557	4.104939065	2.555503897
90.65	0.002811314	-1.25379E-05	-0.002047708	-0.460734266	4.104941063	2.555503897
90.655	0.00214212	-9.26161E-06	-0.001386081	-0.311868295	4.104942223	2.555503897
90.66	0.000469692	-8.92415E-07	0.000302849	0.068140955	4.104942278	2.555503897
90.665	0.001154313	-4.27026E-06	-0.000379279	-0.08533777	4.104942615	2.555503897
90.67	0.001470149	-5.89693E-06	-0.000707632	-0.159217267	4.104943161	2.555503897
90.675	-0.000238671	2.60537E-06	0.001008346	0.226877833	4.104943176	2.555503897
90.68	-0.001000676	6.43796E-06	0.001781187	0.400767135	4.104943429	2.555503897
90.685	-0.001056268	6.6983E-06	0.001833678	0.412577647	4.104943711	2.555503897
90.69	-0.002521454	1.39799E-05	0.003297653	0.741971939	4.104945318	2.555503897
90.695	-0.004015544	2.14498E-05	0.00479143	1.078071748	4.104949393	2.555503897
90.7	-0.004754338	2.5131E-05	0.005527373	1.24365886	4.104955106	2.555503897
90.705	-0.006520352	3.39069E-05	0.007281334	1.638300116	4.104965851	2.555503897
90.71	-0.00943743	4.84618E-05	0.010188713	2.292460375	4.104988362	2.555503897
90.715	-0.012162037	6.20965E-05	0.012910473	2.904856485	4.105025746	2.555503897
90.72	-0.014599846	7.43147E-05	0.015348023	3.453305122	4.105079619	2.555503897
90.725	-0.016707683	8.49093E-05	0.017460567	3.928627465	4.105150171	2.555503897
90.73	-0.017946385	9.11643E-05	0.018707335	4.209150277	4.105231572	2.555503897
90.735	-0.019469156	9.88065E-05	0.020230102	4.551772945	4.105327373	2.555503897
90.74	-0.021876524	0.000110901	0.022638884	5.093748963	4.10544833	2.555503897
90.745	-0.022848422	0.00011588	0.023630224	5.316800344	4.105580274	2.555503897
90.75	-0.022675617	0.000115092	0.023471078	5.280992488	4.105710229	2.555503897
90.755	-0.023999208	0.00012176	0.024800653	5.580146902	4.105855799	2.555503897
90.76	-0.024676339	0.000125276	0.025500437	5.737598238	4.106009698	2.555503897
90.765	-0.023311171	0.00011856	0.024144357	5.432480383	4.10614704	2.555503897
90.77	-0.023344383	0.000118774	0.024187717	5.442236414	4.106284774	2.555503897
90.775	-0.02347377	0.000119551	0.024344497	5.477511779	4.106424039	2.555503897
90.78	-0.020868732	0.000106665	0.021744177	4.892439922	4.106534109	2.555503897
90.785	-0.018956063	9.71511E-05	0.019826034	4.46085769	4.106624927	2.555503897
90.79	-0.017765069	9.12944E-05	0.018645762	4.195296412	4.106704691	2.555503897
90.795	-0.014018096	7.27191E-05	0.014905106	3.353648897	4.106754357	2.555503897
90.8	-0.010886953	5.71342E-05	0.01176972	2.648187013	4.106784313	2.555503897
90.805	-0.009363282	4.95689E-05	0.010248683	2.305953619	4.106806471	2.555503897
90.81	-0.0060704	3.32184E-05	0.0069635	1.566787559	4.106815785	2.555503897
90.815	-0.003550863	2.06199E-05	0.004434099	0.99767222	4.106818971	2.555503897
90.82	-0.002897753	1.73349E-05	0.003774847	0.849340662	4.106821094	2.555503897
90.825	-0.00061889	6.00466E-06	0.001501858	0.337918113	4.106821191	2.555503897
90.83	0.001736016	-5.77332E-06	-0.000859565	-0.19340217	4.106821952	2.555503897
90.835	0.003091694	-1.25804E-05	-0.00222372	-0.500336893	4.106824368	2.555503897
90.84	0.005399445	-2.41356E-05	-0.004538352	-1.021129303	4.106831736	2.555503897
90.845	0.006302053	-2.87849E-05	-0.00546929	-1.230590304	4.106841774	2.555503897
90.85	0.005065914	-2.27712E-05	-0.004255009	-0.957377076	4.106848261	2.555503897
90.855	0.004291902	-1.90129E-05	-0.003496435	-0.786697858	4.106852916	2.555503897
90.86	0.003015169	-1.27659E-05	-0.002236015	-0.503103283	4.106855214	2.555503897
90.865	0.001460322	-5.08509E-06	-0.000687029	-0.154581598	4.106855753	2.555503897
90.87	0.001503577	-5.34411E-06	-0.000739545	-0.166397611	4.106856324	2.555503897
90.875	0.000916089	-2.52635E-06	-0.000171181	-0.038515833	4.106856536	2.555503897
90.88	-0.000929101	6.57641E-06	0.001663289	0.374239942	4.106856754	2.555503897
90.885	-0.001563502	9.69409E-06	0.002291357	0.515555342	4.106857372	2.555503897
90.89	-0.001871071	1.11401E-05	0.002582613	0.581087874	4.106858257	2.555503897
90.895	-0.003338448	1.83429E-05	0.004033091	0.907445576	4.106861074	2.555503897
90.9	-0.004639645	2.47472E-05	0.005322247	1.197505672	4.106866515	2.555503897
90.905	-0.005555088	2.92127E-05	0.006220846	1.399690364	4.106874314	2.555503897
90.91	-0.007481246	3.86813E-05	0.008125492	1.828235607	4.10688846	2.555503897
90.915	-0.010109468	5.16705E-05	0.010736718	2.415761573	4.10691429	2.555503897
90.92	-0.012396835	6.29855E-05	0.013009895	2.92722643	4.106953132	2.555503897
90.925	-0.015135288	7.65386E-05	0.015730914	3.539455699	4.107011029	2.555503897
90.93	-0.018566163	9.35838E-05	0.019150344	4.308827295	4.107098149	2.555503897
90.935	-0.020774416	0.000104619	0.021362483	4.806558777	4.107207226	2.555503897
90.94	-0.021166558	0.000106625	0.0217646	4.897035015	4.10732046	2.555503897
90.945	-0.020866439	0.000105153	0.021467182	4.830116003	4.107430506	2.555503897
90.95	-0.020913048	0.000105364	0.021509883	4.839723737	4.107541044	2.555503897
90.955	-0.022253873	0.000112009	0.022843254	5.139732128	4.10766621	2.555503897
90.96	-0.023577569	0.000118636	0.024170647	5.438395623	4.107806709	2.555503897
90.965	-0.022945496	0.000115557	0.023549036	5.298533029	4.107939776	2.555503897
90.97	-0.021992912	0.000110832	0.022595133	5.083905	4.108062024	2.555503897
90.975	-0.021763981	0.000109703	0.022367172	5.032613706	4.10818174	2.555503897
90.98	-0.021125039	0.000106537	0.021728264	4.888859352	4.10829453	2.555503897
90.985	-0.021125038	0.000106523	0.021725728	4.888288829	4.10840732	2.555503897
90.99	-0.021637052	0.000109104	0.022246817	5.005533866	4.108525644	2.555503897
90.995	-0.02036092	0.000102822	0.020978935	4.720260328	4.108630422	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
91	-0.018517523	9.36574E-05	0.019130671	4.304401035	4.108717087	2.555503897
91.005	-0.017770225	8.99166E-05	0.01837662	4.13473942	4.108796898	2.555503897
91.01	-0.017047825	8.63003E-05	0.017647815	3.970758425	4.108870352	2.555503897
91.015	-0.016867183	8.53345E-05	0.017453413	3.927017921	4.108942257	2.555503897
91.02	-0.018643897	9.40861E-05	0.01922026	4.324558402	4.109030108	2.555503897
91.025	-0.022173048	0.000111598	0.0227524	5.119290109	4.109154367	2.555503897
91.03	-0.026057033	0.000130995	0.026638237	5.99360325	4.10932597	2.555503897
91.035	-0.027512471	0.000138401	0.028111356	6.32505499	4.109517279	2.555503897
91.04	-0.026099197	0.000131492	0.026716348	6.011178292	4.109689439	2.555503897
91.045	-0.025262701	0.000127347	0.02587978	5.822950487	4.109850739	2.555503897
91.05	-0.026573928	0.00013387	0.027196905	6.119303622	4.110029218	2.555503897
91.055	-0.028808814	0.000145029	0.029429246	6.621580375	4.11023898	2.555503897
91.06	-0.031272256	0.000157365	0.03188121	7.17327236	4.110486149	2.555503897
91.065	-0.033201846	0.000167091	0.03381349	7.608035178	4.110764762	2.555503897
91.07	-0.03368827	0.000169639	0.034319566	7.721902445	4.111051597	2.555503897
91.075	-0.034403586	0.000173265	0.035039472	7.883881235	4.111350743	2.555503897
91.08	-0.037340538	0.00018795	0.037954576	8.53977962	4.111703144	2.555503897
91.085	-0.040144133	0.000202078	0.040757433	9.170422352	4.11211045	2.555503897
91.09	-0.040217418	0.000202641	0.040864981	9.194620664	4.112519244	2.555503897
91.095	-0.040262708	0.000202977	0.040932823	9.209885163	4.112928959	2.555503897
91.1	-0.042566522	0.000214563	0.043232831	9.727386882	4.113386902	2.555503897
91.105	-0.044102509	0.000222426	0.044791262	10.078034	4.113878492	2.555503897
91.11	-0.043178189	0.000218039	0.043905332	9.878699633	4.114349691	2.555503897
91.115	-0.042618709	0.000215397	0.043372025	9.758705611	4.114808759	2.555503897
91.12	-0.043348881	0.000219197	0.044139371	9.931358402	4.115283691	2.555503897
91.125	-0.042980629	0.000217591	0.043814888	9.858349764	4.115750588	2.555503897
91.13	-0.041145231	0.000208666	0.042013705	9.453083727	4.116178461	2.555503897
91.135	-0.039603118	0.000201171	0.040501956	9.11294007	4.116574862	2.555503897
91.14	-0.038204842	0.000194423	0.039141511	8.806839934	4.116943766	2.555503897
91.145	-0.035378518	0.0001806	0.036356315	8.18017091	4.117260107	2.555503897
91.15	-0.031502464	0.000161529	0.0325177	7.31648257	4.117510928	2.555503897
91.155	-0.027485157	0.000141755	0.028541892	6.421925683	4.117701857	2.555503897
91.16	-0.021263463	0.000111007	0.022367755	5.032744934	4.117816131	2.555503897
91.165	-0.011672189	6.32926E-05	0.012806113	2.881375341	4.117850564	2.555503897
91.17	-0.002046171	1.51238E-05	0.003175777	0.714549722	4.117851622	2.555503897
91.175	0.005224762	-2.14314E-05	-0.004118198	-0.926594531	4.117858522	2.555503897
91.18	0.010400951	-4.75681E-05	-0.009325893	-2.098325866	4.117885863	2.555503897
91.185	0.012695962	-5.92422E-05	-0.01164998	-2.621245605	4.117926602	2.555503897
91.19	0.013808925	-6.48667E-05	-0.012769268	-2.873085286	4.117974796	2.555503897
91.195	0.017839813	-8.51223E-05	-0.016797881	-3.779523225	4.118055233	2.555503897
91.2	0.022452343	-0.000108463	-0.021435621	-4.823014656	4.118182642	2.555503897
91.205	0.023525417	-0.000114003	-0.022535655	-5.070522286	4.11832252	2.555503897
91.21	0.024890804	-0.000120894	-0.023903714	-5.378335676	4.118479107	2.555503897
91.215	0.029083435	-0.000142085	-0.02810803	-6.324306661	4.118692887	2.555503897
91.22	0.031359422	-0.000153736	-0.030418063	-6.844064269	4.118941436	2.555503897
91.225	0.031092745	-0.000152505	-0.030169446	-6.788125366	4.119185775	2.555503897
91.23	0.032014914	-0.000157206	-0.031105812	-6.998807624	4.119444824	2.555503897
91.235	0.033617652	-0.000165372	-0.032723687	-7.362829612	4.119730458	2.555503897
91.24	0.034855313	-0.000171709	-0.033978895	-7.645251387	4.120037512	2.555503897
91.245	0.035966404	-0.000177436	-0.035112873	-7.900396384	4.120364453	2.555503897
91.25	0.035405441	-0.000174742	-0.034568751	-7.77796901	4.120681275	2.555503897
91.255	0.03455578	-0.000170513	-0.033714927	-7.585858493	4.120983074	2.555503897
91.26	0.035760191	-0.000176652	-0.034954569	-7.86477807	4.121306277	2.555503897
91.265	0.035694864	-0.000176478	-0.03491436	-7.855730899	4.121628301	2.555503897
91.27	0.033355256	-0.000164772	-0.032551774	-7.324149219	4.121909494	2.555503897
91.275	0.032868636	-0.000162348	-0.032062863	-7.21414407	4.122182542	2.555503897
91.28	0.032693	-0.000161582	-0.031908194	-7.179343745	4.12245268	2.555503897
91.285	0.0295637	-0.00014591	-0.028748557	-6.468425302	4.122673579	2.555503897
91.29	0.027110727	-0.000133538	-0.026256523	-5.907717721	4.122859341	2.555503897
91.295	0.026172155	-0.000128839	-0.025310417	-5.694843834	4.123032464	2.555503897
91.3	0.023330902	-0.000114551	-0.022435389	-5.047962442	4.123170039	2.555503897
91.305	0.021155465	-0.000103516	-0.020216681	-4.548753261	4.123283154	2.555503897
91.31	0.021220716	-0.000103811	-0.020276256	-4.562157548	4.123396968	2.555503897
91.315	0.019940601	-9.73609E-05	-0.018979528	-4.270393909	4.123497465	2.555503897
91.32	0.018783305	-9.14441E-05	-0.017790736	-4.00291568	4.123586635	2.555503897
91.325	0.020109403	-9.80639E-05	-0.019127357	-4.303655375	4.123688841	2.555503897
91.33	0.02085775	-0.000101844	-0.019890189	-4.475292415	4.123798795	2.555503897
91.335	0.0208166	-0.000101601	-0.019841174	-4.464264131	4.123908315	2.555503897
91.34	0.022270999	-0.000108884	-0.0213107	-4.794907498	4.124033674	2.555503897
91.345	0.023920864	-0.000117201	-0.022987789	-5.172252601	4.124178295	2.555503897
91.35	0.025172207	-0.0001235	-0.024257382	-5.457910971	4.124338442	2.555503897
91.355	0.027463818	-0.000135044	-0.026582836	-5.981138002	4.124529074	2.555503897
91.36	0.029970525	-0.000147724	-0.029135138	-6.555406089	4.124756095	2.555503897
91.365	0.031557304	-0.000155772	-0.030754373	-6.919733896	4.12500779	2.555503897
91.37	0.033674397	-0.000166476	-0.032906672	-7.404001251	4.12529439	2.555503897
91.375	0.036821235	-0.000182418	-0.036099041	-8.122284223	4.125637057	2.555503897
91.38	0.038995621	-0.000193516	-0.038295394	-8.616463582	4.12602139	2.555503897
91.385	0.040120662	-0.000199319	-0.039443265	-8.874734733	4.126428219	2.555503897
91.39	0.041226454	-0.000205035	-0.040573881	-9.129123132	4.126857783	2.555503897
91.395	0.041234436	-0.000205233	-0.040609367	-9.137107484	4.127287514	2.555503897
91.4	0.040649577	-0.000202397	-0.040036622	-9.008239976	4.12770514	2.555503897
91.405	0.040762918	-0.000203075	-0.040173558	-9.039050444	4.128125099	2.555503897
91.41	0.039953033	-0.000199114	-0.03937394	-8.859136591	4.128528535	2.555503897
91.415	0.038751113	-0.000193099	-0.038160135	-8.586030391	4.128908064	2.555503897
91.42	0.040292393	-0.000200873	-0.039729734	-8.939190246	4.129318383	2.555503897
91.425	0.043888273	-0.000219099	-0.043352778	-9.754375101	4.129805208	2.555503897
91.43	0.04661814	-0.000233066	-0.04611014	-10.37478143	4.130354478	2.555503897
91.435	0.047294336	-0.000236727	-0.046832533	-10.53731993	4.130919798	2.555503897
91.44	0.04544979	-0.000227654	-0.04500091	-10.12520475	4.131441881	2.555503897
91.445	0.043016143	-0.0002155	-0.042549005	-9.573526232	4.13190955	2.555503897
91.45	0.043868304	-0.000219874	-0.043432268	-9.772260211	4.132395933	2.555503897
91.455	0.045824222	-0.000229956	-0.045466875	-10.23004686	4.132926653	2.555503897
91.46	0.043846216	-0.000220253	-0.043507922	-9.789282492	4.133412546	2.555503897
91.465	0.041230922	-0.000207198	-0.040875285	-9.196939059	4.133842203	2.555503897
91.47	0.042304482	-0.000212755	-0.041997324	-9.449397822	4.134294526	2.555503897
91.475	0.042356735	-0.000213334	-0.042114005	-9.475651214	4.134747967	2.555503897
91.48	0.037852483	-0.000191134	-0.03763929	-8.468840345	4.135110097	2.555503897
91.485	0.032961303	-0.000167017	-0.032786645	-7.376995051	4.135384687	2.555503897
91.49	0.02816433	-0.000143364	-0.028033679	-6.307577831	4.135585169	2.555503897
91.495	0.019906001	-0.000102375	-0.019810698	-4.457406957	4.135685317	2.555503897
91.5	0.011662544	-6.11753E-05	-0.011562559	-2.601575694	4.135719694	2.555503897
91.505	0.007740418	-4.14756E-05	-0.007624449	-1.715500971	4.135734837	2.555503897
91.51	0.005192751	-2.873E-05	-0.005078454	-1.142652094	4.135741652	2.555503897
91.515	0.002036449	-1.29534E-05	-0.001929098	-0.434047041	4.1357427	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
91.52	-0.00086901	1.55042E-06	0.000964176	0.216939583	4.135742891	2.555503897
91.525	-0.005698396	2.57399E-05	0.005785319	1.301696866	4.135751098	2.555503897
91.53	-0.011593989	5.54471E-05	0.01169902	2.632279482	4.135785071	2.555503897
91.535	-0.013576353	6.55622E-05	0.013710818	3.084933943	4.135831656	2.555503897
91.54	-0.014243563	6.89275E-05	0.014379948	3.235488403	4.135882932	2.555503897
91.545	-0.018623697	9.09672E-05	0.018759701	4.220932774	4.135970593	2.555503897
91.55	-0.022285294	0.000109565	0.022452278	5.051762542	4.136096113	2.555503897
91.555	-0.022243961	0.000109472	0.02242997	5.046743298	4.136221168	2.555503897
91.56	-0.023694468	0.000116782	0.023884379	5.37398534	4.136363063	2.555503897
91.565	-0.027260228	0.000134815	0.027460801	6.178680204	4.13655088	2.555503897
91.57	-0.029170357	0.000144572	0.029394738	6.61381613	4.13676594	2.555503897
91.575	-0.030099042	0.000149354	0.03034218	6.826990464	4.136994912	2.555503897
91.58	-0.031192637	0.000154955	0.031451845	7.076665079	4.137240824	2.555503897
91.585	-0.032202534	0.00016013	0.032476807	7.307281464	4.137502917	2.555503897
91.59	-0.033315241	0.000165835	0.033606499	7.561462372	4.137783436	2.555503897
91.595	-0.03335096	0.000166116	0.033659284	7.573339003	4.138064557	2.555503897
91.6	-0.033787709	0.000168342	0.034102763	7.673121784	4.138353088	2.555503897
91.605	-0.036974095	0.000184454	0.037291466	8.390579747	4.138698607	2.555503897
91.61	-0.038580771	0.000192738	0.038929978	8.759244988	4.139074806	2.555503897
91.615	-0.037178166	0.00018579	0.037527112	8.443600178	4.139424148	2.555503897
91.62	-0.03836583	0.000191806	0.038741805	8.716906093	4.139796167	2.555503897
91.625	-0.040513287	0.000202777	0.040914923	9.205857645	4.140210998	2.555503897
91.63	-0.039334436	0.000196997	0.03974785	8.943266294	4.140602039	2.555503897
91.635	-0.039193171	0.000196332	0.039613954	8.913139652	4.140990276	2.555503897
91.64	-0.041213516	0.000206633	0.04167711	9.377349785	4.14141957	2.555503897
91.645	-0.04058521	0.000203657	0.041073342	9.241501926	4.141835875	2.555503897
91.65	-0.039025199	0.000195897	0.03950706	8.889088557	4.142220791	2.555503897
91.655	-0.039274397	0.000197253	0.039780864	8.950694503	4.142610639	2.555503897
91.66	-0.038327855	0.000192642	0.03885024	8.741304014	4.142981922	2.555503897
91.665	-0.036259369	0.00018232	0.036768792	8.272978133	4.143314211	2.555503897
91.67	-0.035610944	0.000179137	0.036127154	8.128609725	4.143634722	2.555503897
91.675	-0.034216988	0.000172253	0.034739761	7.816446214	4.143930632	2.555503897
91.68	-0.031253913	0.000157411	0.031750824	7.143935509	4.144177511	2.555503897
91.685	-0.029676167	0.000149488	0.030156239	6.785153853	4.144400094	2.555503897
91.69	-0.028924505	0.00014577	0.029408239	6.616853675	4.144611544	2.555503897
91.695	-0.026906219	0.00013567	0.027376953	6.159814437	4.144794515	2.555503897
91.7	-0.025443539	0.000128303	0.025896175	5.826639303	4.144958132	2.555503897
91.705	-0.025725461	0.000129742	0.026186843	5.892039686	4.145125396	2.555503897
91.71	-0.025638763	0.000129376	0.026112752	5.875369101	4.145291535	2.555503897
91.715	-0.024798086	0.000125187	0.025269953	5.685739482	4.145446957	2.555503897
91.72	-0.024982038	0.000126135	0.025461819	5.728909362	4.145604693	2.555503897
91.725	-0.02603208	0.000131479	0.026540887	5.971699517	4.145775968	2.555503897
91.73	-0.026783243	0.000135348	0.027321601	6.147360159	4.14595727	2.555503897
91.735	-0.027390121	0.000138499	0.027957449	6.290425931	4.146146881	2.555503897
91.74	-0.027816517	0.000140756	0.028412787	6.392877154	4.146342441	2.555503897
91.745	-0.027964661	0.000141608	0.028584688	6.431554811	4.146540091	2.555503897
91.75	-0.028403867	0.000143938	0.029054677	6.537302215	4.146743997	2.555503897
91.755	-0.028052088	0.000142319	0.028727664	6.463724486	4.146942884	2.555503897
91.76	-0.026420396	0.000134213	0.027091148	6.095508266	4.147119307	2.555503897
91.765	-0.026013613	0.000132227	0.026690522	6.005367556	4.147290339	2.555503897
91.77	-0.026399815	0.000134294	0.027107947	6.099287969	4.147466487	2.555503897
91.775	-0.025086032	0.000127808	0.025798984	5.804771325	4.147625539	2.555503897
91.78	-0.02422245	0.000123526	0.024936281	5.610663226	4.147773829	2.555503897
91.785	-0.024722248	0.00012616	0.025468191	5.730342895	4.147928302	2.555503897
91.79	-0.023386858	0.000119602	0.024147932	5.43328475	4.148066537	2.555503897
91.795	-0.02093573	0.000107365	0.021690504	4.880363359	4.148177315	2.555503897
91.8	-0.019193088	9.86818E-05	0.019947668	4.488225336	4.148270418	2.555503897
91.805	-0.016790274	8.66799E-05	0.017540072	3.946516112	4.148341669	2.555503897
91.81	-0.014453269	7.49739E-05	0.015193233	3.418477394	4.148394466	2.555503897
91.815	-0.012430966	6.48777E-05	0.013170228	2.963301357	4.148433522	2.555503897
91.82	-0.008763424	4.6569E-05	0.009504226	2.138450914	4.148452932	2.555503897
91.825	-0.005639936	3.09712E-05	0.006383582	1.436305995	4.148460971	2.555503897
91.83	-0.003889977	2.22856E-05	0.004646887	1.045549539	4.148464796	2.555503897
91.835	0.000570603	7.12064E-08	0.000208303	0.046868129	4.148464878	2.555503897
91.84	0.006475214	-2.95404E-05	-0.00570117	-1.282763207	4.148475475	2.555503897
91.845	0.010306525	-4.88314E-05	-0.009546677	-2.148002379	4.148502323	2.555503897
91.85	0.014283212	-6.88382E-05	-0.013531359	-3.044555816	4.148553884	2.555503897
91.855	0.0186734	-9.10142E-05	-0.017943905	-4.037378524	4.148642014	2.555503897
91.86	0.021089162	-0.000103286	-0.020383787	-4.586352084	4.148754421	2.555503897
91.865	0.02391609	-0.000117566	-0.023221468	-5.224830246	4.148898984	2.555503897
91.87	0.028160575	-0.000139072	-0.027491665	-6.185624608	4.149099412	2.555503897
91.875	0.030488386	-0.000150987	-0.02985576	-6.717545956	4.149334346	2.555503897
91.88	0.031800321	-0.00015772	-0.031191107	-7.017999007	4.149589933	2.555503897
91.885	0.034614813	-0.000172016	-0.034025335	-7.655700347	4.149892764	2.555503897
91.89	0.037035991	-0.000184384	-0.036475846	-8.207065296	4.15023944	2.555503897
91.895	0.038846522	-0.000193652	-0.038311157	-8.620010391	4.150620839	2.555503897
91.9	0.041840384	-0.000208893	-0.0413281	-9.298822552	4.151063292	2.555503897
91.905	0.04406249	-0.000220318	-0.043588316	-9.807371179	4.15155399	2.555503897
91.91	0.044672091	-0.000223602	-0.044237756	-9.953495031	4.152058359	2.555503897
91.915	0.045750083	-0.000229226	-0.045349798	-10.20370454	4.152587364	2.555503897
91.92	0.046134415	-0.000231394	-0.045777742	-10.29999202	4.153125294	2.555503897
91.925	0.04509618	-0.000226354	-0.044760016	-10.07100357	4.153639285	2.555503897
91.93	0.045349672	-0.000227781	-0.045048329	-10.13587409	4.154159071	2.555503897
91.935	0.04591455	-0.00023085	-0.045667933	-10.27528486	4.154691886	2.555503897
91.94	0.044077669	-0.000221835	-0.043847839	-9.865763829	4.155182922	2.555503897
91.945	0.041484976	-0.00020894	-0.041246774	-9.280524236	4.15561789	2.555503897
91.95	0.03956659	-0.000199426	-0.039328991	-8.849022932	4.15601356	2.555503897
91.955	0.037290732	-0.000188118	-0.037051048	-8.336485752	4.156365021	2.555503897
91.96	0.034827367	-0.000175845	-0.034580468	-7.780605258	4.156671583	2.555503897
91.965	0.032389397	-0.000163713	-0.032139784	-7.231451433	4.156936727	2.555503897
91.97	0.028671436	-0.000145266	-0.028432034	-6.397207615	4.157144493	2.555503897
91.975	0.023929872	-0.000121748	-0.023710225	-5.33480068	4.157289222	2.555503897
91.98	0.019628716	-0.00010035	-0.019419162	-4.369311407	4.1573866	2.555503897
91.985	0.015715381	-8.0868E-05	-0.015516151	-3.491134068	4.15744902	2.555503897
91.99	0.011904663	-6.18785E-05	-0.011715411	-2.635967401	4.157484839	2.555503897
91.995	0.008393648	-4.43739E-05	-0.008214947	-1.848363111	4.157502645	2.555503897
92	0.004692176	-2.59189E-05	-0.004527576	-1.018704705	4.15750821	2.555503897
92.005	0.000615097	-5.47065E-06	-0.000445648	-0.100270738	4.157508305	2.555503897
92.01	-0.00295765	1.24942E-05	0.00313737	0.705908328	4.157510516	2.555503897
92.015	-0.005800138	2.68028E-05	0.005989084	1.347543817	4.157519019	2.555503897
92.02	-0.008704332	4.14233E-05	0.00890105	2.002736304	4.157538168	2.555503897
92.025	-0.011459562	5.53265E-05	0.011668367	2.625382619	4.157571358	2.555503897
92.03	-0.013412582	6.52216E-05	0.013636883	3.068298634	4.157616826	2.555503897
92.035	-0.015088802	7.37252E-05	0.01532789	3.448775323	4.157674368	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
92.04	-0.016619686	8.15183E-05	0.016877047	3.797335477	4.157744178	2.555503897
92.045	-0.017331939	8.52216E-05	0.017613039	3.962933857	4.157820101	2.555503897
92.05	-0.017455499	8.59665E-05	0.017761056	3.996237653	4.15789711	2.555503897
92.055	-0.017191518	8.47678E-05	0.017518965	3.941767041	4.157971807	2.555503897
92.06	-0.016286492	8.03473E-05	0.016626414	3.740943205	4.158038847	2.555503897
92.065	-0.015182669	7.49163E-05	0.01553027	3.494310653	4.158097107	2.555503897
92.07	-0.013655485	6.73658E-05	0.014007048	3.15158572	4.158144236	2.555503897
92.075	-0.011291774	5.55977E-05	0.011634486	2.617759356	4.158176462	2.555503897
92.08	-0.009211066	4.52133E-05	0.009542339	2.147026308	4.158197905	2.555503897
92.085	-0.007194098	3.51539E-05	0.007516894	1.691301222	4.158210986	2.555503897
92.09	-0.004316448	2.07578E-05	0.004620286	1.03956443	4.158215695	2.555503897
92.095	-0.001841001	8.32532E-06	0.002120647	0.477145504	4.158216551	2.555503897
92.1	-0.000244129	2.89372E-07	0.000505849	0.113815933	4.158216566	2.555503897
92.105	0.001469013	-8.33176E-06	-0.001225773	-0.275798889	4.158217112	2.555503897
92.11	0.002848196	-1.5307E-05	-0.002626225	-0.590900735	4.158219162	2.555503897
92.115	0.003349164	-1.78834E-05	-0.00314338	-0.70726057	4.158221997	2.555503897
92.12	0.003751466	-1.99501E-05	-0.003558171	-0.800588564	4.158225554	2.555503897
92.125	0.004416581	-2.33457E-05	-0.004239589	-0.953907435	4.158230484	2.555503897
92.13	0.004483992	-2.37736E-05	-0.004324768	-0.973072729	4.158235566	2.555503897
92.135	0.003420204	-1.85217E-05	-0.003264334	-0.734475208	4.158238522	2.555503897
92.14	0.002375949	-1.33337E-05	-0.002217219	-0.498874227	4.158239949	2.555503897
92.145	0.001734316	-1.0178E-05	-0.001580496	-0.35561155	4.158240709	2.555503897
92.15	-1.8165E-05	-1.46649E-06	0.000176507	0.039714046	4.158240709	2.555503897
92.155	-0.002194806	9.42077E-06	0.002370954	0.533464612	4.158241927	2.555503897
92.16	-0.003308487	1.49804E-05	0.003490992	0.785473205	4.158244693	2.555503897
92.165	-0.005457068	2.5685E-05	0.005646487	1.270459553	4.15825222	2.555503897
92.17	-0.009205917	4.44706E-05	0.009426017	2.120853838	4.158273639	2.555503897
92.175	-0.011609967	5.65832E-05	0.011860904	2.668703415	4.158307707	2.555503897
92.18	-0.013050285	6.38279E-05	0.013316475	2.996206979	4.158350751	2.555503897
92.185	-0.015902633	7.81464E-05	0.016191661	3.643123762	4.158414668	2.555503897
92.19	-0.018941064	9.34737E-05	0.019252589	4.331832584	4.158505342	2.555503897
92.195	-0.020167268	9.97537E-05	0.020499941	4.612486766	4.158608136	2.555503897
92.2	-0.020253758	0.000100294	0.020607203	4.6366206	4.158711815	2.555503897
92.205	-0.020359974	0.000100914	0.020730273	4.66431149	4.158816583	2.555503897
92.21	-0.020374571	0.000101074	0.020761638	4.671368644	4.158921502	2.555503897
92.215	-0.019861485	9.85846E-05	0.020258896	4.558251699	4.159021203	2.555503897
92.22	-0.018844699	9.35498E-05	0.019242472	4.329556198	4.159110957	2.555503897
92.225	-0.017823148	8.84522E-05	0.01821376	4.098095956	4.159191244	2.555503897
92.23	-0.017596412	8.72971E-05	0.017980758	4.045670571	4.159269501	2.555503897
92.235	-0.018975127	9.41804E-05	0.019370543	4.358372231	4.159360502	2.555503897
92.24	-0.021975603	0.000109249	0.022385251	5.03668151	4.159482557	2.555503897
92.245	-0.024333818	0.000121206	0.024758266	5.570609805	4.159632214	2.555503897
92.25	-0.023448371	0.000116935	0.023895836	5.376563182	4.159771178	2.555503897
92.255	-0.020932517	0.000104389	0.021363942	4.806886935	4.159881921	2.555503897
92.26	-0.020618853	0.000102798	0.021043401	4.734765313	4.159989371	2.555503897
92.265	-0.022341469	0.000111481	0.022796297	5.129166728	4.160115525	2.555503897
92.27	-0.022321948	0.000111518	0.022803492	5.130785608	4.160241458	2.555503897
92.275	-0.020145457	0.000100693	0.020618502	4.639163061	4.16034403	2.555503897
92.28	-0.019220715	9.60667E-05	0.0196858	4.429304909	4.160437402	2.555503897
92.285	-0.019895406	9.95159E-05	0.020382339	4.586026172	4.160537443	2.555503897
92.29	-0.01859167	9.31244E-05	0.01909268	4.295853075	4.160624803	2.555503897
92.295	-0.015122643	7.58144E-05	0.01560546	3.511228407	4.160682604	2.555503897
92.3	-0.012950577	6.4947E-05	0.013417976	3.019044617	4.160724993	2.555503897
92.305	-0.010774186	5.41191E-05	0.011239774	2.528949043	4.160754332	2.555503897
92.31	-0.006060173	3.07013E-05	0.006533303	1.46999307	4.160763614	2.555503897
92.315	-0.002411187	1.24634E-05	0.00287193	0.646184271	4.160765083	2.555503897
92.32	-0.000107359	9.6969E-07	0.000566252	0.127406591	4.160765086	2.555503897
92.325	0.004401743	-2.15668E-05	-0.003950777	-0.888924855	4.160769983	2.555503897
92.33	0.007465498	-3.70273E-05	-0.007046626	-1.585490961	4.16078407	2.555503897
92.335	0.00772031	-3.83947E-05	-0.007320332	-1.647074707	4.160799134	2.555503897
92.34	0.010451627	-5.20853E-05	-0.010059658	-2.263422974	4.160826742	2.555503897
92.345	0.012703732	-6.3518E-05	-0.012345841	-2.777814224	4.160867531	2.555503897
92.35	0.011151004	-5.58956E-05	-0.010806833	-2.431537374	4.160898958	2.555503897
92.355	0.011986244	-6.00869E-05	-0.011653261	-2.621983776	4.160935269	2.555503897
92.36	0.014475628	-7.267E-05	-0.014175053	-3.189386956	4.16098823	2.555503897
92.365	0.013243844	-6.67063E-05	-0.012970872	-2.918446144	4.16103256	2.555503897
92.37	0.011860725	-5.98878E-05	-0.011594791	-2.608827936	4.161068115	2.555503897
92.375	0.011214056	-5.67895E-05	-0.010969721	-2.468187298	4.161099899	2.555503897
92.38	0.008393777	-4.28171E-05	-0.008152465	-1.834304662	4.161117706	2.555503897
92.385	0.006952704	-3.56546E-05	-0.006709239	-1.509578755	4.161129923	2.555503897
92.39	0.006279477	-3.24173E-05	-0.006057157	-1.362860234	4.161139889	2.555503897
92.395	0.002195141	-1.21941E-05	-0.001986314	-0.446920661	4.161141107	2.555503897
92.4	-0.000995911	3.68543E-06	0.001206923	0.27155764	4.161141358	2.555503897
92.405	-0.002305289	1.01483E-05	0.002505761	0.563796247	4.161142701	2.555503897
92.41	-0.006343958	3.01913E-05	0.006530952	1.469464129	4.161152873	2.555503897
92.415	-0.009668207	4.68233E-05	0.009867957	2.220290415	4.161176497	2.555503897
92.42	-0.010654242	5.17548E-05	0.010856847	2.442790511	4.161205187	2.555503897
92.425	-0.013896848	6.79007E-05	0.014092832	3.17088713	4.161253997	2.555503897
92.43	-0.01683963	8.2666E-05	0.017049861	3.836218695	4.161325667	2.555503897
92.435	-0.017256955	8.48191E-05	0.017480873	3.933196531	4.161400934	2.555503897
92.44	-0.019127774	9.41732E-05	0.019352913	4.354405356	4.161493405	2.555503897
92.445	-0.020902848	0.000103135	0.021145605	4.757761213	4.161603835	2.555503897
92.45	-0.020431011	0.000100883	0.020690805	4.655431036	4.161709336	2.555503897
92.455	-0.020689424	0.000102228	0.020962428	4.716546398	4.161817522	2.555503897
92.46	-0.020729696	0.000102534	0.021023304	4.730243488	4.16192613	2.555503897
92.465	-0.019110072	9.45395E-05	0.019409406	4.367116246	4.16201843	2.555503897
92.47	-0.018234111	9.02088E-05	0.018535521	4.170492277	4.162102462	2.555503897
92.475	-0.017405595	8.6147E-05	0.017716145	3.986132533	4.162179031	2.555503897
92.48	-0.015411927	7.62595E-05	0.015722462	3.537553945	4.162239064	2.555503897
92.485	-0.013774396	6.81105E-05	0.014080255	3.168057267	4.162287018	2.555503897
92.49	-0.012319574	6.08754E-05	0.012622916	2.840155992	4.162325377	2.555503897
92.495	-0.010692092	5.27664E-05	0.010990278	2.472812617	4.16235427	2.555503897
92.5	-0.009240004	4.55264E-05	0.009533229	2.144976428	4.162375849	2.555503897
92.505	-0.00743387	3.65111E-05	0.007719761	1.736946266	4.162389816	2.555503897
92.51	-0.006006476	2.93535E-05	0.006280595	1.413133914	4.162398934	2.555503897
92.515	-0.005065856	2.46313E-05	0.005331436	1.199573081	4.16240542	2.555503897
92.52	-0.003655557	1.75545E-05	0.003909434	0.879622552	4.162408798	2.555503897
92.525	-0.003231077	1.53524E-05	0.003467133	0.780104995	4.162411436	2.555503897
92.53	-0.003960135	1.89334E-05	0.004190265	0.942809667	4.1624154	2.555503897
92.535	-0.004114307	1.96695E-05	0.004338876	0.976247177	4.162419678	2.555503897
92.54	-0.00476626	2.28645E-05	0.004983859	1.121368315	4.16242542	2.555503897
92.545	-0.00628496	3.04159E-05	0.006507619	1.464214172	4.162435403	2.555503897
92.55	-0.007088096	3.44331E-05	0.00731791	1.646529806	4.162448101	2.555503897
92.555	-0.007625202	3.71157E-05	0.007858892	1.7682507	4.162462796	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
92.56	-0.00817008	3.98485E-05	0.008409892	1.892225613	4.162479667	2.555503897
92.565	-0.008201038	4.00172E-05	0.008443864	1.899869342	4.162496666	2.555503897
92.57	-0.008345609	4.0735E-05	0.008588612	1.93243759	4.162514269	2.555503897
92.575	-0.008742695	4.27082E-05	0.00898639	2.021937816	4.162533587	2.555503897
92.58	-0.009584711	4.6895E-05	0.009830212	2.211797658	4.162556805	2.555503897
92.585	-0.010917913	5.35549E-05	0.011172044	2.513709823	4.162586932	2.555503897
92.59	-0.011595447	5.69665E-05	0.011859199	2.668319862	4.162620915	2.555503897
92.595	-0.01226411	6.0313E-05	0.012533106	2.81994882	4.162658929	2.555503897
92.6	-0.013564724	6.68317E-05	0.013845431	3.115222079	4.162705434	2.555503897
92.605	-0.013885827	6.84931E-05	0.014179806	3.190456288	4.162754166	2.555503897
92.61	-0.013820395	6.819E-05	0.014118586	3.176681869	4.162802441	2.555503897
92.615	-0.014577262	7.19824E-05	0.014882033	3.348457532	4.162856147	2.555503897
92.62	-0.015138876	7.48139E-05	0.015451731	3.476639388	4.162914072	2.555503897
92.625	-0.016242414	8.03263E-05	0.016560603	3.726135636	4.162980749	2.555503897
92.63	-0.018310981	9.06903E-05	0.018644513	4.195015501	4.163065491	2.555503897
92.635	-0.019261852	9.55274E-05	0.019616716	4.413761141	4.163159263	2.555503897
92.64	-0.019706911	9.78111E-05	0.020075615	4.517013428	4.163257418	2.555503897
92.645	-0.021220636	0.00010543	0.021604617	4.861038726	4.163371231	2.555503897
92.65	-0.022407555	0.000111477	0.022813763	5.133096744	4.163498132	2.555503897
92.655	-0.02232303	0.000111203	0.022757231	5.120376871	4.163624078	2.555503897
92.66	-0.021224091	0.000105861	0.021678599	4.87768488	4.163737928	2.555503897
92.665	-0.019448904	9.71064E-05	0.019911959	4.4801907	4.16383353	2.555503897
92.67	-0.018804036	9.3935E-05	0.01927223	4.336251842	4.163922897	2.555503897
92.675	-0.020120215	0.000100583	0.020614577	4.638279826	4.164025212	2.555503897
92.68	-0.02047802	0.000102567	0.021014912	4.728355175	4.164131199	2.555503897
92.685	-0.017344146	8.71556E-05	0.017905188	4.028667242	4.164207229	2.555503897
92.69	-0.012979053	6.55805E-05	0.013558447	3.050650494	4.164249804	2.555503897
92.695	-0.010541489	5.35239E-05	0.01113181	2.504657141	4.16427789	2.555503897
92.7	-0.008308357	4.254E-05	0.008922513	2.007565323	4.164295336	2.555503897
92.705	-0.003958543	2.09982E-05	0.004593414	1.033518104	4.164299297	2.555503897
92.71	0.000234185	1.07682E-07	0.000399913	0.089980452	4.16429931	2.555503897
92.715	0.002612364	-1.17576E-05	-0.001979892	-0.445475731	4.164301035	2.555503897
92.72	0.005011923	-2.37076E-05	-0.004375252	-0.984431746	4.164307384	2.555503897
92.725	0.007370366	-3.54884E-05	-0.006735314	-1.51544575	4.164321113	2.555503897
92.73	0.008248144	-3.98911E-05	-0.007616953	-1.713814328	4.164338308	2.555503897
92.735	0.009299132	-4.51035E-05	-0.00866049	-1.948610189	4.164360163	2.555503897
92.74	0.011567957	-5.64017E-05	-0.010921534	-2.457345251	4.164393985	2.555503897
92.745	0.012994088	-6.35442E-05	-0.012350277	-2.778812436	4.164436659	2.555503897
92.75	0.01356448	-6.63915E-05	-0.0129197	-2.90693256	4.164483162	2.555503897
92.755	0.015084221	-7.39504E-05	-0.014430899	-3.246952164	4.164540669	2.555503897
92.76	0.016820764	-8.26262E-05	-0.016164115	-3.636925899	4.164612179	2.555503897
92.765	0.017778144	-8.74332E-05	-0.01712413	-3.852929213	4.164692061	2.555503897
92.77	0.018302506	-9.00782E-05	-0.017652261	-3.97175878	4.164776725	2.555503897
92.775	0.018372584	-9.04446E-05	-0.017725428	-3.988221234	4.164862038	2.555503897
92.78	0.018926647	-9.31943E-05	-0.018274396	-4.111739073	4.164952575	2.555503897
92.785	0.020122077	-9.91725E-05	-0.019467697	-4.380231905	4.165054909	2.555503897
92.79	0.019775358	-9.74902E-05	-0.019126923	-4.303557764	4.165153747	2.555503897
92.795	0.019052636	-9.38587E-05	-0.018393724	-4.138587924	4.165245493	2.555503897
92.8	0.020582334	-0.000101438	-0.019919891	-4.481975452	4.165352562	2.555503897
92.805	0.021865811	-0.000107874	-0.021203934	-4.770885248	4.165473401	2.555503897
92.81	0.021505539	-0.000106101	-0.020845851	-4.690316397	4.165590291	2.555503897
92.815	0.022110901	-0.000109099	-0.021448423	-4.825895204	4.165713854	2.555503897
92.82	0.022947429	-0.000113294	-0.02228513	-5.014154346	4.165846944	2.555503897
92.825	0.022634108	-0.00011175	-0.021973398	-4.944014629	4.165976424	2.555503897
92.83	0.023144336	-0.000114274	-0.022480618	-5.058139001	4.166111807	2.555503897
92.835	0.024192935	-0.000119515	-0.023525858	-5.293318102	4.166259736	2.555503897
92.84	0.024277684	-0.000119961	-0.023614201	-5.313195288	4.166408703	2.555503897
92.845	0.024677506	-0.000121947	-0.024010699	-5.402407183	4.166562617	2.555503897
92.85	0.025663203	-0.000126869	-0.02499193	-5.623184256	4.166729073	2.555503897
92.855	0.026232665	-0.000129727	-0.025561442	-5.751324373	4.166902997	2.555503897
92.86	0.026973239	-0.000133422	-0.026297852	-5.917016741	4.16708688	2.555503897
92.865	0.028086204	-0.000138984	-0.027405991	-6.166347914	4.167286251	2.555503897
92.87	0.029115134	-0.000144136	-0.028432285	-6.397264184	4.167500498	2.555503897
92.875	0.030400535	-0.000150566	-0.029712858	-6.685393124	4.167734079	2.555503897
92.88	0.031810146	-0.000157632	-0.031119501	-7.001887655	4.167989824	2.555503897
92.885	0.032990672	-0.000163567	-0.032300852	-7.267691588	4.168264904	2.555503897
92.89	0.034252725	-0.000169918	-0.033564419	-7.551994204	4.168561432	2.555503897
92.895	0.035313607	-0.000175285	-0.034632041	-7.792209311	4.168876613	2.555503897
92.9	0.035761794	-0.000177602	-0.035092915	-7.895905811	4.169199845	2.555503897
92.905	0.03604633	-0.0001791	-0.035390731	-7.962914497	4.169528241	2.555503897
92.91	0.036047761	-0.000179198	-0.035409114	-7.967050586	4.169856664	2.555503897
92.915	0.035157424	-0.000174849	-0.034530994	-7.769473687	4.170169063	2.555503897
92.92	0.033596782	-0.000167131	-0.032973237	-7.418978323	4.170454343	2.555503897
92.925	0.031701984	-0.000157699	-0.031070683	-6.990903635	4.170708352	2.555503897
92.93	0.030583614	-0.000152055	-0.02993285	-6.734891178	4.170944755	2.555503897
92.935	0.032488598	-0.000161432	-0.031826028	-7.16085632	4.171211526	2.555503897
92.94	0.037312498	-0.000185409	-0.03664533	-8.245199328	4.171563397	2.555503897
92.945	0.041852133	-0.000208371	-0.041208069	-9.271815516	4.172006099	2.555503897
92.95	0.044112507	-0.000219937	-0.043504564	-9.788526915	4.172497911	2.555503897
92.955	0.043920672	-0.000219159	-0.043343496	-9.752286575	4.172985455	2.555503897
92.96	0.041813777	-0.000208675	-0.041227272	-9.276136164	4.173427346	2.555503897
92.965	0.040425521	-0.000201698	-0.039819827	-8.9594611	4.173840381	2.555503897
92.97	0.042521165	-0.000212251	-0.041950457	-9.43885287	4.17429735	2.555503897
92.975	0.045612393	-0.000227971	-0.045099168	-10.14731291	4.174823175	2.555503897
92.98	0.044766354	-0.000223956	-0.04428453	-9.964019282	4.175329675	2.555503897
92.985	0.041062041	-0.000205428	-0.040546606	-9.12298627	4.17575582	2.555503897
92.99	0.039715698	-0.000198654	-0.039181093	-8.815745925	4.176154478	2.555503897
92.995	0.041347957	-0.000206952	-0.040856465	-9.192704584	4.176586577	2.555503897
93	0.041349748	-0.00020717	-0.040900105	-9.202523562	4.177018715	2.555503897
93.005	0.037918294	-0.000190077	-0.037452965	-8.426917156	4.177382105	2.555503897
93.01	0.034295838	-0.000172162	-0.033846227	-7.615401141	4.17767938	2.555503897
93.015	0.032400755	-0.000162819	-0.03196685	-7.19254118	4.17794471	2.555503897
93.02	0.029906096	-0.000150552	-0.029500567	-6.637627477	4.178170755	2.555503897
93.025	0.025390188	-0.000128158	-0.025002462	-5.6255539	4.178333688	2.555503897
93.03	0.021086481	-0.000106709	-0.020699116	-4.657301148	4.178446067	2.555503897
93.035	0.018611966	-9.43645E-05	-0.018224487	-4.100509549	4.178533618	2.555503897
93.04	0.015708359	-7.99241E-05	-0.015331674	-3.449626737	4.178595982	2.555503897
93.045	0.011301192	-5.7872E-05	-0.010917969	-2.456543133	4.178628261	2.555503897
93.05	0.008709156	-4.47825E-05	-0.00830033	-1.867574187	4.178647432	2.555503897
93.055	0.009270137	-4.74852E-05	-0.00884612	-1.990377039	4.178669151	2.555503897
93.06	0.009658381	-4.94219E-05	-0.009237137	-2.078355849	4.178692728	2.555503897
93.065	0.00848407	-4.35388E-05	-0.008051696	-1.811631548	4.17871092	2.555503897
93.07	0.008231706	-4.22159E-05	-0.007788509	-1.752414606	4.178728046	2.555503897
93.075	0.009223438	-4.71602E-05	-0.00878684	-1.977039088	4.178749547	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
93.08	0.008844732	-4.52983E-05	-0.008410792	-1.892428142	4.178769319	2.555503897
93.085	0.007918184	-4.06369E-05	-0.007471624	-1.681115294	4.178785165	2.555503897
93.09	0.009000392	-4.60131E-05	-0.008557198	-1.925369503	4.178805639	2.555503897
93.095	0.009762071	-4.98721E-05	-0.009336134	-2.100630054	4.178829725	2.555503897
93.1	0.008650964	-4.4347E-05	-0.00822048	-1.84960803	4.17884864	2.555503897
93.105	0.008700514	-4.45801E-05	-0.008267672	-1.860226146	4.178867772	2.555503897
93.11	0.009006687	-4.61611E-05	-0.008586909	-1.932054552	4.178888274	2.555503897
93.115	0.007336324	-3.78449E-05	-0.006913588	-1.555557378	4.178901877	2.555503897
93.12	0.00682921	-3.52787E-05	-0.006401602	-1.440360384	4.178913665	2.555503897
93.125	0.007350766	-3.7928E-05	-0.0069366	-1.560734961	4.178927321	2.555503897
93.13	0.005385784	-2.81667E-05	-0.004979832	-1.120462268	4.178934652	2.555503897
93.135	0.003461958	-1.85168E-05	-0.003052587	-0.686831963	4.178937682	2.555503897
93.14	0.003445869	-1.84289E-05	-0.003035586	-0.683006788	4.178940683	2.555503897
93.145	0.00199119	-1.12033E-05	-0.001592539	-0.358321234	4.178941685	2.555503897
93.15	-0.000519443	1.36818E-06	0.000916056	0.206112516	4.178941753	2.555503897
93.155	-0.001506137	6.34847E-06	0.001909453	0.429627002	4.178942326	2.555503897
93.16	-0.002473886	1.11898E-05	0.002874908	0.64685423	4.178943873	2.555503897
93.165	-0.004494087	2.13118E-05	0.004892771	1.100873386	4.178948978	2.555503897
93.17	-0.005857694	2.81901E-05	0.006263445	1.409275123	4.17895765	2.555503897
93.175	-0.006503568	3.14561E-05	0.00691413	1.555679306	4.17896834	2.555503897
93.18	-0.007977891	3.88495E-05	0.008386769	1.887022956	4.178984426	2.555503897
93.185	-0.009690832	4.74773E-05	0.010104661	2.273548694	4.179008161	2.555503897
93.19	-0.010322662	5.07087E-05	0.010747913	2.418280367	4.179035093	2.555503897
93.195	-0.011046033	5.43666E-05	0.011475936	2.582085679	4.179065931	2.555503897
93.2	-0.012416431	6.12807E-05	0.012851717	2.891636407	4.179104896	2.555503897
93.205	-0.012943837	6.40017E-05	0.013393022	3.013429938	4.179147241	2.555503897
93.21	-0.013268649	6.56801E-05	0.013726892	3.088550687	4.179191737	2.555503897
93.215	-0.014204295	7.04253E-05	0.014670665	3.300899555	4.179242731	2.555503897
93.22	-0.01432427	7.11108E-05	0.014805858	3.331318105	4.17929459	2.555503897
93.225	-0.014387365	7.14745E-05	0.014879316	3.347846208	4.179346906	2.555503897
93.23	-0.015467613	7.69394E-05	0.015965938	3.592336029	4.179407374	2.555503897
93.235	-0.015691349	7.81609E-05	0.016207658	3.646723064	4.179469603	2.555503897
93.24	-0.015367108	7.661E-05	0.015894449	3.576251004	4.179529287	2.555503897
93.245	-0.016027812	7.99884E-05	0.016572079	3.728717667	4.179594214	2.555503897
93.25	-0.015923623	7.95905E-05	0.016488752	3.709969292	4.1796583	2.555503897
93.255	-0.01458104	7.2975E-05	0.015153135	3.40945533	4.179712034	2.555503897
93.26	-0.013771208	6.89956E-05	0.014350079	3.228767887	4.179759966	2.555503897
93.265	-0.012766578	6.40634E-05	0.013355034	3.004882722	4.179801159	2.555503897
93.27	-0.010839346	5.44902E-05	0.011424639	2.570543751	4.179830854	2.555503897
93.275	-0.009831249	4.9462E-05	0.010411188	2.342517252	4.179855282	2.555503897
93.28	-0.01011739	5.09246E-05	0.010706572	2.408978746	4.179881153	2.555503897
93.285	-0.010197215	5.139E-05	0.010800555	2.430124911	4.179907434	2.555503897
93.29	-0.010145074	5.11992E-05	0.010762016	2.421453602	4.179933447	2.555503897
93.295	-0.01004845	5.0807E-05	0.010682812	2.403632793	4.179958966	2.555503897
93.3	-0.009070213	4.60155E-05	0.009716727	2.186263468	4.179979759	2.555503897
93.305	-0.007853962	4.0011E-05	0.008507156	1.914110006	4.179995349	2.555503897
93.31	-0.006741629	3.45279E-05	0.007403025	1.665680625	4.180006836	2.555503897
93.315	-0.004988693	2.58336E-05	0.005652942	1.271911875	4.180013126	2.555503897
93.32	-0.003491397	1.83824E-05	0.004153776	0.934599688	4.180016207	2.555503897
93.325	-0.002622114	1.40791E-05	0.003288227	0.739851011	4.180017945	2.555503897
93.33	-0.001296793	7.5008E-06	0.001965523	0.442242739	4.18001837	2.555503897
93.335	-0.000290921	2.49729E-06	0.000959775	0.215949417	4.180018391	2.555503897
93.34	0.000269181	-2.49373E-07	0.000407787	0.091751989	4.180018409	2.555503897
93.345	0.002062638	-9.14948E-06	-0.001380283	-0.310563634	4.180019485	2.555503897
93.35	0.00409805	-1.93115E-05	-0.003420841	-0.769689235	4.180023729	2.555503897
93.355	0.005053527	-2.40808E-05	-0.004378166	-0.985087428	4.180030184	2.555503897
93.36	0.006132542	-2.94432E-05	-0.005454265	-1.227209581	4.180039689	2.555503897
93.365	0.00745992	-3.60514E-05	-0.006779935	-1.525485338	4.180053754	2.555503897
93.37	0.009104365	-4.42292E-05	-0.008419871	-1.894470959	4.180074704	2.555503897
93.375	0.012163038	-5.95013E-05	-0.011480689	-2.583154968	4.180112094	2.555503897
93.38	0.014660911	-7.20597E-05	-0.013995893	-3.149075854	4.180166419	2.555503897
93.385	0.014726252	-7.24574E-05	-0.014073933	-3.166634865	4.180221229	2.555503897
93.39	0.014706805	-7.2363E-05	-0.014054888	-3.162349835	4.180275894	2.555503897
93.395	0.015558233	-7.66248E-05	-0.014909813	-3.354707921	4.180337072	2.555503897
93.4	0.016016422	-7.89223E-05	-0.015369693	-3.458181014	4.180401907	2.555503897
93.405	0.017189069	-8.47678E-05	-0.016539519	-3.721391793	4.180476583	2.555503897
93.41	0.018978865	-9.37451E-05	-0.018335439	-4.125473848	4.18056762	2.555503897
93.415	0.019267846	-9.5235E-05	-0.01863301	-4.192427329	4.18066145	2.555503897
93.42	0.019850574	-9.81275E-05	-0.019211877	-4.322672297	4.180761041	2.555503897
93.425	0.02239414	-0.000110851	-0.021755389	-4.894962473	4.18088779	2.555503897
93.43	0.023944996	-0.000118685	-0.02332061	-5.247137333	4.181032703	2.555503897
93.435	0.024349233	-0.000120747	-0.023732574	-5.339829167	4.181182549	2.555503897
93.44	0.026153104	-0.000129793	-0.025539297	-5.746341811	4.18135542	2.555503897
93.445	0.027739527	-0.000137815	-0.027140681	-6.106653141	4.1815499	2.555503897
93.45	0.028109787	-0.000139741	-0.027525134	-6.193155242	4.181749606	2.555503897
93.455	0.029331312	-0.000145903	-0.028754625	-6.469790621	4.181967045	2.555503897
93.46	0.030529117	-0.000151992	-0.0299695	-6.743137413	4.182202607	2.555503897
93.465	0.030628485	-0.000152585	-0.030087642	-6.769719471	4.182439705	2.555503897
93.47	0.031201993	-0.000155527	-0.030674521	-6.901767195	4.182685764	2.555503897
93.475	0.03164098	-0.00015783	-0.031133732	-7.005089677	4.182938796	2.555503897
93.48	0.031044615	-0.000154943	-0.030550825	-6.873935729	4.18318238	2.555503897
93.485	0.030932049	-0.000154445	-0.030450171	-6.851288406	4.183424201	2.555503897
93.49	0.031096	-0.000155351	-0.030633144	-6.892457343	4.183668592	2.555503897
93.495	0.030587739	-0.000152896	-0.030137373	-6.780908966	4.183905059	2.555503897
93.5	0.030345831	-0.000151751	-0.029906358	-6.728930503	4.1841378	2.555503897
93.505	0.030373285	-0.000151969	-0.029950364	-6.738831839	4.184370963	2.555503897
93.51	0.029894174	-0.000149662	-0.02948465	-6.634046241	4.184596828	2.555503897
93.515	0.029337675	-0.000146951	-0.028937523	-6.510942756	4.184814362	2.555503897
93.52	0.029207138	-0.000146364	-0.028819033	-6.484282386	4.185029965	2.555503897
93.525	0.029406531	-0.000147445	-0.029037312	-6.53339511	4.185248521	2.555503897
93.53	0.029190909	-0.000146476	-0.028841769	-6.489398079	4.185463884	2.555503897
93.535	0.028245509	-0.000141846	-0.027907601	-6.279210251	4.185665524	2.555503897
93.54	0.027870278	-0.000140043	-0.027543812	-6.197357795	4.185861841	2.555503897
93.545	0.028098738	-0.000141295	-0.027796743	-6.254267188	4.18606139	2.555503897
93.55	0.027126898	-0.000136577	-0.026844937	-6.040110879	4.186247374	2.555503897
93.555	0.025414041	-0.000128117	-0.025139402	-5.656365347	4.186410613	2.555503897
93.56	0.024538081	-0.000123828	-0.024275081	-5.461893314	4.186562793	2.555503897
93.565	0.02356001	-0.000119064	-0.023315339	-5.245951294	4.186703083	2.555503897
93.57	0.021465191	-0.000108714	-0.021231117	-4.777001436	4.186819534	2.555503897
93.575	0.019314688	-9.80531E-05	-0.019085623	-4.294265121	4.186913821	2.555503897
93.58	0.017494463	-8.90438E-05	-0.017273524	-3.886542892	4.186991174	2.555503897
93.585	0.015223603	-7.77848E-05	-0.015010187	-3.377292069	4.187049749	2.555503897
93.59	0.012601559	-6.47515E-05	-0.012391866	-2.788169885	4.187089884	2.555503897
93.595	0.009895067	-5.12751E-05	-0.009686418	-2.179444077	4.187114631	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
93.6	0.007344492	-3.85485E-05	-0.007133216	-1.604973568	4.187128264	2.555503897
93.605	0.005507163	-2.93751E-05	-0.005293872	-1.191121139	4.187135929	2.555503897
93.61	0.003734658	-2.05339E-05	-0.003521944	-0.792437456	4.187139454	2.555503897
93.615	0.001997189	-1.18399E-05	-0.001780274	-0.40056159	4.187140462	2.555503897
93.62	0.001563759	-9.66128E-06	-0.001343949	-0.302388614	4.187141081	2.555503897
93.625	0.001113804	-7.4508E-06	-0.00090129	-0.202790218	4.187141394	2.555503897
93.63	-0.000302484	-3.94512E-07	0.000511449	0.115076106	4.187141417	2.555503897
93.635	-0.000598613	1.08359E-06	0.000806808	0.181531877	4.187141508	2.555503897
93.64	-0.000734934	1.7006E-06	0.000930819	0.209434264	4.187141644	2.555503897
93.645	-0.002582804	1.08741E-05	0.002766526	0.622468458	4.18714333	2.555503897
93.65	-0.003990608	1.78949E-05	0.004170921	0.938457144	4.187147355	2.555503897
93.655	-0.004891159	2.23468E-05	0.005061213	1.138772961	4.187153402	2.555503897
93.66	-0.007020824	3.29402E-05	0.007178905	1.615253546	4.18716586	2.555503897
93.665	-0.008884822	4.22438E-05	0.009037888	2.033524757	4.187185811	2.555503897
93.67	-0.010386341	4.97143E-05	0.010529993	2.369248425	4.187213076	2.555503897
93.675	-0.012804988	6.17719E-05	0.012937212	2.910872769	4.187254517	2.555503897
93.68	-0.015018893	7.28357E-05	0.015144865	3.407594531	4.187311527	2.555503897
93.685	-0.01712723	8.3363E-05	0.017242856	3.879642548	4.187385667	2.555503897
93.69	-0.019733235	9.63978E-05	0.019832886	4.462399434	4.187484084	2.555503897
93.695	-0.021692323	0.000106221	0.021783819	4.901359248	4.187603014	2.555503897
93.7	-0.023518465	0.000115362	0.023598469	5.309655571	4.187742809	2.555503897
93.705	-0.025831933	0.000126954	0.025898487	5.827159675	4.187911461	2.555503897
93.71	-0.027641441	0.000136046	0.027701659	6.232873243	4.188104567	2.555503897
93.715	-0.029302319	0.000144386	0.029355062	6.604888927	4.188321577	2.555503897
93.72	-0.031097995	0.000153412	0.031143909	7.007379511	4.188566	2.555503897
93.725	-0.032414496	0.000160051	0.032459093	7.303295848	4.188831555	2.555503897
93.73	-0.033712122	0.000166589	0.033753983	7.594646245	4.189118797	2.555503897
93.735	-0.034932135	0.000172752	0.034974292	7.869215618	4.189427205	2.555503897
93.74	-0.035664835	0.000176478	0.035711853	8.035166902	4.189748687	2.555503897
93.745	-0.036453148	0.000180475	0.036502992	8.213173231	4.190084537	2.555503897
93.75	-0.037090373	0.000183727	0.037146543	8.357972126	4.190432232	2.555503897
93.755	-0.037356769	0.000185119	0.037421949	8.419938437	4.19078494	2.555503897
93.76	-0.037751921	0.000187149	0.037823711	8.510335066	4.191145148	2.555503897
93.765	-0.038034278	0.000188623	0.038115316	8.575946191	4.191510765	2.555503897
93.77	-0.038139612	0.00018921	0.038231423	8.602070162	4.19187841	2.555503897
93.775	-0.038120957	0.000189185	0.038225341	8.60070171	4.192245695	2.555503897
93.78	-0.03743981	0.000185844	0.037550745	8.448917535	4.192599972	2.555503897
93.785	-0.036657309	0.000181963	0.036767267	8.272635019	4.192939595	2.555503897
93.79	-0.036494015	0.000181166	0.036606413	8.236443021	4.193276199	2.555503897
93.795	-0.036540933	0.000181424	0.036658449	8.24815099	4.193613669	2.555503897
93.8	-0.036939228	0.000183432	0.037063949	8.339388425	4.193958536	2.555503897
93.805	-0.037871279	0.000188124	0.038011205	8.552521126	4.194321026	2.555503897
93.81	-0.038665577	0.000192154	0.038813785	8.733101646	4.194698881	2.555503897
93.815	-0.039033601	0.000194061	0.039191172	8.818013801	4.195083963	2.555503897
93.82	-0.03905301	0.000194225	0.039223099	8.825197186	4.195469428	2.555503897
93.825	-0.038834337	0.000193191	0.039014171	8.778188405	4.195850588	2.555503897
93.83	-0.038588321	0.000192009	0.038775518	8.724491565	4.196226934	2.555503897
93.835	-0.03843796	0.000191295	0.038631224	8.692025493	4.196600354	2.555503897
93.84	-0.038640801	0.00019234	0.038842383	8.739536068	4.196977724	2.555503897
93.845	-0.039002805	0.000194191	0.039216101	8.823622833	4.197362199	2.555503897
93.85	-0.039187345	0.000195151	0.039406728	8.866513874	4.19775032	2.555503897
93.855	-0.03977856	0.000198135	0.039996899	8.999302251	4.198150241	2.555503897
93.86	-0.040682495	0.000202704	0.04090041	9.2025923	4.198568544	2.555503897
93.865	-0.041071105	0.000204708	0.04129655	9.291723775	4.198994877	2.555503897
93.87	-0.041382813	0.000206312	0.04161371	9.363084833	4.199427706	2.555503897
93.875	-0.042058889	0.000209741	0.042291372	9.515558775	4.199874792	2.555503897
93.88	-0.042769383	0.000213351	0.043004894	9.676101066	4.200337111	2.555503897
93.885	-0.043456157	0.000216854	0.04369693	9.831809263	4.200814397	2.555503897
93.89	-0.043852942	0.000218917	0.044104613	9.923537835	4.201300439	2.555503897
93.895	-0.044033944	0.000219894	0.044297645	9.966970081	4.201790501	2.555503897
93.9	-0.044467993	0.000222139	0.044741007	10.06672657	4.202290272	2.555503897
93.905	-0.044725298	0.000223514	0.045012641	10.1278442	4.202795843	2.555503897
93.91	-0.044797329	0.00022396	0.045100695	10.14765648	4.203303044	2.555503897
93.915	-0.04507294	0.000225434	0.045391771	10.21314845	4.203816505	2.555503897
93.92	-0.044955814	0.000224961	0.045295594	10.1915087	4.204327301	2.555503897
93.925	-0.044588976	0.000223233	0.044946643	10.11299473	4.204829795	2.555503897
93.93	-0.044442821	0.000222622	0.04482333	10.08524924	4.205329001	2.555503897
93.935	-0.043828641	0.000219702	0.044233808	9.95260672	4.205814504	2.555503897
93.94	-0.042406325	0.000212763	0.042833369	9.63750811	4.206269007	2.555503897
93.945	-0.03932466	0.000197551	0.039765613	8.947262923	4.206659853	2.555503897
93.95	-0.033843827	0.000170477	0.034312901	7.72040262	4.206949344	2.555503897
93.955	-0.027667861	0.000139797	0.028144188	6.332442306	4.20714282	2.555503897
93.96	-0.022267705	0.000112841	0.022732437	5.114798415	4.207268142	2.555503897
93.965	-0.01922618	9.75569E-05	0.019667334	4.425150104	4.207361567	2.555503897
93.97	-0.019307975	9.7884E-05	0.019734953	4.440364443	4.207455788	2.555503897
93.975	-0.018647266	9.4623E-05	0.019079234	4.292827538	4.207543671	2.555503897
93.98	-0.015437631	7.86165E-05	0.015872215	3.57124841	4.207603905	2.555503897
93.985	-0.013847288	7.05829E-05	0.014263579	3.209305254	4.207652367	2.555503897
93.99	-0.014729564	7.49241E-05	0.015140224	3.406550445	4.207707202	2.555503897
93.995	-0.014678135	7.46867E-05	0.015092182	3.39574105	4.207761655	2.555503897
94	-0.013395259	6.82876E-05	0.013804086	3.105919357	4.207807005	2.555503897
94.005	-0.012881654	6.56882E-05	0.013283784	2.988851378	4.207848944	2.555503897
94.01	-0.013412531	6.83225E-05	0.013815777	3.10854972	4.207894411	2.555503897
94.015	-0.013425182	6.84208E-05	0.013835588	3.11300723	4.207939964	2.555503897
94.02	-0.012448276	6.35761E-05	0.012861073	2.893741385	4.207979128	2.555503897
94.025	-0.012027283	6.14805E-05	0.012441703	2.799383162	4.208015689	2.555503897
94.03	-0.011840234	6.0589E-05	0.01226331	2.759244681	4.208051121	2.555503897
94.035	-0.010377014	5.33464E-05	0.010814294	2.433216189	4.208078337	2.555503897
94.04	-0.008798366	4.54871E-05	0.00924247	2.079555721	4.208097902	2.555503897
94.045	-0.007880404	4.09236E-05	0.008330055	1.874262341	4.208113597	2.555503897
94.05	-0.006427073	3.37044E-05	0.006887096	1.549596499	4.208124037	2.555503897
94.055	-0.00466649	2.49246E-05	0.00513285	1.154891238	4.208129541	2.555503897
94.06	-0.003611081	1.96389E-05	0.004077069	0.917340618	4.208132837	2.555503897
94.065	-0.003181986	1.74878E-05	0.003647505	0.820688624	4.208135396	2.555503897
94.07	-0.002547323	1.43358E-05	0.003018112	0.67907524	4.208137036	2.555503897
94.075	-0.001276775	8.00454E-06	0.001754158	0.394685599	4.208137448	2.555503897
94.08	-0.000448145	3.84927E-06	0.000924819	0.208084212	4.208137498	2.555503897
94.085	-0.000151473	2.36479E-06	0.000628574	0.141429235	4.208137504	2.555503897
94.09	0.000850163	-2.6304E-06	-0.000368124	-0.082827834	4.208137687	2.555503897
94.095	0.001364032	-5.23045E-06	-0.000886826	-0.199535894	4.208138157	2.555503897
94.1	0.000818487	-2.51766E-06	-0.000338986	-0.076271799	4.208138326	2.555503897
94.105	0.001437849	-5.57775E-06	-0.000956107	-0.215124088	4.208138849	2.555503897
94.11	0.002482296	-1.08087E-05	-0.001999464	-0.449879324	4.208140406	2.555503897
94.115	0.001998919	-8.42937E-06	-0.001518954	-0.341764688	4.208141416	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
94.12	0.001642668	-6.63446E-06	-0.00115654	-0.260221581	4.208142098	2.555503897
94.125	0.002041694	-8.61517E-06	-0.001556554	-0.350224666	4.208143152	2.555503897
94.13	0.001786826	-7.3439E-06	-0.001299804	-0.292455957	4.208143959	2.555503897
94.135	0.001620659	-6.48293E-06	-0.001125955	-0.253339933	4.208144622	2.555503897
94.14	0.002148157	-9.08357E-06	-0.001651146	-0.371507842	4.208145789	2.555503897
94.145	0.002474773	-1.06899E-05	-0.001975477	-0.444482291	4.208147337	2.555503897
94.15	0.00308563	-1.36952E-05	-0.002575085	-0.579394127	4.208149743	2.555503897
94.155	0.004390106	-2.01751E-05	-0.00386705	-0.870086359	4.208154614	2.555503897
94.16	0.005266752	-2.45471E-05	-0.004738515	-1.066165867	4.208161625	2.555503897
94.165	0.005830122	-2.73384E-05	-0.005294799	-1.191329788	4.208170216	2.555503897
94.17	0.007083609	-3.35638E-05	-0.006535252	-1.470431678	4.208182898	2.555503897
94.175	0.008430548	-4.02803E-05	-0.007873182	-1.77146586	4.208200861	2.555503897
94.18	0.009411425	-4.51686E-05	-0.008846666	-1.990499927	4.208223247	2.555503897
94.185	0.010876214	-5.24574E-05	-0.010297807	-2.317006589	4.208253145	2.555503897
94.19	0.012755787	-6.18331E-05	-0.012163735	-2.736840445	4.208294268	2.555503897
94.195	0.014576802	-7.09298E-05	-0.013973406	-3.144016259	4.208347971	2.555503897
94.2	0.016683752	-8.14615E-05	-0.016067651	-3.615221381	4.208418321	2.555503897
94.205	0.018703341	-9.15852E-05	-0.018079837	-4.067963389	4.208506734	2.555503897
94.21	0.020230849	-9.92631E-05	-0.019605304	-4.411193385	4.208610178	2.555503897
94.215	0.021934804	-0.00010782	-0.02130482	-4.793584434	4.20873178	2.555503897
94.22	0.023626474	-0.000116339	-0.02299623	-5.174151803	4.208872863	2.555503897
94.225	0.02475173	-0.000122044	-0.024128484	-5.428908911	4.209027704	2.555503897
94.23	0.025823328	-0.000127478	-0.025206686	-5.671504258	4.209196243	2.555503897
94.235	0.026836598	-0.000132634	-0.026229726	-5.901688382	4.209378268	2.555503897
94.24	0.027398514	-0.000135548	-0.02680756	-6.031701102	4.209567996	2.555503897
94.245	0.027729122	-0.000137306	-0.027156292	-6.110165613	4.209762329	2.555503897
94.25	0.02778167	-0.000137679	-0.027230192	-6.126793124	4.2099574	2.555503897
94.255	0.027632288	-0.000137038	-0.027100768	-6.097672857	4.210150379	2.555503897
94.26	0.027493705	-0.000136451	-0.026982168	-6.070987868	4.210341427	2.555503897
94.265	0.027013625	-0.000134163	-0.026520107	-5.967024161	4.210525861	2.555503897
94.27	0.026428697	-0.000131338	-0.025949721	-5.838687249	4.210702395	2.555503897
94.275	0.026082479	-0.000129702	-0.0256195	-5.764387447	4.210874334	2.555503897
94.28	0.025528995	-0.000127038	-0.025081911	-5.643430067	4.211039053	2.555503897
94.285	0.024991582	-0.000124448	-0.024559255	-5.525832372	4.21119691	2.555503897
94.29	0.024622486	-0.000122709	-0.024208531	-5.446919476	4.211350138	2.555503897
94.295	0.02368294	-0.000118141	-0.023287136	-5.239605555	4.211491896	2.555503897
94.3	0.022339816	-0.000111553	-0.021958812	-4.940732613	4.211618031	2.555503897
94.305	0.020779855	-0.000103888	-0.02041398	-4.593145585	4.211727165	2.555503897
94.31	0.018409223	-9.21774E-05	-0.018055215	-4.062423352	4.211812819	2.555503897
94.315	0.015614278	-7.83165E-05	-0.015265416	-3.434718712	4.211874439	2.555503897
94.32	0.013213177	-6.6389E-05	-0.012866506	-2.894963916	4.211918564	2.555503897
94.325	0.011263278	-5.67013E-05	-0.010919218	-2.456824036	4.211950627	2.555503897
94.33	0.009606875	-4.84751E-05	-0.009266493	-2.084960858	4.211973953	2.555503897
94.335	0.008098822	-4.09898E-05	-0.007763259	-1.746733307	4.211990531	2.555503897
94.34	0.006681861	-3.39599E-05	-0.006351999	-1.429199699	4.212001815	2.555503897
94.345	0.005280945	-2.70185E-05	-0.004959018	-1.115779023	4.212008864	2.555503897
94.35	0.003372119	-1.75513E-05	-0.003059954	-0.688489725	4.212011737	2.555503897
94.355	0.000968934	-5.59888E-06	-0.000663684	-0.149328915	4.212011975	2.555503897
94.36	-0.001276968	5.59253E-06	0.00157873	0.355214306	4.212012387	2.555503897
94.365	-0.003483458	1.65994E-05	0.003782959	0.851165677	4.212015454	2.555503897
94.37	-0.005510743	2.67405E-05	0.00581277	1.307873176	4.212023129	2.555503897
94.375	-0.006586654	3.21499E-05	0.006895097	1.551396841	4.212034094	2.555503897
94.38	-0.007372848	3.60904E-05	0.007683336	1.728750634	4.212047833	2.555503897
94.385	-0.008637445	4.24159E-05	0.008948356	2.013380052	4.212066689	2.555503897
94.39	-0.009624358	4.73752E-05	0.009939896	2.236476647	4.2120901	2.555503897
94.395	-0.010279419	5.06719E-05	0.010598878	2.384747544	4.212116806	2.555503897
94.4	-0.011206407	5.53218E-05	0.011528199	2.593844752	4.212148546	2.555503897
94.405	-0.012057103	5.96057E-05	0.012384183	2.786441148	4.212185288	2.555503897
94.41	-0.012593103	6.23252E-05	0.012927505	2.908688586	4.212225369	2.555503897
94.415	-0.012869288	6.3749E-05	0.013211924	2.972682965	4.212267228	2.555503897
94.42	-0.012928545	6.40797E-05	0.01327798	2.987545475	4.212309473	2.555503897
94.425	-0.013380992	6.63591E-05	0.013733266	3.08998493	4.212354726	2.555503897
94.43	-0.014133523	7.01537E-05	0.014491113	3.260500497	4.212405213	2.555503897
94.435	-0.014287039	7.09761E-05	0.014655186	3.297416905	4.212456802	2.555503897
94.44	-0.014136666	7.02633E-05	0.014511215	3.265023404	4.212507312	2.555503897
94.445	-0.014476564	7.19833E-05	0.014856456	3.342702586	4.212560279	2.555503897
94.45	-0.015041892	7.48422E-05	0.015427275	3.471136792	4.212617464	2.555503897
94.455	-0.015284071	7.60983E-05	0.015678065	3.527564736	4.212676505	2.555503897
94.46	-0.015394948	7.66864E-05	0.015795472	3.553981211	4.212736405	2.555503897
94.465	-0.015941948	7.94405E-05	0.016345249	3.677681059	4.212800638	2.555503897
94.47	-0.016778813	8.36544E-05	0.017186302	3.86691798	4.212871792	2.555503897
94.475	-0.017446073	8.70303E-05	0.017859988	4.018497292	4.212948718	2.555503897
94.48	-0.018236374	9.10163E-05	0.018655271	4.197435906	4.213032771	2.555503897
94.485	-0.019199732	9.58783E-05	0.019625163	4.415661623	4.213125939	2.555503897
94.49	-0.019901543	9.94462E-05	0.020336763	4.575771767	4.213226042	2.555503897
94.495	-0.020566437	0.000102826	0.021010822	4.727434907	4.213332946	2.555503897
94.5	-0.021333834	0.000106726	0.021788394	4.902388673	4.213447977	2.555503897
94.505	-0.021901258	0.00010964	0.022369261	5.033083725	4.213569208	2.555503897
94.51	-0.022205797	0.000111248	0.022689819	5.105209205	4.213693834	2.555503897
94.515	-0.022095549	0.000110788	0.022596766	5.084272457	4.213817226	2.555503897
94.52	-0.021883498	0.000109803	0.022397766	5.03949739	4.21393826	2.555503897
94.525	-0.022131166	0.000111108	0.022661328	5.098798826	4.21406205	2.555503897
94.53	-0.022169677	0.00011139	0.022717217	5.111373716	4.214186271	2.555503897
94.535	-0.021718485	0.000109219	0.022278804	5.012730939	4.214305487	2.555503897
94.54	-0.021700183	0.000109193	0.022273546	5.011547923	4.214424502	2.555503897
94.545	-0.021854421	0.000110049	0.022446451	5.050451441	4.214545215	2.555503897
94.55	-0.021426695	0.000108014	0.022035471	4.957981071	4.21466125	2.555503897
94.555	-0.020778023	0.000104869	0.021400621	4.815139686	4.214770365	2.555503897
94.56	-0.020069401	0.000101429	0.020706404	4.658940848	4.214872164	2.555503897
94.565	-0.01900667	9.62297E-05	0.01965728	4.422888015	4.214963468	2.555503897
94.57	-0.017500771	8.88171E-05	0.018162303	4.086518129	4.215040876	2.555503897
94.575	-0.015817116	8.0506E-05	0.016486989	3.709572555	4.215104107	2.555503897
94.58	-0.014186523	7.24635E-05	0.014866615	3.344988357	4.215154973	2.555503897
94.585	-0.011716542	6.0248E-05	0.012406988	2.791572331	4.215189669	2.555503897
94.59	-0.008333238	4.34413E-05	0.009025691	2.030780436	4.21520722	2.555503897
94.595	-0.005473821	2.92024E-05	0.006163464	1.386779477	4.215214793	2.555503897
94.6	-0.003018854	1.69781E-05	0.003707945	0.834287707	4.215217096	2.555503897
94.605	-0.000450771	4.17449E-06	0.001137728	0.255988689	4.215217148	2.555503897
94.61	0.001560565	-5.86934E-06	-0.000877296	-0.197391513	4.215217763	2.555503897
94.615	0.003487931	-1.54837E-05	-0.002805203	-0.631170779	4.215220838	2.555503897
94.62	0.00574916	-2.67801E-05	-0.005069204	-1.140570937	4.215229192	2.555503897
94.625	0.007386189	-3.49892E-05	-0.006713649	-1.510571074	4.21524298	2.555503897
94.63	0.008464507	-4.04028E-05	-0.007797755	-1.754494827	4.215261089	2.555503897
94.635	0.009592365	-4.60564E-05	-0.008929604	-2.00916089	4.215284344	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
94.64	0.010667832	-5.14517E-05	-0.010009446	-2.252125436	4.215313107	2.555503897
94.645	0.011669531	-5.6481E-05	-0.011015805	-2.478556195	4.215347525	2.555503897
94.65	0.012472698	-6.05235E-05	-0.011824509	-2.660514613	4.215386843	2.555503897
94.655	0.013204909	-6.42063E-05	-0.01256113	-2.826254197	4.215430913	2.555503897
94.66	0.014107861	-6.87471E-05	-0.01346917	-3.030563325	4.215481217	2.555503897
94.665	0.014567606	-7.10913E-05	-0.013937883	-3.136023709	4.215534852	2.555503897
94.67	0.014640049	-7.14895E-05	-0.014017502	-3.15393785	4.215589023	2.555503897
94.675	0.01501818	-7.34036E-05	-0.014400159	-3.240035871	4.215646027	2.555503897
94.68	0.015278267	-7.47386E-05	-0.014667033	-3.300082483	4.215705024	2.555503897
94.685	0.0153128	-7.49395E-05	-0.014707205	-3.3091212	4.215764287	2.555503897
94.69	0.015633045	-7.65604E-05	-0.015031195	-3.382018845	4.215826055	2.555503897
94.695	0.01589815	-7.79165E-05	-0.015302237	-3.443003399	4.215889935	2.555503897
94.7	0.015949214	-7.82037E-05	-0.015359647	-3.455920504	4.215954227	2.555503897
94.705	0.015976067	-7.83703E-05	-0.015392942	-3.463411887	4.216018735	2.555503897
94.71	0.015733441	-7.71932E-05	-0.015155214	-3.409923136	4.216081299	2.555503897
94.715	0.015351427	-7.53089E-05	-0.014774714	-3.324310576	4.216140862	2.555503897
94.72	0.015039496	-7.3766E-05	-0.014463187	-3.254217176	4.216198028	2.555503897
94.725	0.014750574	-7.23281E-05	-0.014172924	-3.188907895	4.21625302	2.555503897
94.73	0.014784085	-7.24886E-05	-0.014205344	-3.196202313	4.216308261	2.555503897
94.735	0.015038061	-7.37545E-05	-0.014461011	-3.253727422	4.216365417	2.555503897
94.74	0.01517797	-7.44517E-05	-0.014601793	-3.285403505	4.216423641	2.555503897
94.745	0.015505363	-7.60784E-05	-0.01493026	-3.359308471	4.216484404	2.555503897
94.75	0.015932909	-7.82137E-05	-0.015361324	-3.456297892	4.216548564	2.555503897
94.755	0.016066437	-7.88842E-05	-0.015495657	-3.486522932	4.216613804	2.555503897
94.76	0.016192524	-7.9508E-05	-0.015620332	-3.514574771	4.216680073	2.555503897
94.765	0.016383308	-8.04539E-05	-0.015809356	-3.557105066	4.216747912	2.555503897
94.77	0.016432875	-8.06894E-05	-0.015856429	-3.567696526	4.216816162	2.555503897
94.775	0.016682689	-8.19128E-05	-0.01610091	-3.622704682	4.216886503	2.555503897
94.78	0.017147711	-8.42145E-05	-0.01656082	-3.726184609	4.21696082	2.555503897
94.785	0.017398266	-8.54475E-05	-0.016807181	-3.781615719	4.217037324	2.555503897
94.79	0.017686065	-8.68537E-05	-0.017088128	-3.844828799	4.217116381	2.555503897
94.795	0.018276048	-8.97683E-05	-0.017670367	-3.975832571	4.2172008	2.555503897
94.8	0.018777583	-9.22484E-05	-0.018165757	-4.087295238	4.217289916	2.555503897
94.805	0.019251176	-9.4581E-05	-0.018631632	-4.192117309	4.217383584	2.555503897
94.81	0.020033299	-9.84535E-05	-0.019404947	-4.366113119	4.217485017	2.555503897
94.815	0.020786885	-0.000102198	-0.02015256	-4.534326019	4.217594225	2.555503897
94.82	0.021352556	-0.000105008	-0.020713424	-4.660520329	4.217709458	2.555503897
94.825	0.021912026	-0.000107789	-0.021268649	-4.785445924	4.217830808	2.555503897
94.83	0.022206593	-0.000109259	-0.021561984	-4.851446376	4.217955443	2.555503897
94.835	0.022223659	-0.000109343	-0.021578722	-4.855212492	4.21808027	2.555503897
94.84	0.02208613	-0.000108658	-0.021440451	-4.824101403	4.218203556	2.555503897
94.845	0.021371598	-0.000105098	-0.02072141	-4.66231718	4.218318994	2.555503897
94.85	0.020192977	-9.9199E-05	-0.01953078	-4.394425389	4.218422051	2.555503897
94.855	0.019086713	-9.36302E-05	-0.018407207	-4.141621577	4.218514125	2.555503897
94.86	0.018433635	-9.0286E-05	-0.017732677	-3.989852418	4.218600006	2.555503897
94.865	0.019229665	-9.41461E-05	-0.018512164	-4.165236912	4.218693465	2.555503897
94.87	0.02139949	-0.0001049	-0.020682508	-4.653564376	4.218809205	2.555503897
94.875	0.023029381	-0.000113027	-0.022314034	-5.020657605	4.218943247	2.555503897
94.88	0.023272497	-0.000114253	-0.022558258	-5.075608104	4.219080134	2.555503897
94.885	0.022914255	-0.000112451	-0.02219447	-4.993755834	4.219212839	2.555503897
94.89	0.02295105	-0.000112586	-0.022221663	-4.999874155	4.21934597	2.555503897
94.895	0.024090201	-0.000118215	-0.023349027	-5.253531116	4.219492646	2.555503897
94.9	0.025456387	-0.000125023	-0.024706951	-5.559064061	4.219656429	2.555503897
94.905	0.0256627	-0.00012607	-0.024915064	-5.605889456	4.219822878	2.555503897
94.91	0.025322232	-0.000124356	-0.024568866	-5.527994905	4.219984939	2.555503897
94.915	0.025656779	-0.000125977	-0.024896401	-5.601690152	4.220151311	2.555503897
94.92	0.026820182	-0.00013174	-0.026046397	-5.860439229	4.220333113	2.555503897
94.925	0.028067771	-0.000137955	-0.02728503	-6.139131861	4.220532223	2.555503897
94.93	0.028522284	-0.000140221	-0.02773449	-6.240260197	4.220737833	2.555503897
94.935	0.029144464	-0.000143288	-0.028342575	-6.377079312	4.220952511	2.555503897
94.94	0.031029953	-0.000152666	-0.030201665	-6.795374611	4.221195865	2.555503897
94.945	0.032360093	-0.00015933	-0.031522133	-7.09247982	4.221460529	2.555503897
94.95	0.032494486	-0.000160008	-0.031656401	-7.122690261	4.221727397	2.555503897
94.955	0.033623995	-0.000165603	-0.032764976	-7.37211963	4.222013139	2.555503897
94.96	0.035988836	-0.000177386	-0.03509837	-7.897133196	4.222340488	2.555503897
94.965	0.038300339	-0.00018895	-0.037387325	-8.412148066	4.222711238	2.555503897
94.97	0.039979834	-0.000197395	-0.039058276	-8.7881122	4.223115216	2.555503897
94.975	0.0407151	-0.000201135	-0.039798053	-8.954561867	4.22353419	2.555503897
94.98	0.04137321	-0.00020446	-0.040455603	-9.102510746	4.223966818	2.555503897
94.985	0.042907758	-0.000212158	-0.041977722	-9.444987345	4.224432134	2.555503897
94.99	0.044412653	-0.000219749	-0.043478191	-9.782593021	4.224930661	2.555503897
94.995	0.045122052	-0.000223386	-0.044197031	-9.944332059	4.225445242	2.555503897
95	0.045523977	-0.000225478	-0.044610394	-10.03733867	4.225969031	2.555503897
95.005	0.046193911	-0.0002289	-0.045286611	-10.18948744	4.22650835	2.555503897
95.01	0.047182078	-0.000233928	-0.046279722	-10.41293738	4.227070989	2.555503897
95.015	0.047706452	-0.00023667	-0.046821267	-10.53478499	4.227646204	2.555503897
95.02	0.047528396	-0.000235903	-0.046666525	-10.49996808	4.228217133	2.555503897
95.025	0.047605113	-0.000236392	-0.046765203	-10.52217076	4.228789907	2.555503897
95.03	0.047853771	-0.000237757	-0.047035829	-10.58306146	4.22936868	2.555503897
95.035	0.047461029	-0.000235936	-0.046668167	-10.50033759	4.229937992	2.555503897
95.04	0.046833396	-0.00023293	-0.046061116	-10.36375104	4.230492346	2.555503897
95.045	0.04637703	-0.000230776	-0.045626408	-10.26594191	4.231035949	2.555503897
95.05	0.045657654	-0.000227323	-0.0449294	-10.10911509	4.231562818	2.555503897
95.055	0.044508726	-0.000221723	-0.043799621	-9.854914802	4.232063505	2.555503897
95.06	0.043222742	-0.000215425	-0.042529436	-9.569123093	4.232535677	2.555503897
95.065	0.042132527	-0.000210096	-0.041455087	-9.327394559	4.232984331	2.555503897
95.07	0.041096361	-0.000205041	-0.040436215	-9.098148486	4.233411188	2.555503897
95.075	0.039849575	-0.000198935	-0.039206195	-8.821393765	4.233812538	2.555503897
95.08	0.038411084	-0.000191873	-0.037783921	-8.501382253	4.234185435	2.555503897
95.085	0.036685111	-0.000183365	-0.03607119	-8.11601768	4.234525574	2.555503897
95.09	0.035284491	-0.000176453	-0.034680431	-7.803096961	4.234840235	2.555503897
95.095	0.034656322	-0.000173401	-0.034066523	-7.664967644	4.235143793	2.555503897
95.1	0.03385029	-0.000169493	-0.033280614	-7.488138131	4.235433394	2.555503897
95.105	0.032339157	-0.000162071	-0.031788371	-7.15238347	4.235697716	2.555503897
95.11	0.030726607	-0.000154126	-0.030191675	-6.793126965	4.235936335	2.555503897
95.115	0.029501918	-0.000148113	-0.028983744	-6.521342511	4.236156312	2.555503897
95.12	0.028264075	-0.000142066	-0.027769406	-6.248116355	4.236358216	2.555503897
95.125	0.025646735	-0.00012917	-0.025180653	-5.665646971	4.236524458	2.555503897
95.13	0.021602547	-0.000109114	-0.021158333	-4.760624934	4.236642404	2.555503897
95.135	0.017399616	-8.8199E-05	-0.016967826	-3.817760907	4.236718921	2.555503897
95.14	0.012544845	-6.39728E-05	-0.012119326	-2.726848335	4.236758695	2.555503897
95.145	0.007660992	-3.9479E-05	-0.007222972	-1.625168728	4.236773529	2.555503897
95.15	0.005621542	-2.91587E-05	-0.005161629	-1.161366447	4.236781516	2.555503897
95.155	0.005509857	-2.85642E-05	-0.005042912	-1.134655253	4.236789189	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
95.16	0.0043533	-2.28065E-05	-0.003893351	-0.876003968	4.236793979	2.555503897
95.165	0.001917787	-1.06535E-05	-0.001467904	-0.330278411	4.236794908	2.555503897
95.17	-0.001960225	8.76719E-06	0.002405166	0.541162344	4.236795879	2.555503897
95.175	-0.006137251	2.98165E-05	0.006599193	1.484818417	4.236805399	2.555503897
95.18	-0.007488143	3.67306E-05	0.007975945	1.794587721	4.236819571	2.555503897
95.185	-0.007502039	3.68402E-05	0.007997754	1.799494659	4.236833795	2.555503897
95.19	-0.009648511	4.76129E-05	0.010141991	2.281947978	4.236857324	2.555503897
95.195	-0.012483052	6.19126E-05	0.01298665	2.921996303	4.236896708	2.555503897
95.2	-0.013785317	6.85565E-05	0.01430772	3.219236914	4.236944737	2.555503897
95.205	-0.013942948	6.94257E-05	0.014480528	3.258118817	4.236993872	2.555503897
95.21	-0.014136915	7.04259E-05	0.014679365	3.302857137	4.237044383	2.555503897
95.215	-0.015773768	7.86516E-05	0.016314294	3.670716124	4.237107268	2.555503897
95.22	-0.017934195	8.95672E-05	0.018482965	4.158667169	4.237188558	2.555503897
95.225	-0.018306296	9.15281E-05	0.0188717	4.246132407	4.237273257	2.555503897
95.23	-0.018362702	9.18382E-05	0.01893404	4.260158895	4.237358478	2.555503897
95.235	-0.020056217	0.000100367	0.020627596	4.64120907	4.237460144	2.555503897
95.24	-0.021366362	0.000107035	0.021951208	4.93902188	4.237575526	2.555503897
95.245	-0.021183063	0.000106196	0.021781482	4.900833534	4.237688936	2.555503897
95.25	-0.02121319	0.000106388	0.021820373	4.909584026	4.23780267	2.555503897
95.255	-0.021707601	0.000108921	0.022325628	5.023266304	4.237921766	2.555503897
95.26	-0.021769682	0.000109294	0.022399082	5.039793457	4.238041545	2.555503897
95.265	-0.021665044	0.000108817	0.022302832	5.018137295	4.238160175	2.555503897
95.27	-0.021651146	0.000108793	0.022298038	5.017058605	4.238278653	2.555503897
95.275	-0.021631631	0.00010874	0.022287358	5.014655574	4.238396918	2.555503897
95.28	-0.021722207	0.000109249	0.022389997	5.037749234	4.238516175	2.555503897
95.285	-0.021227943	0.00010684	0.0219036	4.9283099	4.238630066	2.555503897
95.29	-0.019869579	0.000100069	0.02053663	4.620741684	4.238729849	2.555503897
95.295	-0.019087192	9.61526E-05	0.019746451	4.442951477	4.238821927	2.555503897
95.3	-0.018720353	9.4344E-05	0.019381572	4.360853603	4.238910501	2.555503897
95.305	-0.017509466	8.82928E-05	0.018161086	4.086244325	4.238987987	2.555503897
95.31	-0.016972449	8.5585E-05	0.017615098	3.963397077	4.239060792	2.555503897
95.315	-0.017160793	8.65552E-05	0.017811037	4.007483255	4.239135223	2.555503897
95.32	-0.015864138	8.00772E-05	0.016504825	3.713585665	4.23919883	2.555503897
95.325	-0.015109326	7.6245E-05	0.015732539	3.539821286	4.239256529	2.555503897
95.33	-0.016351815	8.24694E-05	0.016989349	3.82260349	4.239324107	2.555503897
95.335	-0.016385876	8.26899E-05	0.01703372	3.832586975	4.239391968	2.555503897
95.34	-0.015579348	7.86353E-05	0.016215045	3.648385042	4.239453312	2.555503897
95.345	-0.016406244	8.27617E-05	0.017048301	3.83586776	4.239521341	2.555503897
95.35	-0.0172348	8.69428E-05	0.017892212	4.025747663	4.239596415	2.555503897
95.355	-0.017505046	8.83064E-05	0.018167364	4.08765695	4.239673861	2.555503897
95.36	-0.018772898	9.46666E-05	0.019450435	4.376347805	4.239762933	2.555503897
95.365	-0.020430249	0.000103016	0.02113394	4.755136556	4.239868426	2.555503897
95.37	-0.021641593	0.000109147	0.022369603	5.033160712	4.239986799	2.555503897
95.375	-0.022594705	0.000113983	0.023329999	5.249249696	4.240115829	2.555503897
95.38	-0.023784182	0.000120001	0.024523995	5.517898787	4.240258801	2.555503897
95.385	-0.025302643	0.000127693	0.026049683	5.861178592	4.240420612	2.555503897
95.39	-0.026184216	0.000132216	0.026946358	6.06293066	4.240593895	2.555503897
95.395	-0.026478191	0.000133774	0.027255373	6.132458813	4.24077109	2.555503897
95.4	-0.026944488	0.00013619	0.027734353	6.240229513	4.240954582	2.555503897
95.405	-0.027132893	0.000137204	0.027935374	6.285459123	4.241140648	2.555503897
95.41	-0.028018171	0.000141675	0.028821457	6.484827896	4.241339054	2.555503897
95.415	-0.031058317	0.000156993	0.03185623	7.167651656	4.241582853	2.555503897
95.42	-0.033990885	0.000171889	0.034805635	7.83126791	4.241874865	2.555503897
95.425	-0.03394061	0.00017186	0.034791537	7.82809591	4.242166014	2.555503897
95.43	-0.032175046	0.000163141	0.033031661	7.432123674	4.242427661	2.555503897
95.435	-0.032009576	0.000162393	0.032880842	7.398189465	4.242686622	2.555503897
95.44	-0.033248096	0.000168755	0.034165296	7.687191687	4.242966011	2.555503897
95.445	-0.032569954	0.000165567	0.03352146	7.54232856	4.24323412	2.555503897
95.45	-0.030095753	0.000153308	0.031048035	6.985807987	4.243463041	2.555503897
95.455	-0.028918905	0.000147512	0.029879454	6.722877234	4.243674409	2.555503897
95.46	-0.02824905	0.000144334	0.029238877	6.578747344	4.243876099	2.555503897
95.465	-0.02518377	0.00012917	0.026183994	5.891398761	4.244036393	2.555503897
95.47	-0.020833613	0.000107705	0.021864385	4.919486557	4.244146093	2.555503897
95.475	-0.016362787	8.56081E-05	0.017423109	3.920199584	4.244213762	2.555503897
95.48	-0.009340379	5.07488E-05	0.010427067	2.346090058	4.244235812	2.555503897
95.485	-0.000946385	8.80464E-06	0.002025365	0.455707052	4.244236038	2.555503897
95.49	0.003789988	-1.50511E-05	-0.002745474	-0.617731549	4.244239668	2.555503897
95.495	0.004643894	-1.94441E-05	-0.003623434	-0.815272584	4.244245119	2.555503897
95.5	0.00523202	-2.24121E-05	-0.004216487	-0.948709589	4.244252037	2.555503897
95.505	0.006979502	-3.11442E-05	-0.005960841	-1.341189334	4.244264349	2.555503897
95.51	0.009960233	-4.60592E-05	-0.008938691	-2.011205475	4.244289423	2.555503897
95.515	0.012914629	-6.09151E-05	-0.011902682	-2.678103521	4.244331577	2.555503897
95.52	0.013513566	-6.40054E-05	-0.012518998	-2.816774555	4.244377732	2.555503897
95.525	0.014054661	-6.67056E-05	-0.013057438	-2.937923619	4.244427656	2.555503897
95.53	0.017578395	-8.43747E-05	-0.016579161	-3.730311135	4.244505753	2.555503897
95.535	0.020191028	-9.76229E-05	-0.019217893	-4.324025867	4.24460879	2.555503897
95.54	0.020043292	-9.6974E-05	-0.019086495	-4.294461453	4.244710325	2.555503897
95.545	0.021663267	-0.000105129	-0.020712278	-4.660262568	4.244828936	2.555503897
95.55	0.024053788	-0.00011725	-0.023124268	-5.20296025	4.244975168	2.555503897
95.555	0.02344862	-0.000114342	-0.022536878	-5.070797655	4.245114134	2.555503897
95.56	0.02339891	-0.000114112	-0.022490508	-5.060364243	4.245252512	2.555503897
95.565	0.025893098	-0.000126693	-0.025002437	-5.625548331	4.245421963	2.555503897
95.57	0.026946589	-0.000132128	-0.026083294	-5.868741073	4.245605483	2.555503897
95.575	0.026371226	-0.000129345	-0.02552116	-5.742261061	4.24578125	2.555503897
95.58	0.026722424	-0.00013118	-0.025891728	-5.825638834	4.245961729	2.555503897
95.585	0.027284919	-0.000134109	-0.026477031	-5.957332023	4.246149887	2.555503897
95.59	0.026988569	-0.000132731	-0.026198795	-5.894728968	4.246333979	2.555503897
95.595	0.026528685	-0.000130506	-0.025749509	-5.793639604	4.246511851	2.555503897
95.6	0.026688014	-0.000131386	-0.025927279	-5.833637789	4.246691866	2.555503897
95.605	0.026821795	-0.000132172	-0.026085969	-5.869343047	4.24687369	2.555503897
95.61	0.025680439	-0.000126558	-0.024952369	-5.614283112	4.247040369	2.555503897
95.615	0.024572341	-0.000121056	-0.02384217	-5.364488313	4.247192974	2.555503897
95.62	0.024810058	-0.000122323	-0.024098007	-5.422051649	4.247348546	2.555503897
95.625	0.024210377	-0.000119434	-0.023514816	-5.290833649	4.247496688	2.555503897
95.63	0.022554643	-0.0001112	-0.021854201	-4.917195296	4.247625261	2.555503897
95.635	0.022217539	-0.000109563	-0.021524231	-4.842952056	4.247750019	2.555503897
95.64	0.021787226	-0.000107509	-0.021110104	-4.749773382	4.247869991	2.555503897
95.645	0.020156631	-9.94045E-05	-0.019476803	-4.382280656	4.247972677	2.555503897
95.65	0.019643231	-9.68778E-05	-0.018967758	-4.267745506	4.248070199	2.555503897
95.655	0.019332116	-9.54156E-05	-0.018673222	-4.201474898	4.248164656	2.555503897
95.66	0.017816619	-8.78954E-05	-0.017158752	-3.860719174	4.248244884	2.555503897
95.665	0.01712109	-8.44627E-05	-0.016467668	-3.705225272	4.24831897	2.555503897
95.67	0.016524384	-8.1566E-05	-0.015884597	-3.574034422	4.248387983	2.555503897
95.675	0.014900952	-7.34979E-05	-0.014261104	-3.208748502	4.248444101	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
95.68	0.014102926	-6.95509E-05	-0.013467141	-3.030106732	4.248494369	2.555503897
95.685	0.013042229	-6.4319E-05	-0.012414983	-2.793371219	4.24853736	2.555503897
95.69	0.011259279	-5.54153E-05	-0.010625102	-2.390647887	4.248569401	2.555503897
95.695	0.011384345	-5.60706E-05	-0.010758363	-2.420631672	4.248602157	2.555503897
95.7	0.011402924	-5.62673E-05	-0.010798041	-2.429559298	4.24863502	2.555503897
95.705	0.009883211	-4.87138E-05	-0.009278474	-2.087656746	4.248659707	2.555503897
95.71	0.009847507	-4.85701E-05	-0.009250935	-2.081460442	4.248684216	2.555503897
95.715	0.010270861	-5.0791E-05	-0.009699394	-2.182363661	4.248710878	2.555503897
95.72	0.009673077	-4.78884E-05	-0.009113218	-2.050474026	4.248734527	2.555503897
95.725	0.009627404	-4.77521E-05	-0.009085721	-2.044287185	4.248757952	2.555503897
95.73	0.008986308	-4.46596E-05	-0.008464047	-1.904410649	4.248778362	2.555503897
95.735	0.007779078	-3.86945E-05	-0.007266077	-1.634867311	4.248793657	2.555503897
95.74	0.007472582	-3.72604E-05	-0.006978106	-1.570073882	4.24880777	2.555503897
95.745	0.006003153	-3.00211E-05	-0.005524842	-1.243089387	4.248816878	2.555503897
95.75	0.0040633	-2.03604E-05	-0.00358632	-0.806922041	4.248821051	2.555503897
95.755	0.003850843	-1.93802E-05	-0.003389876	-0.762722207	4.248824799	2.555503897
95.76	0.002577132	-1.31425E-05	-0.002138599	-0.481184877	4.248826477	2.555503897
95.765	-0.000321099	1.29198E-06	0.000754999	0.169874808	4.248826503	2.555503897
95.77	-0.00234096	1.13508E-05	0.002770213	0.623297921	4.248827888	2.555503897
95.775	-0.00450346	2.20963E-05	0.004921891	1.107425405	4.248833014	2.555503897
95.78	-0.007592178	3.7509E-05	0.008006165	1.801387171	4.248847582	2.555503897
95.785	-0.010571467	5.23997E-05	0.010983836	2.471363047	4.248875828	2.555503897
95.79	-0.013453464	6.68153E-05	0.013864487	3.119509606	4.248921573	2.555503897
95.795	-0.015991319	7.95154E-05	0.016400723	3.690162786	4.248986204	2.555503897
95.8	-0.018402739	9.15675E-05	0.018806169	4.231388071	4.249071798	2.555503897
95.805	-0.021335218	0.000106238	0.021732468	4.88980539	4.249186843	2.555503897
95.81	-0.024255384	0.000120858	0.024646694	5.545506178	4.249335537	2.555503897
95.815	-0.027706888	0.000138136	0.028088223	6.319850131	4.249529559	2.555503897
95.82	-0.032210899	0.000160767	0.032592113	7.333225494	4.249791789	2.555503897
95.825	-0.036127496	0.000180523	0.036514287	8.215714512	4.250121666	2.555503897
95.83	-0.038934413	0.000194707	0.039319781	8.846950711	4.250504793	2.555503897
95.835	-0.04160311	0.00020819	0.041985317	9.446696385	4.250942242	2.555503897
95.84	-0.044201365	0.000221331	0.044581537	10.03084582	4.251436038	2.555503897
95.845	-0.046664102	0.0002338	0.047043986	10.58489689	4.251986391	2.555503897
95.85	-0.048829849	0.000244799	0.049214836	11.07333813	4.252589016	2.555503897
95.855	-0.050168443	0.000251646	0.050557349	11.37540344	4.253225133	2.555503897
95.86	-0.051021786	0.000256035	0.05141636	11.5686811	4.253883074	2.555503897
95.865	-0.051915152	0.000260616	0.052312509	11.77031463	4.254564258	2.555503897
95.87	-0.05288259	0.000265565	0.05328082	11.98818439	4.255271066	2.555503897
95.875	-0.05412253	0.000271887	0.054517297	12.26639191	4.256011407	2.555503897
95.88	-0.055512342	0.000278983	0.055904714	12.57856073	4.256790259	2.555503897
95.885	-0.05643418	0.000283749	0.056836363	12.78818169	4.257595193	2.555503897
95.89	-0.056480064	0.000284109	0.056904517	12.80351635	4.258401437	2.555503897
95.895	-0.056203749	0.000282817	0.056643612	12.74481261	4.259199811	2.555503897
95.9	-0.056592626	0.000284856	0.057052831	12.83688691	4.260009272	2.555503897
95.905	-0.057171623	0.000287875	0.057642883	12.96964872	4.26083538	2.555503897
95.91	-0.057284442	0.00028855	0.057774874	12.99934675	4.261664752	2.555503897
95.915	-0.057698438	0.000290734	0.058201638	13.09536855	4.262506155	2.555503897
95.92	-0.058004189	0.000292403	0.058527856	13.16876768	4.263356499	2.555503897
95.925	-0.057220141	0.000288589	0.05775756	12.99545102	4.26418401	2.555503897
95.93	-0.056420532	0.000284658	0.056963982	12.81689589	4.264988555	2.555503897
95.935	-0.056168939	0.000283482	0.056726663	12.7634992	4.26578594	2.555503897
95.94	-0.055793391	0.000281691	0.05636528	12.68218799	4.266572699	2.555503897
95.945	-0.055301969	0.000279319	0.055886564	12.57447689	4.267345659	2.555503897
95.95	-0.054277595	0.000274264	0.054866789	12.34502749	4.268090249	2.555503897
95.955	-0.053109732	0.00026844	0.053692555	12.08082488	4.268803141	2.555503897
95.96	-0.053550767	0.000270689	0.054146614	12.18298809	4.269527923	2.555503897
95.965	-0.054741923	0.000276765	0.055373248	12.45898072	4.270285307	2.555503897
95.97	-0.055109036	0.000278717	0.055767207	12.5476216	4.271052883	2.555503897
95.975	-0.055856854	0.000282571	0.056544792	12.72257813	4.271841433	2.555503897
95.98	-0.05716124	0.000289268	0.057895593	13.0265084	4.272667241	2.555503897
95.985	-0.057458623	0.00029094	0.058232894	13.10240112	4.273501664	2.555503897
95.99	-0.056949801	0.000288556	0.057751417	12.9940688	4.274321374	2.555503897
95.995	-0.055842409	0.00028317	0.056663978	12.74939499	4.275109516	2.555503897
96	-0.053408789	0.000271092	0.054227273	12.2011364	4.275830459	2.555503897
96.005	-0.051115774	0.000259654	0.051921561	11.68235124	4.276490827	2.555503897
96.01	-0.050384798	0.000256067	0.051198768	11.51972291	4.277132443	2.555503897
96.015	-0.049789793	0.000253207	0.050622667	11.39010018	4.277758994	2.555503897
96.02	-0.048363242	0.000246174	0.049206324	11.07142284	4.278350156	2.555503897
96.025	-0.046448913	0.000236672	0.047293744	10.64109249	4.278895446	2.555503897
96.03	-0.044514692	0.000227043	0.045356492	10.20521059	4.279396267	2.555503897
96.035	-0.043375511	0.000221398	0.044221324	9.949797792	4.279871783	2.555503897
96.04	-0.042593067	0.000217577	0.043453202	9.776970524	4.280330298	2.555503897
96.045	-0.041079904	0.000210091	0.04194865	9.438446169	4.280756813	2.555503897
96.05	-0.039616048	0.000202833	0.040490636	9.110393113	4.281153473	2.555503897
96.055	-0.038299794	0.000196337	0.039185963	8.816841588	4.281524213	2.555503897
96.06	-0.036067813	0.000185231	0.036956706	8.31525875	4.281853	2.555503897
96.065	-0.034210132	0.000175973	0.035099166	7.897312327	4.282148792	2.555503897
96.07	-0.032839487	0.000169198	0.033740506	7.591613814	4.282421356	2.555503897
96.075	-0.029815251	0.00015411	0.030716307	6.9111691	4.28264603	2.555503897
96.08	-0.027103855	0.000140518	0.027993866	6.298619913	4.282831698	2.555503897
96.085	-0.026197445	0.000136035	0.027096316	6.09667112	4.283005156	2.555503897
96.09	-0.02366312	0.000123421	0.024571922	5.528682417	4.283146677	2.555503897
96.095	-0.020031346	0.000105215	0.020931101	4.709497752	4.28324809	2.555503897
96.1	-0.017879943	9.44351E-05	0.01877686	4.224793554	4.28332889	2.555503897
96.105	-0.015107462	8.05641E-05	0.01600649	3.601460328	4.283386574	2.555503897
96.11	-0.011915041	6.45318E-05	0.012806677	2.881502313	4.283422455	2.555503897
96.115	-0.009779752	5.38177E-05	0.010669599	2.400659664	4.283446628	2.555503897
96.12	-0.006682107	3.82773E-05	0.007571711	1.703634998	4.283457913	2.555503897
96.125	-0.003868763	2.41077E-05	0.004748987	1.068522171	4.283461696	2.555503897
96.13	-0.002393947	1.67067E-05	0.00327535	0.736953706	4.283463145	2.555503897
96.135	0.001081554	-7.18423E-07	-0.000192306	-0.04326888	4.28346344	2.555503897
96.14	0.005031937	-2.06312E-05	-0.004151743	-0.934142144	4.28346984	2.555503897
96.145	0.007004055	-3.05987E-05	-0.006132386	-1.379786847	4.283482239	2.555503897
96.15	0.009880706	-4.50729E-05	-0.009007015	-2.026578424	4.283506913	2.555503897
96.155	0.013326839	-6.24666E-05	-0.012459084	-2.803293845	4.283551801	2.555503897
96.16	0.015658524	-7.42647E-05	-0.014799143	-3.329807152	4.283613771	2.555503897
96.165	0.018493084	-8.85829E-05	-0.01763747	-3.968430769	4.283700207	2.555503897
96.17	0.021008546	-0.000101331	-0.020163136	-4.536705642	4.283811756	2.555503897
96.175	0.022979528	-0.000111315	-0.022140157	-4.981535305	4.283945218	2.555503897
96.18	0.026207255	-0.000127628	-0.025368794	-5.707978714	4.284118806	2.555503897
96.185	0.028765626	-0.000140635	-0.02794142	-6.286819471	4.28432794	2.555503897
96.19	0.03038348	-0.000148878	-0.029571098	-6.653497112	4.284561259	2.555503897
96.195	0.033474682	-0.00016453	-0.032664089	-7.349419973	4.284844469	2.555503897

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
96.2	0.036126925	-0.000178053	-0.035334739	-7.950316243	4.285174336	2.555503897
96.205	0.037028357	-0.000182766	-0.036265065	-8.159639565	4.285520869	2.555503897
96.21	0.038110538	-0.000188359	-0.037368983	-8.408021151	4.285887953	2.555503897
96.215	0.03912698	-0.000193639	-0.038410923	-8.642457731	4.28627488	2.555503897
96.22	0.039551743	-0.000195942	-0.038865242	-8.744679396	4.286670253	2.55589123
96.225	0.039750022	-0.000197104	-0.039094531	-8.796269538	4.2870696	2.556352451
96.23	0.039290876	-0.000194946	-0.038658745	-8.698217643	4.287459775	2.556770291
96.235	0.039089987	-0.00019405	-0.038477792	-8.657503224	4.28784597	2.557144814
96.24	0.039690167	-0.000197197	-0.039112899	-8.800402267	4.288244116	2.557476028
96.245	0.039698258	-0.000197394	-0.03914893	-8.808509245	4.288642424	2.557763774
96.25	0.03903711	-0.000194207	-0.038505489	-8.663735133	4.289027575	2.558008042
96.255	0.038393559	-0.000191094	-0.037876916	-8.522306161	4.289400132	2.558209017
96.26	0.03780753	-0.000188264	-0.037305717	-8.393786396	4.289761402	2.558366918
96.265	0.037247958	-0.000185575	-0.03676311	-8.271699818	4.290112058	2.558481956
96.27	0.035928086	-0.000179067	-0.035450324	-7.976323007	4.290438303	2.558554374
96.275	0.034175544	-0.000170339	-0.033690621	-7.580389762	4.290733497	2.55858463
96.28	0.033617767	-0.000167607	-0.033139861	-7.45646868	4.291019133	2.55858463
96.285	0.032963924	-0.000164442	-0.032502181	-7.312990827	4.291293767	2.55858463
96.29	0.030797674	-0.000153661	-0.030330599	-6.824384828	4.291533491	2.55858463
96.295	0.028852368	-0.000143952	-0.02837596	-6.384590931	4.291743888	2.55858463
96.3	0.027010566	-0.000134781	-0.026530815	-5.969433273	4.29192828	2.55858463
96.305	0.023984758	-0.00011964	-0.02348646	-5.284453554	4.292073674	2.55858463
96.31	0.021169601	-0.000105505	-0.020646579	-4.645480266	4.292186941	2.55858463
96.315	0.019140957	-9.53235E-05	-0.018602444	-4.185549829	4.292279539	2.55858463
96.32	0.016831572	-8.37336E-05	-0.016276752	-3.662269128	4.292351141	2.55858463
96.325	0.014470475	-7.1861E-05	-0.013895751	-3.126543965	4.292404064	2.55858463
96.33	0.012371676	-6.12966E-05	-0.011778298	-2.650117007	4.292442748	2.55858463
96.335	0.010516107	-5.1938E-05	-0.009903473	-2.228281366	4.292470698	2.55858463
96.34	0.009394377	-4.62662E-05	-0.008767634	-1.972717666	4.292493003	2.55858463
96.345	0.008365981	-4.10932E-05	-0.00773197	-1.73969316	4.292510693	2.558650209
96.35	0.006603797	-3.22263E-05	-0.005957364	-1.340406998	4.292521715	2.558906814
96.355	0.004931739	-2.37824E-05	-0.00426813	-0.960329297	4.292527862	2.559131621
96.36	0.003599719	-1.70467E-05	-0.002921097	-0.657246926	4.292531137	2.559325139
96.365	0.002208174	-9.99746E-06	-0.001511844	-0.340164934	4.292532369	2.559487805
96.37	0.001630087	-7.01911E-06	-0.000916565	-0.206227104	4.292533041	2.559620031
96.375	0.001692755	-7.29316E-06	-0.000971915	-0.218680793	4.292533765	2.559722018
96.38	0.001048069	-4.02341E-06	-0.000317902	-0.071527919	4.292534043	2.55979382
96.385	0.00047601	-1.08607E-06	0.000269019	0.060529182	4.2925341	2.559835639
96.39	0.000778395	-2.55037E-06	-2.67125E-05	-0.006010307	4.292534253	2.559847661
96.395	0.000958805	-3.41789E-06	-0.000201896	-0.045426643	4.292534486	2.559847661
96.4	0.001348712	-5.32281E-06	-0.000586522	-0.13196748	4.292534945	2.559847661
96.405	0.002618586	-1.16656E-05	-0.001866778	-0.420025142	4.292536678	2.559847661
96.41	0.003812509	-1.76559E-05	-0.003075368	-0.691957814	4.292540352	2.559847661
96.415	0.004913702	-2.31825E-05	-0.004189941	-0.942736723	4.292546454	2.559847661
96.42	0.006366555	-3.04936E-05	-0.005663808	-1.274356775	4.292556699	2.559847661
96.425	0.007484203	-3.6142E-05	-0.006802023	-1.530455088	4.292570856	2.559847661
96.43	0.008291924	-4.02334E-05	-0.00762624	-1.715904037	4.292588233	2.559847661
96.435	0.009138354	-4.45286E-05	-0.008491298	-1.910542107	4.292609339	2.559847661
96.44	0.009704271	-4.74246E-05	-0.00907443	-2.041746788	4.292633141	2.559847661
96.445	0.010130765	-4.96254E-05	-0.009517529	-2.141443998	4.29265908	2.559847661
96.45	0.010222137	-5.01625E-05	-0.009625488	-2.16573487	4.29268549	2.559847661
96.455	0.009266169	-4.54347E-05	-0.008670842	-1.95093935	4.29270719	2.559847661
96.46	0.007916956	-3.86924E-05	-0.007310034	-1.644757568	4.292723032	2.559847661
96.465	0.007252936	-3.53813E-05	-0.006641986	-1.494446904	4.292736327	2.559847661
96.47	0.006812737	-3.32254E-05	-0.006207104	-1.396598342	4.292748058	2.559847661
96.475	0.005613169	-2.72718E-05	-0.00500647	-1.126455761	4.292756021	2.559847661
96.48	0.003467715	-1.65541E-05	-0.002846222	-0.640399879	4.29275906	2.559847661
96.485	0.000592806	-2.14077E-06	5.66922E-05	0.012755747	4.292759149	2.559847661
96.49	-0.00230148	1.24177E-05	0.002966208	0.667396828	4.292760488	2.559847661
96.495	-0.004160031	2.17908E-05	0.00483736	1.088406094	4.292764862	2.559847661
96.5	-0.005703146	2.95501E-05	0.006385724	1.436787857	4.292773082	2.559847661
96.505	-0.008102956	4.16295E-05	0.008795095	1.978896405	4.292789677	2.559847661
96.51	-0.009717499	4.98144E-05	0.010426898	2.346051946	4.292813543	2.559847661
96.515	-0.009557864	4.90463E-05	0.01027133	2.311049266	4.292836632	2.559847661
96.52	-0.010138378	5.19307E-05	0.010848711	2.440959864	4.29286261	2.559847661
96.525	-0.012277549	6.26798E-05	0.012990611	2.92288748	4.292900708	2.559847661
96.53	-0.01372532	7.00083E-05	0.014450333	3.251324961	4.29294832	2.559847661
96.535	-0.013854802	7.06935E-05	0.014586439	3.281948849	4.292996835	2.559847661
96.54	-0.014068584	7.17599E-05	0.014799134	3.329805157	4.293046859	2.559847661
96.545	-0.015188799	7.73857E-05	0.015919287	3.581839613	4.293105166	2.559847661
96.55	-0.016112494	8.20718E-05	0.016852121	3.791727269	4.293170781	2.559847661
96.555	-0.015270623	7.7878E-05	0.016005247	3.601180589	4.293229718	2.559847661
96.56	-0.014158935	7.2247E-05	0.014868625	3.345440686	4.293280387	2.559847661
96.565	-0.014967902	7.62601E-05	0.015679002	3.527775448	4.29333701	2.559847661
96.57	-0.015983079	8.13795E-05	0.016712401	3.760290122	4.293401575	2.559847661
96.575	-0.015407562	7.85053E-05	0.016131961	3.629691202	4.293461574	2.559847661
96.58	-0.01464379	7.46382E-05	0.015351263	3.454034085	4.293515772	2.559847661
96.585	-0.014602097	7.43978E-05	0.015302746	3.443117939	4.293569662	2.559847661
96.59	-0.014680852	7.47809E-05	0.015380132	3.460529717	4.293624135	2.559847661
96.595	-0.014330988	7.30242E-05	0.01502548	3.380732977	4.293676042	2.559847661
96.6	-0.013119962	6.69257E-05	0.01379494	3.103861506	4.293719547	2.559847661
96.605	-0.012024369	6.13574E-05	0.012671845	2.851165194	4.29375609	2.559847661
96.61	-0.012367947	6.30277E-05	0.013009163	2.927061618	4.293794751	2.559847661
96.615	-0.012430465	6.33415E-05	0.013072512	2.941315176	4.293833803	2.559847661
96.62	-0.010952776	5.58789E-05	0.011567249	2.602630944	4.293864123	2.559847661
96.625	-0.01075872	5.48044E-05	0.011351113	2.554000333	4.293893378	2.559847661
96.63	-0.012206767	6.20456E-05	0.012813026	2.882930788	4.293931038	2.559847661
96.635	-0.011952963	6.07728E-05	0.012555883	2.825073702	4.293967148	2.559847661
96.64	-0.01133113	5.75722E-05	0.011909666	2.679674746	4.293999598	2.559847661
96.645	-0.012816983	6.49764E-05	0.013404489	3.016010104	4.294041117	2.559847661
96.65	-0.01357691	6.87912E-05	0.014174156	3.189185106	4.294087706	2.559847661
96.655	-0.013688631	6.92885E-05	0.014274474	3.21175667	4.294135064	2.559847661
96.66	-0.016100547	8.13553E-05	0.016707703	3.759233159	4.294200581	2.559847661
96.665	-0.017857205	9.02169E-05	0.018473041	4.156434288	4.294281175	2.559847661
96.67	-0.018055539	9.11873E-05	0.018666111	4.199874939	4.29436357	2.559847661
96.675	-0.020617653	0.000104021	0.021218808	4.774231696	4.294471007	2.559847661
96.68	-0.022814397	0.000115119	0.023424999	5.270624706	4.294602558	2.559847661
96.685	-0.022770651	0.000114889	0.023378596	5.260184143	4.294733605	2.559847661
96.69	-0.025591529	0.000128984	0.026179999	5.890499782	4.294899131	2.559847661
96.695	-0.030672217	0.000154602	0.031265685	7.034779128	4.295136906	2.559847661
96.7	-0.034210052	0.000172546	0.034824687	7.835554547	4.295432696	2.559847661
96.705	-0.036567052	0.000184548	0.037203573	8.370803943	4.295770649	2.559847661
96.71	-0.037734281	0.000190536	0.038389924	8.637732966	4.296130521	2.559847661
96.715	-0.039673731	0.000200355	0.040334753	9.075319514	4.296528337	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
96.72	-0.043817429	0.000221402	0.044500786	10.0126769	4.297013591	2.559847661
96.725	-0.045583278	0.000230537	0.046307872	10.41927115	4.297538746	2.559847661
96.73	-0.045541978	0.000230445	0.04628929	10.41509035	4.298062949	2.559847661
96.735	-0.048377402	0.000244878	0.049143302	11.05724301	4.298654458	2.559847661
96.74	-0.050463398	0.000255651	0.051272261	11.53625879	4.299298077	2.559847661
96.745	-0.049756356	0.000252269	0.050589286	11.38258938	4.299923787	2.559847661
96.75	-0.050627076	0.000256808	0.051500748	11.58766837	4.300571588	2.559847661
96.755	-0.05165604	0.000262236	0.052572932	11.8289097	4.301245988	2.559847661
96.76	-0.050117112	0.000254678	0.051046968	11.48556783	4.301880805	2.559847661
96.765	-0.049062734	0.000249499	0.050001793	11.25040349	4.302489191	2.559847661
96.77	-0.04893829	0.000249064	0.049914115	11.23067578	4.303094495	2.559847661
96.775	-0.047044446	0.000239716	0.048028535	10.8064204	4.303653856	2.559847661
96.78	-0.044403654	0.000226531	0.045371101	10.20849778	4.304152182	2.559847661
96.785	-0.042865606	0.000218911	0.043836394	9.86318865	4.304616584	2.559847661
96.79	-0.040618851	0.000207754	0.041590394	9.357838582	4.305033579	2.559847661
96.795	-0.036936089	0.000189297	0.037877877	8.522522234	4.305378388	2.559847661
96.8	-0.034191189	0.000175536	0.035112309	7.900269477	4.305673851	2.559847661
96.805	-0.031601869	0.000162604	0.032515145	7.315907647	4.305926259	2.559847661
96.81	-0.027411639	0.000141716	0.028324059	6.372913342	4.306116168	2.559847661
96.815	-0.023484452	0.000122217	0.024415548	5.493498274	4.306255559	2.559847661
96.82	-0.019209153	0.000100994	0.020165961	4.537341156	4.306348819	2.559847661
96.825	-0.012534106	6.7687E-05	0.013505197	3.038669272	4.306388525	2.559847661
96.83	-0.005842299	3.41145E-05	0.006801953	1.530439316	4.306397152	2.559847661
96.835	-0.000917142	9.28971E-06	0.001851977	0.416694873	4.306397365	2.559847661
96.84	0.00219471	-6.49415E-06	-0.001292377	-0.290784884	4.306398582	2.559847661
96.845	0.002205142	-6.71958E-06	-0.001331711	-0.299634953	4.306399811	2.559847661
96.85	0.000510733	1.72686E-06	0.00037333	0.083999311	4.306399877	2.559847661
96.855	0.000903012	-1.93804E-07	-1.47125E-05	-0.003310308	4.306400083	2.559847661
96.86	0.004211503	-1.67883E-05	-0.003341912	-0.751930208	4.306404566	2.559847661
96.865	0.007277932	-3.22927E-05	-0.006427018	-1.446079162	4.306417953	2.559847661
96.87	0.007013351	-3.1103E-05	-0.00618222	-1.390999593	4.306430385	2.559847661
96.875	0.005922846	-2.56414E-05	-0.00507966	-1.142923493	4.306439251	2.559847661
96.88	0.008149097	-3.67848E-05	-0.007320478	-1.647107645	4.306456035	2.559847661
96.885	0.011402788	-5.32047E-05	-0.010584801	-2.381580297	4.306488897	2.559847661
96.89	0.011896906	-5.58228E-05	-0.011103368	-2.498257842	4.306524669	2.559847661
96.895	0.011278952	-5.27772E-05	-0.010488366	-2.359882436	4.306556822	2.559847661
96.9	0.012541042	-5.91213E-05	-0.011760458	-2.646103085	4.306596572	2.559847661
96.905	0.015137086	-7.22195E-05	-0.014362083	-3.231468625	4.306654483	2.559847661
96.91	0.016318693	-7.82776E-05	-0.015564859	-3.502093335	4.306721788	2.559847661
96.915	0.016221281	-7.78675E-05	-0.015482029	-3.483456431	4.306788292	2.559847661
96.92	0.017853512	-8.60952E-05	-0.017116502	-3.851213036	4.306868852	2.559847661
96.925	0.020456488	-9.9271E-05	-0.019730476	-4.43935714	4.306974616	2.559847661
96.93	0.021116728	-0.000102742	-0.020418859	-4.59424336	4.307087318	2.559847661
96.935	0.021041006	-0.000102467	-0.020363263	-4.581734121	4.307199212	2.559847661
96.94	0.022107866	-0.000107913	-0.021444146	-4.824932895	4.307322742	2.559847661
96.945	0.023142565	-0.000113246	-0.022501481	-5.062833258	4.307458104	2.559847661
96.95	0.022728613	-0.000111326	-0.022113566	-4.975552451	4.307588668	2.559847661
96.955	0.021702329	-0.000106281	-0.021095127	-4.746403529	4.307707707	2.559847661
96.96	0.02189787	-0.000107349	-0.021310797	-4.794929373	4.3078289	2.559847661
96.965	0.021889953	-0.000107462	-0.021333532	-4.80004467	4.307950006	2.559847661
96.97	0.019547489	-9.58448E-05	-0.018989332	-4.272599697	4.30804658	2.559847661
96.975	0.017734269	-8.67945E-05	-0.017164403	-3.861990609	4.308126068	2.559847661
96.98	0.017356982	-8.49879E-05	-0.016800249	-3.780056076	4.30820221	2.559847661
96.985	0.015005207	-7.32966E-05	-0.014444583	-3.250031093	4.308259116	2.559847661
96.99	0.012672171	-6.16104E-05	-0.012091591	-2.720607989	4.308299702	2.559847661
96.995	0.01209369	-5.87545E-05	-0.011516802	-2.591280347	4.308336667	2.559847661
97	0.009785279	-4.72514E-05	-0.009202586	-2.070581938	4.308360868	2.559847661
97.005	0.007287905	-3.47136E-05	-0.006681881	-1.503423149	4.308374292	2.559847661
97.01	0.006692906	-3.17385E-05	-0.006083981	-1.368895818	4.308385613	2.559847661
97.015	0.004729959	-2.19428E-05	-0.00411606	-0.926113587	4.308391268	2.559847661
97.02	0.002103012	-8.74137E-06	-0.001465558	-0.329750643	4.308392386	2.559847661
97.025	0.001118384	-3.76329E-06	-0.000466559	-0.10497572	4.308392702	2.559847661
97.03	0.000126733	1.22123E-06	0.00053348	0.120032955	4.308392706	2.559847661
97.035	-0.000966426	6.732E-06	0.001638803	0.368730687	4.308392942	2.559847661
97.04	-0.001624648	1.00582E-05	0.002305809	0.518807019	4.308393609	2.559847661
97.045	-0.002359404	1.37729E-05	0.003050577	0.686379779	4.308395016	2.559847661
97.05	-0.002442366	1.42186E-05	0.003139522	0.706392417	4.308396523	2.559847661
97.055	-0.002642068	1.52157E-05	0.003339818	0.751459123	4.308398288	2.559847661
97.06	-0.003778711	2.09306E-05	0.004485273	1.009186524	4.308401897	2.559847661
97.065	-0.00433832	2.37813E-05	0.005056529	1.137719041	4.308406653	2.559847661
97.07	-0.004473881	2.44876E-05	0.005198043	1.169559676	4.308411712	2.559847661
97.075	-0.005010143	2.72115E-05	0.005743807	1.292356673	4.308418056	2.559847661
97.08	-0.00502197	2.73227E-05	0.005765208	1.297171734	4.308424431	2.559847661
97.085	-0.004446259	2.44681E-05	0.005188774	1.167474236	4.308429427	2.559847661
97.09	-0.004204786	2.32704E-05	0.00494696	1.113066096	4.308433896	2.559847661
97.095	-0.004590974	2.52291E-05	0.005342522	1.202067456	4.308439223	2.559847661
97.1	-0.004847283	2.65679E-05	0.005612855	1.262892368	4.308445161	2.559847661
97.105	-0.004188141	2.33162E-05	0.004956194	1.11514369	4.308449594	2.559847661
97.11	-0.00348899	1.98318E-05	0.004252822	0.956884862	4.308452671	2.559847661
97.115	-0.003311749	1.89658E-05	0.004078056	0.917562531	4.308455443	2.559847661
97.12	-0.003052904	1.76972E-05	0.003822037	0.859958282	4.308457798	2.559847661
97.125	-0.003034522	1.76282E-05	0.003808142	0.856831957	4.308460126	2.559847661
97.13	-0.003188848	1.84423E-05	0.003972574	0.893829078	4.308462696	2.559847661
97.135	-0.002900249	1.70389E-05	0.003689191	0.830068081	4.308464822	2.559847661
97.14	-0.00261431	1.56334E-05	0.003405566	0.766252319	4.308466549	2.559847661
97.145	-0.002486759	1.50188E-05	0.003281566	0.738352415	4.308468112	2.559847661
97.15	-0.002512898	1.51668E-05	0.003311487	0.745084513	4.308469708	2.559847661
97.155	-0.00297569	1.74973E-05	0.003782128	0.850978764	4.308471946	2.559847661
97.16	-0.004075679	2.30174E-05	0.004896504	1.101713315	4.308476144	2.559847661
97.165	-0.006634651	3.58788E-05	0.007479852	1.682966647	4.30848727	2.559847661
97.17	-0.009387292	4.97991E-05	0.010266549	2.309973556	4.308509542	2.559847661
97.175	-0.010023369	5.31309E-05	0.010933248	2.459980736	4.308534934	2.559847661
97.18	-0.010199306	5.40992E-05	0.011126995	2.503573975	4.308561225	2.559847661
97.185	-0.011587379	6.11535E-05	0.012538188	2.821092316	4.30859516	2.559847661
97.19	-0.012763536	6.71986E-05	0.013747104	3.093098369	4.308636334	2.559847661
97.195	-0.012585585	6.64762E-05	0.013599821	3.059959713	4.308676367	2.559847661
97.2	-0.010708184	5.71899E-05	0.011725226	2.638175935	4.308705348	2.559847661
97.205	-0.00915505	4.94386E-05	0.010161459	2.286328365	4.308726531	2.559847661
97.21	-0.010383346	5.56467E-05	0.011414977	2.568369849	4.30875378	2.559847661
97.215	-0.011671253	6.22515E-05	0.012747915	2.868280851	4.308788208	2.559847661
97.22	-0.01117318	5.9911E-05	0.012275244	2.761929866	4.308819761	2.559847661
97.225	-0.010406108	5.62214E-05	0.011530339	2.594326257	4.308847129	2.559847661
97.23	-0.008025706	4.44467E-05	0.009154819	2.059834166	4.308863409	2.559847661
97.235	-0.004883194	2.87596E-05	0.005993503	1.348538209	4.308869435	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
97.24	-0.004111066	2.49533E-05	0.005226887	1.176049548	4.308873707	2.559847661
97.245	-0.002897199	1.90251E-05	0.004033264	0.907484429	4.308875828	2.559847661
97.25	0.001061096	-5.85839E-07	8.75408E-05	0.019696669	4.308876113	2.559847661
97.255	0.005572816	-2.29662E-05	-0.004410213	-0.992297871	4.308883962	2.559847661
97.26	0.009685546	-4.34397E-05	-0.008520099	-1.917022209	4.308907672	2.559847661
97.265	0.012001545	-5.50001E-05	-0.010838827	-2.438736097	4.308944076	2.559847661
97.27	0.013214685	-6.09845E-05	-0.012038625	-2.708690586	4.308988212	2.559847661
97.275	0.017449677	-8.20243E-05	-0.016254024	-3.657155318	4.309065169	2.559847661
97.28	0.02231853	-0.000106414	-0.021135157	-4.755410227	4.309191064	2.559847661
97.285	0.023729607	-0.00011355	-0.022561696	-5.076381691	4.309333381	2.559847661
97.29	0.025204555	-0.000120912	-0.024020622	-5.404639915	4.309493939	2.559847661
97.295	0.02872724	-0.000138543	-0.027513105	-6.19044855	4.309702515	2.559847661
97.3	0.031295367	-0.000151474	-0.030072725	-6.766363024	4.30995005	2.559847661
97.305	0.03250249	-0.000157588	-0.03128249	-7.038560324	4.310217049	2.559847661
97.31	0.033920928	-0.000164736	-0.032696504	-7.356713351	4.31050786	2.559847661
97.315	0.035911392	-0.000174756	-0.034677985	-7.802546732	4.310833802	2.559847661
97.32	0.037531832	-0.000182965	-0.036300712	-8.167660127	4.311189823	2.559847661
97.325	0.037902515	-0.000184928	-0.036688669	-8.254950484	4.311552911	2.559847661
97.33	0.03836721	-0.000187328	-0.037162809	-8.361632071	4.311924957	2.559847661
97.335	0.039401044	-0.000192598	-0.038204054	-8.595912146	4.312317323	2.559847661
97.34	0.039153563	-0.000191492	-0.037978194	-8.545093652	4.312704775	2.559847661
97.345	0.037861167	-0.000185129	-0.036693589	-8.256057604	4.313067071	2.559847661
97.35	0.036380855	-0.000177811	-0.035217093	-7.923845911	4.313401591	2.559847661
97.355	0.033697556	-0.000164461	-0.032525104	-7.318148455	4.313688585	2.559847661
97.36	0.030449796	-0.000148202	-0.029249722	-6.581187552	4.313922924	2.559847661
97.365	0.028543	-0.000138549	-0.027306509	-6.143964451	4.314128833	2.559847661
97.37	0.029658254	-0.000143937	-0.028394533	-6.388769831	4.314351147	2.559847661
97.375	0.035331631	-0.000171924	-0.034038904	-7.658753363	4.31466665	2.559847661
97.38	0.04360085	-0.000213445	-0.042317181	-9.521365634	4.31514712	2.559847661
97.385	0.049585354	-0.000244078	-0.048352516	-10.8793161	4.315768536	2.559847661
97.39	0.050651268	-0.000249821	-0.049481613	-11.13336292	4.316416956	2.559847661
97.395	0.047555177	-0.000234361	-0.046361361	-10.4313063	4.316988529	2.559847661
97.4	0.042614062	-0.000209968	-0.041444464	-9.325004319	4.317447496	2.559847661
97.405	0.038343652	-0.000188748	-0.037173157	-8.363960381	4.317819085	2.559847661
97.41	0.03708652	-0.000182385	-0.035893272	-8.075986166	4.318166708	2.559847661
97.415	0.041507053	-0.000204247	-0.040304891	-9.068600507	4.31860214	2.559847661
97.42	0.046109483	-0.000227315	-0.044953066	-10.11443986	4.319139488	2.559847661
97.425	0.041758285	-0.00020604	-0.040659837	-9.148463313	4.319580207	2.559847661
97.43	0.034700813	-0.000170953	-0.033594978	-7.558870057	4.319884544	2.559847661
97.435	0.034760753	-0.000171109	-0.033630546	-7.566872825	4.320189934	2.559847661
97.44	0.036538162	-0.00017999	-0.035423038	-7.970183438	4.320527353	2.559847661
97.445	0.035414369	-0.000174458	-0.03430607	-7.71886571	4.320844335	2.559847661
97.45	0.034603426	-0.000170425	-0.033491852	-7.535666588	4.321146966	2.559847661
97.455	0.034395057	-0.000169371	-0.033279303	-7.487843146	4.321445964	2.559847661
97.46	0.036549013	-0.000180056	-0.035436253	-7.973156991	4.321783584	2.559847661
97.465	0.039724981	-0.000195999	-0.038651286	-8.69653931	4.322182428	2.559847661
97.47	0.036486882	-0.000180145	-0.03545132	-7.97654689	4.3225189	2.559847661
97.475	0.032500262	-0.000160311	-0.031456838	-7.077788631	4.322785862	2.559847661
97.48	0.035054203	-0.00017295	-0.034008252	-7.651856662	4.32309643	2.559847661
97.485	0.034686863	-0.000171312	-0.033676672	-7.577251234	4.323400523	2.559847661
97.49	0.030153888	-0.000148809	-0.02914721	-6.558122233	4.323630329	2.559847661
97.495	0.030092104	-0.000148418	-0.029072317	-6.541271368	4.323859195	2.559847661
97.5	0.030734959	-0.000151671	-0.029729069	-6.68904054	4.324097944	2.559847661
97.505	0.029435146	-0.000145214	-0.028425688	-6.395779789	4.324316926	2.559847661
97.51	0.029911564	-0.000147576	-0.02890263	-6.503091735	4.324543054	2.559847661
97.515	0.030041648	-0.000148266	-0.029041897	-6.53442688	4.324771153	2.559847661
97.52	0.03005485	-0.00014833	-0.029054994	-6.537373656	4.324999452	2.559847661
97.525	0.031772533	-0.000156912	-0.03078728	-6.927138017	4.325254593	2.559847661
97.53	0.032705731	-0.000161638	-0.031740646	-7.141645357	4.325524941	2.559847661
97.535	0.033805956	-0.000167182	-0.032858746	-7.39321788	4.325813784	2.559847661
97.54	0.035068575	-0.000173591	-0.034150913	-7.683955421	4.326124607	2.559847661
97.545	0.034645269	-0.000171605	-0.033749795	-7.593703925	4.326427971	2.559847661
97.55	0.034996738	-0.00017345	-0.034122349	-7.677528608	4.326737521	2.559847661
97.555	0.03516188	-0.000174428	-0.034319097	-7.721796877	4.327049999	2.559847661
97.56	0.033578798	-0.000166677	-0.03275431	-7.369719858	4.327334974	2.559847661
97.565	0.03271076	-0.000162458	-0.031903002	-7.178175397	4.327605405	2.559847661
97.57	0.031612707	-0.00015712	-0.030826116	-6.935876085	4.327857986	2.559847661
97.575	0.030472456	-0.000151549	-0.029702611	-6.683087567	4.328092674	2.559847661
97.58	0.029609951	-0.000147409	-0.028868084	-6.495318871	4.328314264	2.559847661
97.585	0.026273573	-0.000130936	-0.025561161	-5.751261142	4.328488731	2.559847661
97.59	0.024321851	-0.000121258	-0.023620583	-5.314631111	4.328638241	2.559847661
97.595	0.024158322	-0.000120587	-0.023486204	-5.284395934	4.328785747	2.559847661
97.6	0.020189586	-0.000100955	-0.019552779	-4.399375294	4.328888769	2.559847661
97.605	0.017322717	-8.6655E-05	-0.016690119	-3.755276786	4.328964611	2.559847661
97.61	0.016827057	-8.42947E-05	-0.016217823	-3.649010109	4.329036174	2.559847661
97.615	0.012675199	-6.3672E-05	-0.012093368	-2.721007729	4.32907678	2.559847661
97.62	0.010116642	-5.08619E-05	-0.009533431	-2.145021958	4.329102647	2.559847661
97.625	0.010378267	-5.22643E-05	-0.009816662	-2.208749024	4.32912987	2.559847661
97.63	0.007287371	-3.6946E-05	-0.006754267	-1.519710044	4.329143292	2.559847661
97.635	0.00476611	-2.43768E-05	-0.004245596	-0.955259147	4.329149033	2.559847661
97.64	0.003163938	-1.64733E-05	-0.00266887	-0.600495843	4.329151563	2.559847661
97.645	-0.00097563	4.19012E-06	0.001450687	0.326404478	4.329151803	2.559847661
97.65	-0.002877732	1.37379E-05	0.003352885	0.754399013	4.329153896	2.559847661
97.655	-0.004321045	2.08782E-05	0.004774894	1.07435105	4.329158615	2.559847661
97.66	-0.008811169	4.33831E-05	0.009253882	2.082123538	4.329178237	2.559847661
97.665	-0.011483238	5.68492E-05	0.011931809	2.684656949	4.329211565	2.559847661
97.67	-0.013490893	6.69278E-05	0.013935053	3.135386857	4.329257565	2.559847661
97.675	-0.016099637	8.00885E-05	0.016549561	3.723651261	4.329323075	2.559847661
97.68	-0.015611774	7.76819E-05	0.016061925	3.613933078	4.329384675	2.559847661
97.685	-0.015882095	7.8962E-05	0.016320505	3.672113718	4.329448427	2.559847661
97.69	-0.018431311	9.1745E-05	0.018863989	4.244397583	4.329534286	2.559847661
97.695	-0.019501932	9.71237E-05	0.01993157	4.484603202	4.32963041	2.559847661
97.7	-0.021388652	0.000106556	0.021803175	4.905714283	4.329746033	2.559847661
97.705	-0.023925725	0.000119311	0.024332789	5.474877557	4.329890712	2.559847661
97.71	-0.025450705	0.000126955	0.025847998	5.815799494	4.330054422	2.559847661
97.715	-0.029300212	0.000146319	0.029684539	6.679021234	4.330271401	2.559847661
97.72	-0.03337153	0.00016697	0.033772535	7.598820447	4.330552868	2.559847661
97.725	-0.035169791	0.00017614	0.035586593	8.006983485	4.330865487	2.559847661
97.73	-0.037923683	0.000190114	0.038349697	8.628681859	4.331228981	2.559847661
97.735	-0.040095678	0.000201226	0.040545854	9.12281707	4.331635304	2.559847661
97.74	-0.040116074	0.000201435	0.040585886	9.131824294	4.33204204	2.559847661
97.745	-0.041102707	0.000206466	0.04158118	9.355765594	4.332469029	2.559847661
97.75	-0.042713243	0.000214672	0.043201961	9.720441292	4.332930135	2.559847661
97.755	-0.044300467	0.000222757	0.044798251	10.07960645	4.333426148	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
97.76	-0.04648653	0.000233889	0.046995336	10.57395051	4.333972321	2.559847661
97.765	-0.047939925	0.000241335	0.04846443	10.90449672	4.33455318	2.559847661
97.77	-0.049985281	0.000251737	0.050515832	11.36606218	4.33518466	2.559847661
97.775	-0.05348597	0.000269549	0.054026749	12.15601864	4.335907689	2.559847661
97.78	-0.055466011	0.000279758	0.056037846	12.60851546	4.336685242	2.559847661
97.785	-0.055676024	0.000280999	0.056282399	12.66353984	4.337468694	2.559847661
97.79	-0.055851088	0.000282021	0.056483617	12.70881393	4.33825708	2.559847661
97.795	-0.056710112	0.000286472	0.057360081	12.90601823	4.339069905	2.559847661
97.8	-0.058777813	0.000297049	0.059435609	13.37301207	4.339943083	2.559847661
97.805	-0.060628753	0.000306594	0.061300095	13.7925214	4.340872121	2.559847661
97.81	-0.061422181	0.000310799	0.062121277	13.97728729	4.341825633	2.559847661
97.815	-0.062466886	0.000316263	0.063188072	14.21731611	4.342811857	2.559847661
97.82	-0.063641337	0.000322415	0.064388919	14.48750685	4.343835514	2.559847661
97.825	-0.064221744	0.000325595	0.065009521	14.62714224	4.344877928	2.559847661
97.83	-0.063596845	0.000322698	0.064424486	14.49550939	4.345900154	2.559847661
97.835	-0.061904349	0.000314363	0.062742073	14.11696645	4.346868696	2.559847661
97.84	-0.061272831	0.000311348	0.062133717	13.98008635	4.347817577	2.559847661
97.845	-0.06110789	0.000310732	0.062009627	13.95216611	4.348761356	2.559847661
97.85	-0.060034954	0.000305533	0.060960883	13.71619862	4.349672285	2.559847661
97.855	-0.059507295	0.000303091	0.060468401	13.60539018	4.350567271	2.559847661
97.86	-0.057591487	0.000293686	0.058572621	13.17883976	4.351405558	2.559847661
97.865	-0.054058496	0.000276031	0.055016787	12.37877717	4.352144148	2.559847661
97.87	-0.052899572	0.00027033	0.05386938	12.12061051	4.35285141	2.559847661
97.875	-0.05141492	0.000263073	0.052409172	11.79206378	4.35351953	2.559847661
97.88	-0.048063711	0.000246339	0.049044713	11.03506034	4.354103392	2.559847661
97.885	-0.046394284	0.000238078	0.047384813	10.66158288	4.3546474	2.559847661
97.89	-0.043716951	0.0002248	0.044718436	10.06164801	4.355130432	2.559847661
97.895	-0.039134362	0.000202131	0.040170376	9.038334618	4.355517504	2.559847661
97.9	-0.036135192	0.000187315	0.037200639	8.370143695	4.355847521	2.559847661
97.905	-0.0324457	0.00016908	0.033548667	7.548450061	4.356113588	2.559847661
97.91	-0.028026606	0.000147115	0.029154011	6.55965249	4.356312114	2.559847661
97.915	-0.024597941	0.000130095	0.025751836	5.794163007	4.356465037	2.559847661
97.92	-0.019984472	0.000107122	0.021163866	4.761869841	4.356565976	2.559847661
97.925	-0.015571514	8.50731E-05	0.016765251	3.772181406	4.356627259	2.559847661
97.93	-0.011454642	6.45193E-05	0.012668814	2.850483152	4.356660421	2.559847661
97.935	-0.005459518	3.44571E-05	0.006684107	1.503924177	4.356667954	2.559847661
97.94	-0.001032457	1.21559E-05	0.002249603	0.506160596	4.356668224	2.559847661
97.945	0.001931523	-2.7404E-06	-0.000710064	-0.15976443	4.356669167	2.559847661
97.95	0.006231129	-2.44025E-05	-0.005010565	-1.127377153	4.35667898	2.559847661
97.955	0.009378081	-4.0311E-05	-0.008166292	-1.837415735	4.356701208	2.559847661
97.96	0.012164959	-5.43648E-05	-0.01095231	-2.464269755	4.35673861	2.559847661
97.965	0.015659874	-7.20251E-05	-0.014450917	-3.251456403	4.35680059	2.559847661
97.97	0.017468087	-8.11927E-05	-0.016266041	-3.659859178	4.35687771	2.559847661
97.975	0.020186835	-9.48907E-05	-0.018976865	-4.269794529	4.356980704	2.559847661
97.98	0.023696773	-0.000112652	-0.022489414	-5.060118257	4.357122628	2.559847661
97.985	0.024847496	-0.000118519	-0.023649321	-5.321097126	4.35727867	2.559847661
97.99	0.027504883	-0.000131903	-0.026293782	-5.916100917	4.357469873	2.559847661
97.995	0.031367528	-0.000151553	-0.030173919	-6.789131691	4.357718551	2.559847661
98	0.032557096	-0.000157681	-0.031383245	-7.061230121	4.357986447	2.559847661
98.005	0.034619574	-0.000168151	-0.033448796	-7.525979145	4.358289361	2.559847661
98.01	0.037861882	-0.000184659	-0.036703799	-8.258354867	4.358651671	2.559847661
98.015	0.039531106	-0.00019321	-0.038389055	-8.637537365	4.359046632	2.559847661
98.02	0.042177425	-0.00020668	-0.041042584	-9.234581353	4.359496242	2.559847661
98.025	0.044896595	-0.000220593	-0.043781778	-9.850900006	4.360005693	2.559847661
98.03	0.045798148	-0.000225291	-0.044706367	-10.05893251	4.36053581	2.559847661
98.035	0.04740168	-0.000233511	-0.046323794	-10.42285375	4.361103699	2.559847661
98.04	0.048794459	-0.000240706	-0.047738946	-10.74126285	4.36170545	2.559847661
98.045	0.049267158	-0.000243214	-0.048232185	-10.85224167	4.362318917	2.559847661
98.05	0.050625953	-0.000250205	-0.049606635	-11.16149291	4.362966689	2.559847661
98.055	0.05121555	-0.000253333	-0.050221593	-11.29985839	4.363629638	2.559847661
98.06	0.051255457	-0.000253631	-0.050280262	-11.31305906	4.364293619	2.559847661
98.065	0.052468636	-0.000259874	-0.051507178	-11.58911512	4.364989405	2.559847661
98.07	0.053026994	-0.000262832	-0.052088553	-11.71992443	4.365700078	2.559847661
98.075	0.053308853	-0.000264356	-0.05238798	-11.78729549	4.366418326	2.559847661
98.08	0.054412691	-0.000270054	-0.053507433	-12.03917235	4.367166627	2.559847661
98.085	0.054998112	-0.000273148	-0.054115041	-12.17588434	4.367931117	2.559847661
98.09	0.055654108	-0.000276589	-0.054790924	-12.32795782	4.368713952	2.559847661
98.095	0.056132258	-0.000279161	-0.055296013	-12.44160299	4.369510297	2.559847661
98.1	0.055474409	-0.000275967	-0.054650948	-12.29646323	4.370288085	2.559847661
98.105	0.055271073	-0.000275045	-0.054464964	-12.25461693	4.371060181	2.559847661
98.11	0.05498382	-0.000273725	-0.054198435	-12.19464781	4.371824273	2.559847661
98.115	0.053928768	-0.000268496	-0.053142957	-11.95716544	4.372559324	2.559847661
98.12	0.053367845	-0.00026576	-0.052590937	-11.83296091	4.373279162	2.559847661
98.125	0.052043814	-0.000259174	-0.051262364	-11.53403187	4.373963726	2.559847661
98.13	0.050451795	-0.000251171	-0.049648942	-11.17101193	4.37460705	2.559847661
98.135	0.050395903	-0.000250947	-0.049604019	-11.1609042	4.375248948	2.559847661
98.14	0.049802438	-0.000248042	-0.049018209	-11.02909698	4.375875818	2.559847661
98.145	0.048853483	-0.000243301	-0.048062898	-10.81415197	4.376479025	2.559847661
98.15	0.048618896	-0.000242188	-0.047838719	-10.76371175	4.377076454	2.559847661
98.155	0.047592304	-0.00023707	-0.046807853	-10.53176698	4.37764892	2.559847661
98.16	0.047012903	-0.000234179	-0.046225796	-10.40080404	4.378207532	2.559847661
98.165	0.046923049	-0.000233795	-0.046148337	-10.38337594	4.37876401	2.559847661
98.17	0.046225918	-0.000230321	-0.04544886	-10.22599349	4.379304076	2.559847661
98.175	0.046822711	-0.000233386	-0.046067867	-10.36527013	4.379858177	2.559847661
98.18	0.047329478	-0.00023606	-0.046607711	-10.48673503	4.380424338	2.559847661
98.185	0.046558164	-0.000232246	-0.0458375	-10.3134376	4.380972195	2.559847661
98.19	0.046573968	-0.000232404	-0.045869472	-10.32063121	4.381520425	2.559847661
98.195	0.046022992	-0.000229727	-0.045329281	-10.19908812	4.38205576	2.559847661
98.2	0.044922112	-0.000224231	-0.044223151	-9.95020897	4.38256579	2.559847661
98.205	0.044521049	-0.000222289	-0.043832384	-9.862286379	4.383066754	2.559847661
98.21	0.043055494	-0.000214963	-0.042358527	-9.530668489	4.38353528	2.559847661
98.215	0.042197538	-0.000210666	-0.041494336	-9.336225523	4.383985319	2.559847661
98.22	0.042170732	-0.000210636	-0.041488378	-9.334885002	4.384434786	2.559847661
98.225	0.040056863	-0.000200047	-0.039359641	-8.855919125	4.384840322	2.559847661
98.23	0.038335293	-0.000191379	-0.037617955	-8.464039896	4.385211749	2.559847661
98.235	0.037130023	-0.000185366	-0.036410194	-8.19229361	4.385560188	2.559847661
98.24	0.034479291	-0.000172003	-0.033727656	-7.588722596	4.385860652	2.559847661
98.245	0.033540749	-0.000167269	-0.032777825	-7.375010682	4.386144981	2.559847661
98.25	0.032597973	-0.000162601	-0.031841339	-7.164301382	4.386413551	2.559847661
98.255	0.029456286	-0.000146757	-0.028664662	-6.449548905	4.386632848	2.559847661
98.26	0.028014365	-0.00013947	-0.02720444	-6.120998947	4.3868312	2.559847661
98.265	0.02639952	-0.000131384	-0.025584693	-5.756555837	4.387007344	2.559847661
98.27	0.022903996	-0.000113722	-0.022049049	-4.961035964	4.38713993	2.559847661
98.275	0.021122648	-0.000104696	-0.020243353	-4.554754421	4.387252695	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
98.28	0.019127174	-9.46411E-05	-0.018232728	-4.102363906	4.38734516	2.559847661
98.285	0.016263229	-8.01334E-05	-0.0153334	-3.450015088	4.387412008	2.559847661
98.29	0.015289494	-7.51929E-05	-0.014346514	-3.227965553	4.387471091	2.559847661
98.295	0.013485	-6.61115E-05	-0.012533047	-2.819935507	4.387517051	2.559847661
98.3	0.010475609	-5.08748E-05	-0.009492125	-2.135728207	4.387544786	2.559847661
98.305	0.008663888	-4.168E-05	-0.007658082	-1.723068542	4.387563758	2.559847661
98.31	0.006594898	-3.12011E-05	-0.005568833	-1.252987502	4.38757475	2.559847661
98.315	0.004680817	-2.14732E-05	-0.003630202	-0.816795527	4.387580288	2.559847661
98.32	0.003555137	-1.57526E-05	-0.002490562	-0.560376506	4.387583482	2.559847661
98.325	0.0019269	-7.49245E-06	-0.00084553	-0.190244294	4.387584421	2.559847661
98.33	0.000822054	-1.86595E-06	0.000274658	0.061798119	4.387584591	2.559847661
98.335	-0.000187037	3.24841E-06	0.001292639	0.290843759	4.3875846	2.559847661
98.34	-0.001719856	1.1032E-05	0.002841478	0.639332596	4.387585348	2.559847661
98.345	-0.002468714	1.48459E-05	0.003600189	0.810042579	4.387586888	2.559847661
98.35	-0.003940313	2.22909E-05	0.005080891	1.143200451	4.387590812	2.559847661
98.355	-0.005853478	3.20232E-05	0.007015785	1.578551729	4.387599472	2.559847661
98.36	-0.00642638	3.49648E-05	0.007600449	1.710100999	4.38760991	2.559847661
98.365	-0.007908635	4.24788E-05	0.009093565	2.046052185	4.387625718	2.559847661
98.37	-0.009594427	5.10847E-05	0.010803037	2.430683366	4.387648983	2.559847661
98.375	-0.009737865	5.18665E-05	0.010958301	2.465617729	4.38767295	2.559847661
98.38	-0.010886263	5.77051E-05	0.012117686	2.726479458	4.387702902	2.559847661
98.385	-0.011986575	6.33602E-05	0.013240359	2.979080741	4.387739216	2.559847661
98.39	-0.011565653	6.12899E-05	0.012822239	2.88500386	4.387773023	2.559847661
98.395	-0.011984298	6.34395E-05	0.0132561	2.982622567	4.387809323	2.559847661
98.4	-0.012141001	6.4299E-05	0.013424768	3.02057276	4.387846578	2.559847661
98.405	-0.011456885	6.08623E-05	0.01273079	2.864427714	4.387879753	2.559847661
98.41	-0.011895386	6.30906E-05	0.013180806	2.965681307	4.387915516	2.559847661
98.415	-0.012230159	6.48196E-05	0.013529926	3.044233305	4.38795332	2.559847661
98.42	-0.012586955	6.66364E-05	0.01389063	3.125391696	4.387993362	2.559847661
98.425	-0.013741084	7.25141E-05	0.015057032	3.387832173	4.388041084	2.559847661
98.43	-0.01395914	7.36685E-05	0.0152857	3.439282469	4.388090333	2.559847661
98.435	-0.014492811	7.63824E-05	0.015824501	3.560512783	4.388143419	2.559847661
98.44	-0.015875995	8.34342E-05	0.01722327	3.875235655	4.388207121	2.559847661
98.445	-0.016145568	8.48622E-05	0.017506475	3.938956814	4.388273006	2.559847661
98.45	-0.016709383	8.77452E-05	0.018078195	4.067593852	4.388343572	2.559847661
98.455	-0.017750413	9.30733E-05	0.019134577	4.305279747	4.388423205	2.559847661
98.46	-0.018105531	9.49232E-05	0.019501289	4.387789951	4.388506056	2.559847661
98.465	-0.019303498	0.000101031	0.0207118	4.660155041	4.388600234	2.559847661
98.47	-0.020297151	0.00010615	0.021726311	4.888420014	4.388704357	2.559847661
98.475	-0.020299055	0.000106223	0.021740751	4.891669008	4.388808499	2.559847661
98.48	-0.021349765	0.000111592	0.022804382	5.130985851	4.388923702	2.559847661
98.485	-0.022176451	0.000115868	0.023651279	5.321537772	4.389047998	2.559847661
98.49	-0.022443818	0.000117286	0.023932204	5.384745817	4.38917531	2.559847661
98.495	-0.023658753	0.000123513	0.025165303	5.662193186	4.389316779	2.559847661
98.5	-0.023946006	0.000125078	0.025473888	5.731624715	4.389461704	2.559847661
98.505	-0.023838081	0.000124597	0.025376742	5.709767013	4.389605325	2.559847661
98.51	-0.024869263	0.000129902	0.026430081	5.946768242	4.38976164	2.559847661
98.515	-0.02479267	0.000129634	0.026371903	5.933678102	4.389916994	2.559847661
98.52	-0.024286382	0.000127145	0.025869202	5.82057045	4.390066068	2.559847661
98.525	-0.02465007	0.000129072	0.026258424	5.908145439	4.39021964	2.559847661
98.53	-0.02421495	0.000126971	0.025834193	5.812693471	4.390367838	2.559847661
98.535	-0.023883385	0.000125368	0.025510495	5.739861272	4.390512006	2.559847661
98.54	-0.023835037	0.000125226	0.025481864	5.733419332	4.39065559	2.559847661
98.545	-0.022862322	0.000120397	0.024507254	5.514132211	4.390787695	2.559847661
98.55	-0.022536652	0.000118829	0.024190746	5.442917832	4.390916062	2.559847661
98.555	-0.021859151	0.00011553	0.023525144	5.293157418	4.391036827	2.559847661
98.56	-0.019493488	0.000103649	0.021129361	4.754106331	4.391132868	2.559847661
98.565	-0.018258691	9.74441E-05	0.01987889	4.472750152	4.391217127	2.559847661
98.57	-0.017456776	9.34914E-05	0.019082536	4.293570646	4.391294147	2.559847661
98.575	-0.014807649	8.01808E-05	0.016402192	3.690493297	4.391349565	2.559847661
98.58	-0.012409332	6.80882E-05	0.013968896	3.143001521	4.391388485	2.559847661
98.585	-0.01020677	5.70091E-05	0.011740975	2.641719276	4.391414815	2.559847661
98.59	-0.006728573	3.94495E-05	0.00821262	1.847839599	4.391426257	2.559847661
98.595	-0.003529606	2.3249E-05	0.00496025	1.116056173	4.391429406	2.559847661
98.6	-0.000910141	9.97347E-06	0.002297113	0.516850506	4.391429615	2.559847661
98.605	0.001537273	-2.45002E-06	-0.000193486	-0.043534356	4.391430213	2.559847661
98.61	0.003225285	-1.10304E-05	-0.001912739	-0.430366251	4.391432842	2.559847661
98.615	0.00508193	-2.04433E-05	-0.003797962	-0.854541523	4.391439369	2.559847661
98.62	0.007567892	-3.30681E-05	-0.006325107	-1.423149115	4.391453844	2.559847661
98.625	0.009497273	-4.29152E-05	-0.008295172	-1.866413729	4.391476641	2.559847661
98.63	0.010235652	-4.67343E-05	-0.009058997	-2.038274217	4.39150312	2.559847661
98.635	0.010429216	-4.77582E-05	-0.009263751	-2.084343982	4.391530611	2.559847661
98.64	0.011402301	-5.2709E-05	-0.010253649	-2.307070921	4.39156347	2.559847661
98.645	0.012634127	-5.90058E-05	-0.011512358	-2.590280449	4.391603813	2.559847661
98.65	0.012787569	-5.98467E-05	-0.011680064	-2.628014508	4.391645142	2.559847661
98.655	0.012976797	-6.08336E-05	-0.011877649	-2.672471118	4.391687703	2.559847661
98.66	0.013671177	-6.43898E-05	-0.01258829	-2.83236524	4.39173494	2.559847661
98.665	0.013859648	-6.53923E-05	-0.012788597	-2.877434364	4.391783489	2.559847661
98.67	0.014045748	-6.63661E-05	-0.012983166	-2.921212334	4.391833351	2.559847661
98.675	0.014352549	-6.79552E-05	-0.013300649	-2.992645938	4.391885414	2.559847661
98.68	0.014571863	-6.9094E-05	-0.013528142	-3.043831959	4.391939081	2.559847661
98.685	0.015225977	-7.24388E-05	-0.014196276	-3.194162052	4.391997674	2.559847661
98.69	0.015510343	-7.39301E-05	-0.014494153	-3.261184445	4.392058476	2.559847661
98.695	0.015546172	-7.41397E-05	-0.014535999	-3.270599786	4.39211956	2.559847661
98.7	0.016421074	-7.86022E-05	-0.015427184	-3.471116475	4.392187712	2.559847661
98.705	0.016918746	-8.11889E-05	-0.015943655	-3.587322447	4.392260057	2.559847661
98.71	0.016869536	-8.0989E-05	-0.015903284	-3.578238974	4.392331983	2.559847661
98.715	0.01738207	-8.36341E-05	-0.016431833	-3.697162478	4.392408345	2.559847661
98.72	0.017450027	-8.40517E-05	-0.016514199	-3.715694675	4.392485306	2.559847661
98.725	0.017068965	-8.21753E-05	-0.01613527	-3.630435641	4.392558942	2.559847661
98.73	0.017170617	-8.27426E-05	-0.016249837	-3.656213376	4.392633457	2.559847661
98.735	0.016901713	-8.145E-05	-0.015988814	-3.597483055	4.392705657	2.559847661
98.74	0.016263674	-7.82709E-05	-0.015346977	-3.4530698	4.392772509	2.559847661
98.745	0.015865777	-7.63015E-05	-0.014949464	-3.363629367	4.39283613	2.559847661
98.75	0.015335113	-7.36599E-05	-0.014416346	-3.243677918	4.392895566	2.559847661
98.755	0.014857257	-7.12745E-05	-0.013935033	-3.135382449	4.392951356	2.559847661
98.76	0.014502546	-6.95116E-05	-0.013579366	-3.05535733	4.393004513	2.559847661
98.765	0.014197263	-6.79909E-05	-0.013272611	-2.986337433	4.393055456	2.559847661
98.77	0.014262088	-6.83449E-05	-0.013344118	-3.002426456	4.393106865	2.559847661
98.775	0.014246869	-6.8302E-05	-0.013335437	-3.000473259	4.393158165	2.559847661
98.78	0.014341603	-6.88043E-05	-0.013436898	-3.023302102	4.393210149	2.559847661
98.785	0.014919284	-7.17674E-05	-0.014035236	-3.157928013	4.393266406	2.559847661
98.79	0.014881681	-7.16323E-05	-0.014007896	-3.151776611	4.393322379	2.559847661
98.795	0.014639085	-7.04287E-05	-0.013764841	-3.097089336	4.393376542	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
98.8	0.015266203	-7.36308E-05	-0.014411421	-3.242569835	4.393435445	2.559847661
98.805	0.015645497	-7.56069E-05	-0.014810322	-3.332322471	4.393497311	2.559847661
98.81	0.015642298	-7.56326E-05	-0.014815504	-3.333488298	4.393559153	2.559847661
98.815	0.016136511	-7.81779E-05	-0.0153292	-3.449069961	4.393624963	2.559847661
98.82	0.016410372	-7.96297E-05	-0.015622174	-3.514989168	4.393693026	2.559847661
98.825	0.016323973	-7.92511E-05	-0.015545705	-3.497783718	4.393760375	2.559847661
98.83	0.016451908	-7.99617E-05	-0.015689166	-3.530062386	4.393828783	2.559847661
98.835	0.016287342	-7.92102E-05	-0.015537366	-3.495907238	4.39389583	2.559847661
98.84	0.015577481	-7.56971E-05	-0.014827999	-3.336299738	4.393957159	2.559847661
98.845	0.014572512	-7.06885E-05	-0.013816975	-3.108819294	4.394010831	2.559847661
98.85	0.012992767	-6.27699E-05	-0.012219641	-2.749419211	4.394053497	2.559847661
98.855	0.010749668	-5.14677E-05	-0.009941424	-2.236820316	4.394082702	2.559847661
98.86	0.008628334	-4.0748E-05	-0.007782094	-1.750971121	4.394101518	2.559847661
98.865	0.006986367	-3.24497E-05	-0.006111439	-1.375073865	4.394113854	2.559847661
98.87	0.005241417	-2.3635E-05	-0.004337713	-0.975985525	4.394120798	2.559847661
98.875	0.003217747	-1.33975E-05	-0.002278769	-0.512723014	4.394123415	2.559847661
98.88	0.001218754	-3.26961E-06	-0.00024299	-0.054672862	4.39412379	2.559847661
98.885	-0.000656765	6.24353E-06	0.001668205	0.375346101	4.394123899	2.559847661
98.89	-0.002448444	1.53353E-05	0.003493845	0.786115035	4.394125414	2.559847661
98.895	-0.004493963	2.57211E-05	0.005578279	1.255112789	4.394130519	2.559847661
98.9	-0.006325309	3.50536E-05	0.007450385	1.676336533	4.394140631	2.559847661
98.905	-0.007177857	3.94255E-05	0.008327067	1.873590071	4.394153652	2.559847661
98.91	-0.008432497	4.58017E-05	0.009605346	2.161202817	4.394171624	2.559847661
98.915	-0.010385864	5.57523E-05	0.011599393	2.60986335	4.394198886	2.559847661
98.92	-0.011153868	5.97235E-05	0.012394911	2.788854942	4.394230329	2.559847661
98.925	-0.011861072	6.33468E-05	0.013120617	2.952138728	4.394265886	2.559847661
98.93	-0.013451152	7.14691E-05	0.01474694	3.318061422	4.394311616	2.559847661
98.935	-0.013822801	7.34507E-05	0.015143545	3.407297599	4.394359907	2.559847661
98.94	-0.013967026	7.42367E-05	0.01530095	3.442713716	4.394409211	2.559847661
98.945	-0.015021127	7.96558E-05	0.0163855	3.686737561	4.394466238	2.559847661
98.95	-0.014708089	7.81817E-05	0.01608696	3.619565941	4.394520913	2.559847661
98.955	-0.013959244	7.44474E-05	0.015332995	3.449923965	4.394570162	2.559847661
98.96	-0.014153724	7.55013E-05	0.015545854	3.497817169	4.394620793	2.559847661
98.965	-0.013199867	7.07627E-05	0.014589265	3.282584578	4.39466483	2.559847661
98.97	-0.011898011	6.42073E-05	0.01326659	2.984982734	4.394700609	2.559847661
98.975	-0.011577294	6.2622E-05	0.012946811	2.913032566	4.394734485	2.559847661
98.98	-0.010551138	5.74807E-05	0.011909983	2.679746166	4.394762621	2.559847661
98.985	-0.0094602	5.19716E-05	0.010799374	2.429859193	4.394785241	2.559847661
98.99	-0.009118564	5.0263E-05	0.010454987	2.352372146	4.394806255	2.559847661
98.995	-0.008279156	4.60404E-05	0.009604086	2.160919244	4.394823579	2.559847661
99	-0.007776989	4.35011E-05	0.009092478	2.045807506	4.394838866	2.559847661
99.005	-0.007740862	4.33463E-05	0.009061288	2.038789865	4.39485401	2.559847661
99.01	-0.006884715	3.90456E-05	0.008195013	1.843877821	4.39486599	2.559847661
99.015	-0.006122966	3.52E-05	0.007420566	1.66962729	4.394875465	2.559847661
99.02	-0.005411764	3.1621E-05	0.006699995	1.50749898	4.394882867	2.559847661
99.025	-0.004162477	2.52984E-05	0.005427369	1.221158046	4.394887246	2.559847661
99.03	-0.003676656	2.28233E-05	0.004929304	1.109093427	4.394890663	2.559847661
99.035	-0.003230483	2.05787E-05	0.004477702	1.007483005	4.394893301	2.559847661
99.04	-0.001913253	1.39054E-05	0.003135339	0.705451205	4.394894226	2.559847661
99.045	-0.001261438	1.05715E-05	0.002464909	0.554604582	4.394894628	2.559847661
99.05	-0.000967208	9.06777E-06	0.002162547	0.486573179	4.394894864	2.559847661
99.055	-0.000277156	5.55193E-06	0.001455714	0.327535681	4.394894884	2.559847661
99.06	-0.000123323	4.74143E-06	0.001292805	0.290881029	4.394894888	2.559847661
99.065	5.50814E-06	4.07639E-06	0.001159108	0.260799215	4.394894888	2.559847661
99.07	0.000429943	1.90431E-06	0.00072253	0.162569188	4.394894934	2.559847661
99.075	0.000379529	2.13567E-06	0.000769383	0.173111239	4.394894971	2.559847661
99.08	0.000583063	1.0991E-06	0.000560699	0.126157203	4.394895057	2.559847661
99.085	0.001131327	-1.7008E-06	-1.96894E-06	-0.000443012	4.39489538	2.559847661
99.09	0.001169131	-1.92172E-06	-4.62031E-05	-0.010395703	4.394895726	2.559847661
99.095	0.00138285	-3.01947E-06	-0.00026694	-0.06006143	4.394896209	2.559847661
99.1	0.001832057	-5.33001E-06	-0.00073117	-0.164513333	4.394897057	2.559847661
99.105	0.001572135	-4.05955E-06	-0.000474585	-0.106781631	4.394897682	2.559847661
99.11	0.001134276	-1.86749E-06	-3.19476E-05	-0.007188214	4.394898007	2.559847661
99.115	0.000949871	-9.62412E-07	0.000150789	0.033927525	4.394898235	2.559847661
99.12	0.000303972	2.27039E-06	0.000803386	0.18076175	4.394898258	2.559847661
99.125	-0.000675009	7.20831E-06	0.001799884	0.404973998	4.394898374	2.559847661
99.13	-0.001452863	1.11379E-05	0.002592658	0.58334798	4.394898907	2.559847661
99.135	-0.002392284	1.58834E-05	0.003549744	0.798692313	4.394900354	2.559847661
99.14	-0.003514361	2.15712E-05	0.004696486	1.056709278	4.394903475	2.559847661
99.145	-0.004283507	2.54859E-05	0.005485488	1.234234817	4.394908112	2.559847661
99.15	-0.004911086	2.86806E-05	0.006129257	1.379082741	4.394914208	2.559847661
99.155	-0.005517196	3.17747E-05	0.006752619	1.519339232	4.394921902	2.559847661
99.16	-0.005817228	3.33221E-05	0.007064346	1.589477752	4.394930454	2.559847661
99.165	-0.006158934	3.50781E-05	0.007418045	1.669060174	4.394940041	2.559847661
99.17	-0.006318413	3.59271E-05	0.007589026	1.707530798	4.394950132	2.559847661
99.175	-0.005801577	3.33448E-05	0.007067537	1.590195746	4.394958638	2.559847661
99.18	-0.005433664	3.14943E-05	0.006693907	1.506129057	4.3949661	2.559847661
99.185	-0.00528059	3.07418E-05	0.006541998	1.471949581	4.394973148	2.559847661
99.19	-0.004680182	2.77213E-05	0.005932287	1.33476455	4.394978684	2.559847661
99.195	-0.004351138	2.60565E-05	0.005596298	1.259167153	4.394983469	2.559847661
99.2	-0.004343703	2.60352E-05	0.005591984	1.258196366	4.394988238	2.559847661
99.205	-0.003949314	2.40607E-05	0.00519355	1.168548776	4.39499218	2.559847661
99.21	-0.003574134	2.21768E-05	0.004813452	1.083026789	4.394995408	2.559847661
99.215	-0.003066124	1.96297E-05	0.004299611	0.967412423	4.394997784	2.559847661
99.22	-0.00216793	1.50956E-05	0.003385136	0.76165551	4.394998972	2.559847661
99.225	-0.001520582	1.18215E-05	0.002724957	0.613115365	4.394999557	2.559847661
99.23	-0.000687015	7.61223E-06	0.001876434	0.422197732	4.394999676	2.559847661
99.235	0.000433922	1.92251E-06	0.000729815	0.16420848	4.394999724	2.559847661
99.24	0.000761202	2.35759E-07	0.000389971	0.087743375	4.39499987	2.559847661
99.245	0.000806729	1.89834E-09	0.000342855	0.077142422	4.395000035	2.559847661
99.25	0.001371585	-2.86013E-06	-0.000233697	-0.052581842	4.39500051	2.559847661
99.255	0.001877207	-5.43794E-06	-0.000752854	-0.16939222	4.395001401	2.559847661
99.26	0.002231823	-7.25084E-06	-0.001117057	-0.251337911	4.39500266	2.559847661
99.265	0.002563987	-8.95663E-06	-0.00145971	-0.328434662	4.395004321	2.559847661
99.27	0.002575412	-9.04215E-06	-0.001476691	-0.332255427	4.395005997	2.559847661
99.275	0.002415037	-8.25019E-06	-0.001316744	-0.296267433	4.395007472	2.559847661
99.28	0.002211495	-7.23831E-06	-0.001112402	-0.250290392	4.395008708	2.559847661
99.285	0.00181943	-5.27031E-06	-0.000715028	-0.160881237	4.395009544	2.559847661
99.29	0.00129252	-2.61255E-06	-0.000178482	-0.040158474	4.395009966	2.559847661
99.295	0.000711777	3.22614E-07	0.000413936	0.093135697	4.395010095	2.559847661
99.3	-3.97044E-05	4.12632E-06	0.001181469	0.265830588	4.395010095	2.559847661
99.305	-0.000976539	8.88551E-06	0.002141516	0.481841122	4.395010336	2.559847661
99.31	-0.001492487	1.15343E-05	0.002675705	0.602033699	4.395010899	2.559847661
99.315	-0.001425471	1.12214E-05	0.002612508	0.587814353	4.395011412	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
99.32	-0.001577129	1.20036E-05	0.002770345	0.623327634	4.395012041	2.559847661
99.325	-0.001680299	1.25548E-05	0.002881477	0.648332267	4.395012755	2.559847661
99.33	-0.001247801	1.03839E-05	0.002443056	0.549687693	4.395013148	2.559847661
99.335	-0.00114393	9.85924E-06	0.002337117	0.525851252	4.395013479	2.559847661
99.34	-0.001157846	9.9465E-06	0.002354741	0.529816653	4.395013818	2.559847661
99.345	-0.000644956	7.35804E-06	0.001832119	0.412226828	4.395013923	2.559847661
99.35	-0.00052497	6.73851E-06	0.001707073	0.384091406	4.395013993	2.559847661
99.355	-0.000733077	7.79798E-06	0.001921045	0.432235021	4.395014128	2.559847661
99.36	-0.000458164	6.4164E-06	0.001642031	0.369456883	4.395014181	2.559847661
99.365	-0.000178117	4.99499E-06	0.001355115	0.304900956	4.39501419	2.559847661
99.37	1.68453E-05	4.00742E-06	0.00115579	0.260052816	4.39501419	2.559847661
99.375	0.000407164	2.02769E-06	0.000756258	0.170158009	4.395014231	2.559847661
99.38	0.000794186	5.77914E-08	0.000358765	0.080722106	4.395014391	2.559847661
99.385	0.001248185	-2.25765E-06	-0.000108381	-0.024385816	4.395014785	2.559847661
99.39	0.001478715	-3.4529E-06	-0.000349497	-0.078636729	4.395015337	2.559847661
99.395	0.001410115	-3.12511E-06	-0.000283292	-0.063740734	4.39501584	2.559847661
99.4	0.001585055	-4.02638E-06	-0.000465177	-0.104664768	4.395016475	2.559847661
99.405	0.001616681	-4.21117E-06	-0.000502397	-0.113039428	4.395017135	2.559847661
99.41	0.001447084	-3.36313E-06	-0.000331125	-0.074503117	4.395017665	2.559847661
99.415	0.001712537	-4.71242E-06	-0.000603556	-0.135800064	4.395018406	2.559847661
99.42	0.002020765	-6.28667E-06	-0.000921071	-0.207241078	4.395019438	2.559847661
99.425	0.002461734	-8.5243E-06	-0.001372327	-0.308773682	4.39502097	2.559847661
99.43	0.003434272	-1.34665E-05	-0.002365492	-0.532235665	4.39502395	2.559847661
99.435	0.004108688	-1.69191E-05	-0.003058772	-0.688223777	4.395028217	2.559847661
99.44	0.004655482	-1.97114E-05	-0.00361938	-0.814360596	4.395033695	2.559847661
99.445	0.005896059	-2.60227E-05	-0.0048862	-1.099395107	4.395042481	2.559847661
99.45	0.007221153	-3.27966E-05	-0.006245403	-1.405215704	4.39505566	2.559847661
99.455	0.008030902	-3.69822E-05	-0.007085026	-1.594130815	4.395071961	2.559847661
99.46	0.008223771	-3.8049E-05	-0.007299007	-1.642276561	4.395089054	2.559847661
99.465	0.008081185	-3.7404E-05	-0.00716872	-1.612962059	4.395105559	2.559847661
99.47	0.008174015	-3.79513E-05	-0.007279271	-1.637836069	4.395122446	2.559847661
99.475	0.007881194	-3.65646E-05	-0.006999204	-1.574820788	4.395138145	2.559847661
99.48	0.006933379	-3.18463E-05	-0.006046563	-1.360476679	4.395150294	2.559847661
99.485	0.006225691	-2.83305E-05	-0.00533696	-1.200816009	4.39516009	2.559847661
99.49	0.005345926	-2.39584E-05	-0.004454752	-1.002319267	4.395167313	2.559847661
99.495	0.003835539	-1.63833E-05	-0.002926884	-0.658548931	4.395171032	2.559847661
99.5	0.002297858	-8.65567E-06	-0.001369034	-0.308032604	4.395172366	2.559847661
99.505	0.000450898	6.37341E-07	0.000503407	0.113266597	4.395172418	2.559847661
99.51	-0.001955224	1.2783E-05	0.002949052	0.663536786	4.395173384	2.559847661
99.515	-0.004402862	2.51703E-05	0.005441625	1.224365592	4.395178283	2.559847661
99.52	-0.006541475	3.60221E-05	0.007623788	1.715352275	4.395189098	2.559847661
99.525	-0.007835196	4.26104E-05	0.008947991	2.013298001	4.395204614	2.559847661
99.53	-0.008579519	4.6393E-05	0.009708052	2.18431168	4.395223218	2.559847661
99.535	-0.009877552	5.29641E-05	0.011028068	2.481315383	4.395247877	2.559847661
99.54	-0.011508684	6.12401E-05	0.012689916	2.855231112	4.395281352	2.559847661
99.545	-0.013029292	6.8968E-05	0.014241064	3.204239449	4.395324258	2.559847661
99.55	-0.014531981	7.6619E-05	0.015776158	3.549635464	4.395377632	2.559847661
99.555	-0.015552427	8.18384E-05	0.016822251	3.785006405	4.395438764	2.559847661
99.56	-0.016372403	8.6028E-05	0.017660457	3.973602811	4.395506513	2.559847661
99.565	-0.017579209	9.21807E-05	0.018891125	4.250503126	4.395584617	2.559847661
99.57	-0.018528056	9.70469E-05	0.019864206	4.469446265	4.39567138	2.559847661
99.575	-0.019046769	9.97306E-05	0.02040076	4.590171061	4.39576307	2.559847661
99.58	-0.019570159	0.000102433	0.020940893	4.711700846	4.395859867	2.559847661
99.585	-0.02005435	0.000104936	0.021441204	4.824270842	4.395961514	2.559847661
99.59	-0.020632999	0.000107919	0.022037474	4.958431654	4.396069111	2.559847661
99.595	-0.021021013	0.000109951	0.022443505	5.049788516	4.396180793	2.559847661
99.6	-0.020903707	0.000109415	0.022335169	5.025413125	4.396291232	2.559847661
99.605	-0.021112171	0.000110513	0.022555718	5.075036444	4.396403885	2.559847661
99.61	-0.021516087	0.000112625	0.022977781	5.170000693	4.396520889	2.559847661
99.615	-0.021028398	0.000110231	0.022494422	5.061244948	4.39663265	2.559847661
99.62	-0.0201976	0.000106071	0.021654537	4.872270791	4.396735754	2.559847661
99.625	-0.01966633	0.000103423	0.021119898	4.751976956	4.396833505	2.559847661
99.63	-0.018724275	9.86928E-05	0.020165529	4.537243993	4.396922116	2.559847661
99.635	-0.017611752	9.30621E-05	0.019029752	4.281694191	4.397000509	2.559847661
99.64	-0.017737384	9.36786E-05	0.019154483	4.309758619	4.397080025	2.559847661
99.645	-0.018992921	0.000100057	0.020442193	4.599493385	4.397171197	2.559847661
99.65	-0.019735384	0.000103893	0.021216341	4.773676634	4.397269636	2.559847661
99.655	-0.019244622	0.000101503	0.020733796	4.665104141	4.39736324	2.559847661
99.66	-0.017558275	9.30473E-05	0.019026858	4.281043097	4.397441158	2.559847661
99.665	-0.015027909	8.02638E-05	0.016449732	3.701189663	4.397498237	2.559847661
99.67	-0.013472746	7.23627E-05	0.014857965	3.343042203	4.397544113	2.559847661
99.675	-0.013257833	7.12802E-05	0.014639946	3.293987844	4.397588538	2.559847661
99.68	-0.011851662	6.42083E-05	0.013215946	2.973587831	4.397624038	2.559847661
99.685	-0.009106768	5.02986E-05	0.010416798	2.34377955	4.397644999	2.559847661
99.69	-0.007643921	4.28203E-05	0.008912778	2.005374995	4.397659766	2.559847661
99.695	-0.007459317	4.18423E-05	0.008716148	1.961133304	4.397673829	2.559847661
99.7	-0.00658175	3.73826E-05	0.007819558	1.759400554	4.397684778	2.559847661
99.705	-0.00515372	3.00961E-05	0.006355148	1.42990831	4.397691491	2.559847661
99.71	-0.004907506	2.87559E-05	0.006086331	1.369424543	4.397697578	2.559847661
99.715	-0.00595264	3.3988E-05	0.007142769	1.607123077	4.397706533	2.559847661
99.72	-0.00649206	3.67065E-05	0.007691501	1.730587662	4.397717186	2.559847661
99.725	-0.006208091	3.52339E-05	0.007394095	1.663671432	4.397726926	2.559847661
99.73	-0.006719005	3.7761E-05	0.007904324	1.778472882	4.397738336	2.559847661
99.735	-0.00788469	4.36399E-05	0.009090535	2.045370373	4.397754049	2.559847661
99.74	-0.008202957	4.52484E-05	0.009414985	2.118371544	4.397771055	2.559847661
99.745	-0.008277515	4.55913E-05	0.009484163	2.13393659	4.397788372	2.559847661
99.75	-0.009322096	5.08436E-05	0.010543386	2.372261798	4.397810336	2.559847661
99.755	-0.010395093	5.62772E-05	0.011638781	2.618725697	4.397837647	2.559847661
99.76	-0.010721637	5.79313E-05	0.011972184	2.693741297	4.3978667	2.559847661
99.765	-0.011403936	6.13665E-05	0.012664441	2.849499169	4.397899569	2.559847661
99.77	-0.012523297	6.70377E-05	0.013807009	3.10657709	4.397939207	2.559847661
99.775	-0.012997895	6.9462E-05	0.014295291	3.216440527	4.397981907	2.559847661
99.78	-0.013336451	7.11803E-05	0.014641363	3.294306726	4.398026859	2.559847661
99.785	-0.013923285	7.41646E-05	0.015242281	3.429513282	4.398075855	2.559847661
99.79	-0.013924407	7.41889E-05	0.015246916	3.430556134	4.398124859	2.559847661
99.795	-0.013955263	7.43346E-05	0.015276345	3.437177692	4.39817408	2.559847661
99.8	-0.01476576	7.84325E-05	0.016101511	3.622840005	4.398229185	2.559847661
99.805	-0.015499468	8.21688E-05	0.016853543	3.79204714	4.398289902	2.559847661
99.81	-0.015964457	8.4548E-05	0.017332332	3.899774794	4.398354316	2.559847661
99.815	-0.016257906	8.60712E-05	0.017638827	3.968736128	4.398421121	2.559847661
99.82	-0.015709773	8.33375E-05	0.01708676	3.844521102	4.398483496	2.559847661
99.825	-0.014756402	7.85153E-05	0.016113244	3.625479938	4.398538531	2.559847661
99.83	-0.014569287	7.75497E-05	0.015918386	3.581636924	4.398592179	2.559847661
99.835	-0.015038571	7.99342E-05	0.016399939	3.689986167	4.398649339	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
99.84	-0.014886295	7.92052E-05	0.016252673	3.656851474	4.398705347	2.559847661
99.845	-0.013546232	7.24442E-05	0.014888117	3.349826289	4.398751725	2.559847661
99.85	-0.01234444	6.63312E-05	0.01365506	3.0723886	4.398790239	2.559847661
99.855	-0.012392724	6.65382E-05	0.013697042	3.081834496	4.398829055	2.559847661
99.86	-0.012958515	6.94034E-05	0.014275622	3.21201501	4.398871496	2.559847661
99.865	-0.012884687	6.90612E-05	0.014206475	3.196456902	4.398913454	2.559847661
99.87	-0.011749506	6.32381E-05	0.013049475	2.936131847	4.398948346	2.559847661
99.875	-0.010897652	5.89772E-05	0.012172311	2.738769863	4.398978361	2.559847661
99.88	-0.011654261	6.27831E-05	0.012940869	2.911695574	4.399012689	2.559847661
99.885	-0.011958087	6.43625E-05	0.013259684	2.983428934	4.39904883	2.559847661
99.89	-0.010538678	5.71923E-05	0.011812554	2.657824652	4.3990769	2.559847661
99.895	-0.009790406	5.33614E-05	0.011040504	2.484113327	4.399101126	2.559847661
99.9	-0.010151858	5.51683E-05	0.01140542	2.566219594	4.399127173	2.559847661
99.905	-0.010272709	5.57782E-05	0.011528579	2.593930172	4.399153845	2.559847661
99.91	-0.010388248	5.6364E-05	0.011646859	2.620543353	4.399181119	2.559847661
99.915	-0.010109969	5.49657E-05	0.011364473	2.557006484	4.399206952	2.559847661
99.92	-0.009439358	5.15549E-05	0.010676511	2.402215083	4.399229472	2.559847661
99.925	-0.009530383	5.19874E-05	0.010764004	2.421900842	4.399252428	2.559847661
99.93	-0.009735893	5.30162E-05	0.010971772	2.468648804	4.399276385	2.559847661
99.935	-0.009931783	5.39806E-05	0.011166513	2.512465314	4.399301315	2.559847661
99.94	-0.011033801	5.95423E-05	0.012289282	2.76508837	4.399332085	2.559847661
99.945	-0.011901424	6.39514E-05	0.013179036	2.965283166	4.399367884	2.559847661
99.95	-0.012427517	6.6614E-05	0.013716204	3.08614594	4.399406919	2.559847661
99.955	-0.013899519	7.40711E-05	0.015220158	3.424535514	4.399455747	2.559847661
99.96	-0.015232672	8.08722E-05	0.016591164	3.733011813	4.399514392	2.559847661
99.965	-0.015722562	8.34057E-05	0.017101745	3.847892677	4.399576869	2.559847661
99.97	-0.016247008	8.61065E-05	0.017645927	3.97033362	4.399643584	2.559847661
99.975	-0.016606417	8.79778E-05	0.018022437	4.055048326	4.399713283	2.559847661
99.98	-0.017009878	9.00646E-05	0.018442258	4.149507981	4.39978641	2.559847661
99.985	-0.017715493	9.37005E-05	0.019173599	4.314059705	4.39986573	2.559847661
99.99	-0.017658242	9.34874E-05	0.019130118	4.304276498	4.399944538	2.559847661
99.995	-0.017531282	9.28905E-05	0.019009587	4.277157093	4.400022217	2.559847661
100	-0.01836441	9.7174E-05	0.019872138	4.471231153	4.400107455	2.559847661
100.005	-0.018315416	9.7039E-05	0.019843872	4.464871102	4.400192238	2.559847661
100.01	-0.017026608	9.05927E-05	0.018542404	4.172040896	4.400265509	2.559847661
100.015	-0.016551205	8.82354E-05	0.018066648	4.064995725	4.400334745	2.559847661
100.02	-0.016154771	8.63159E-05	0.01767932	3.977847081	4.400400705	2.559847661
100.025	-0.014561504	7.83239E-05	0.016067155	3.61510983	4.400454295	2.559847661
100.03	-0.013538843	7.31785E-05	0.015029671	3.381675888	4.400500623	2.559847661
100.035	-0.013243296	7.1749E-05	0.014741496	3.316836534	4.40054495	2.559847661
100.04	-0.011687949	6.39588E-05	0.013171504	2.963588497	4.400579476	2.559847661
100.045	-0.009754973	5.42042E-05	0.011206683	2.521503755	4.400603527	2.559847661
100.05	-0.00889342	4.9865E-05	0.010333017	2.324928863	4.400623517	2.559847661
100.055	-0.008023664	4.55101E-05	0.00945641	2.127692275	4.400639788	2.559847661
100.06	-0.006823735	3.94751E-05	0.008241973	1.85444384	4.400651557	2.559847661
100.065	-0.005847533	3.45736E-05	0.007255938	1.632585972	4.400660199	2.559847661
100.07	-0.004505611	2.78275E-05	0.005899323	1.327347673	4.40066533	2.559847661
100.075	-0.002967739	2.00662E-05	0.004340292	0.976565782	4.400667556	2.559847661
100.08	-0.001963117	1.50008E-05	0.003323138	0.747706142	4.40066853	2.559847661
100.085	-0.000811979	9.21165E-06	0.002160992	0.486223263	4.400668697	2.559847661
100.09	0.000926481	4.32849E-07	0.000399336	0.089850518	4.400668913	2.559847661
100.095	0.00236186	-6.84046E-06	-0.001059612	-0.238412739	4.400670323	2.559847661
100.1	0.003135293	-1.07578E-05	-0.001845166	-0.415162299	4.400672808	2.559847661
100.105	0.003953842	-1.48863E-05	-0.002672895	-0.601401424	4.400676759	2.559847661
100.11	0.005142262	-2.08894E-05	-0.003876169	-0.872138047	4.400683442	2.559847661
100.115	0.00645591	-2.75322E-05	-0.005207229	-1.171626636	4.400693976	2.559847661
100.12	0.00811404	-3.59251E-05	-0.006888362	-1.549881395	4.400710616	2.559847661
100.125	0.009943219	-4.52137E-05	-0.008748091	-1.96832046	4.400735604	2.559847661
100.13	0.011095295	-5.10911E-05	-0.009924417	-2.232993815	4.400766718	2.559847661
100.135	0.011975569	-5.55765E-05	-0.010821919	-2.434931684	4.400802964	2.559847661
100.14	0.013174884	-6.16805E-05	-0.012042968	-2.709667883	4.400846835	2.559847661
100.145	0.014229084	-6.70599E-05	-0.013118783	-2.951726237	4.400898006	2.559847661
100.15	0.015378226	-7.29206E-05	-0.014290547	-3.215373081	4.400957777	2.559847661
100.155	0.016404722	-7.81834E-05	-0.015342485	-3.45205923	4.401025793	2.559847661
100.16	0.016565484	-7.90557E-05	-0.015516804	-3.491280945	4.401095149	2.559847661
100.165	0.017141261	-8.19984E-05	-0.016104861	-3.623593744	4.40116941	2.559847661
100.17	0.018243946	-8.76394E-05	-0.017231352	-3.87705426	4.401253533	2.559847661
100.175	0.018217625	-8.75723E-05	-0.017216175	-3.873639433	4.401337413	2.559847661
100.18	0.018319785	-8.8109E-05	-0.017324556	-3.8980251	4.401422237	2.559847661
100.185	0.019458846	-9.39135E-05	-0.018483471	-4.158781014	4.401517937	2.559847661
100.19	0.01984225	-9.59188E-05	-0.018883589	-4.24880745	4.401617445	2.559847661
100.195	0.019943328	-9.64627E-05	-0.018992113	-4.273225381	4.401717969	2.559847661
100.2	0.02074719	-0.000100568	-0.019811171	-4.457513527	4.40182676	2.559847661
100.205	0.021185655	-0.000102838	-0.020263916	-4.55938111	4.401940199	2.559847661
100.21	0.021718186	-0.000105566	-0.020807928	-4.68178382	4.402059411	2.559847661
100.215	0.022839296	-0.000111294	-0.021950188	-4.938792295	4.40219125	2.559847661
100.22	0.023266834	-0.000113534	-0.022396817	-5.039283757	4.40232807	2.559847661
100.225	0.02324722	-0.000113488	-0.022387422	-5.037169935	4.40246466	2.559847661
100.23	0.023691445	-0.000115783	-0.022845082	-5.140143388	4.402606519	2.559847661
100.235	0.024206103	-0.00011845	-0.023376707	-5.259759111	4.402754609	2.559847661
100.24	0.024549488	-0.000120258	-0.02373709	-5.340845339	4.402906931	2.559847661
100.245	0.024661265	-0.0001209	-0.02386512	-5.369652108	4.403060642	2.559847661
100.25	0.024443377	-0.000119876	-0.023658182	-5.323091029	4.40321165	2.559847661
100.255	0.023938923	-0.000117403	-0.02315887	-5.210745796	4.403356489	2.559847661
100.26	0.022926048	-0.000112352	-0.022139221	-4.981324616	4.40348933	2.559847661
100.265	0.021670387	-0.000106055	-0.020868641	-4.695444193	4.403608019	2.559847661
100.27	0.02037366	-9.955E-05	-0.019556588	-4.400232257	4.403712928	2.559847661
100.275	0.018523725	-9.02374E-05	-0.017679262	-3.97783386	4.403799651	2.559847661
100.28	0.01639777	-7.94973E-05	-0.015515508	-3.490989392	4.40386761	2.559847661
100.285	0.014549306	-7.01405E-05	-0.013631564	-3.067101927	4.40392111	2.559847661
100.29	0.013087882	-6.2731E-05	-0.012140434	-2.731597633	4.403964403	2.559847661
100.295	0.012055635	-5.74976E-05	-0.011087593	-2.494708492	4.404001136	2.559847661
100.3	0.010809214	-5.11927E-05	-0.009819595	-2.209408841	4.404030666	2.559847661
100.305	0.009120764	-4.26284E-05	-0.008097916	-1.822031036	4.404051691	2.559847661
100.31	0.007976469	-3.67898E-05	-0.006924655	-1.558047299	4.404067772	2.559847661
100.315	0.007544607	-3.45656E-05	-0.006477777	-1.457499911	4.404082158	2.559847661
100.32	0.007193328	-3.276E-05	-0.006115066	-1.375889896	4.404095236	2.559847661
100.325	0.006968992	-3.15938E-05	-0.005880804	-1.323181012	4.404107511	2.559847661
100.33	0.007050404	-3.19782E-05	-0.005958456	-1.34065269	4.404120074	2.559847661
100.335	0.007336345	-3.34052E-05	-0.006246629	-1.405491637	4.404133677	2.559847661
100.34	0.007857685	-3.60308E-05	-0.006776785	-1.524776515	4.404149282	2.559847661
100.345	0.00855921	-3.9584E-05	-0.007494049	-1.686161059	4.404167798	2.559847661
100.35	0.009033013	-4.20002E-05	-0.007981684	-1.795878919	4.40418842	2.559847661
100.355	0.009204042	-4.28799E-05	-0.008159198	-1.835819457	4.404209831	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
100.36	0.009624224	-4.5016E-05	-0.008590207	-1.932796569	4.404233241	2.559847661
100.365	0.010148148	-4.76961E-05	-0.009130886	-2.054449342	4.40425927	2.559847661
100.37	0.010125072	-4.76138E-05	-0.009114175	-2.050689291	4.40428518	2.559847661
100.375	0.009967489	-4.68345E-05	-0.0089568	-2.015280082	4.40431029	2.559847661
100.38	0.010029278	-4.7167E-05	-0.009023944	-2.030387309	4.404335713	2.559847661
100.385	0.009905257	-4.65633E-05	-0.008902021	-2.002954693	4.40436051	2.559847661
100.39	0.00976212	-4.58557E-05	-0.008759126	-1.970803304	4.404384596	2.559847661
100.395	0.009723622	-4.56804E-05	-0.008723736	-1.962840553	4.404408492	2.559847661
100.4	0.009573316	-4.49395E-05	-0.008574126	-1.929178434	4.404431656	2.559847661
100.405	0.00956503	-4.4917E-05	-0.008569603	-1.928160715	4.404454779	2.559847661
100.41	0.009531693	-4.47804E-05	-0.008541994	-1.921948712	4.404477741	2.559847661
100.415	0.009135475	-4.28077E-05	-0.008143716	-1.832336088	4.404498834	2.559847661
100.42	0.008670554	-4.04826E-05	-0.007674381	-1.72673579	4.404517835	2.559847661
100.425	0.008063999	-3.74438E-05	-0.007061082	-1.588743363	4.40453427	2.559847661
100.43	0.007220931	-3.32001E-05	-0.006204847	-1.396090543	4.404547449	2.559847661
100.435	0.006463881	-2.93866E-05	-0.005437484	-1.223433873	4.404558009	2.559847661
100.44	0.005657497	-2.53264E-05	-0.004622116	-1.039976054	4.404566098	2.559847661
100.445	0.004783757	-2.09221E-05	-0.003737835	-0.841012799	4.404571882	2.559847661
100.45	0.00387572	-1.63519E-05	-0.002820464	-0.634604368	4.404575679	2.559847661
100.455	0.002360015	-8.708E-06	-0.001286597	-0.289484379	4.404577086	2.559847661
100.46	0.000442894	9.96855E-07	0.000659973	0.148493814	4.404577136	2.559847661
100.465	-0.001092359	8.78936E-06	0.00222228	0.500013044	4.404577437	2.559847661
100.47	-0.002391358	1.53841E-05	0.003543967	0.797392514	4.404578883	2.559847661
100.475	-0.003769795	2.23864E-05	0.004946875	1.113046858	4.404582474	2.559847661
100.48	-0.005036004	2.88348E-05	0.006238376	1.403634661	4.404588884	2.559847661
100.485	-0.00586015	3.30534E-05	0.00708307	1.593690837	4.404597564	2.559847661
100.49	-0.006202303	3.48185E-05	0.007436441	1.673199125	4.404607286	2.559847661
100.495	-0.006853838	3.8128E-05	0.008098925	1.82225819	4.404619159	2.559847661
100.5	-0.008259472	4.52723E-05	0.009528691	2.143955409	4.404636401	2.559847661
100.505	-0.009320732	5.07135E-05	0.010617279	2.388887776	4.404658358	2.559847661
100.51	-0.009262293	5.04838E-05	0.010570014	2.378253222	4.40468004	2.559847661
100.515	-0.009018919	4.92845E-05	0.010327805	2.323756132	4.404700599	2.559847661
100.52	-0.009355661	5.10207E-05	0.01067845	2.402651176	4.404722721	2.559847661
100.525	-0.00949947	5.18012E-05	0.010834723	2.43781264	4.404745528	2.559847661
100.53	-0.009035253	4.94915E-05	0.010368265	2.332859703	4.404766161	2.559847661
100.535	-0.008911681	4.8889E-05	0.010246617	2.30548891	4.404786233	2.559847661
100.54	-0.008979874	4.92793E-05	0.010325445	2.323225046	4.404806614	2.559847661
100.545	-0.008184038	4.52957E-05	0.009521163	2.14226158	4.404823542	2.559847661
100.55	-0.007404804	4.13582E-05	0.008726471	1.963455951	4.4048374	2.559847661
100.555	-0.00752567	4.19837E-05	0.008852809	1.991882024	4.404851714	2.559847661
100.56	-0.007286178	4.08171E-05	0.00861728	1.938888067	4.404865132	2.559847661
100.565	-0.006162045	3.51548E-05	0.007474915	1.681855883	4.404874728	2.559847661
100.57	-0.005355916	3.10667E-05	0.006650401	1.496340183	4.404881979	2.559847661
100.575	-0.005445062	3.15183E-05	0.006741676	1.516877074	4.404889472	2.559847661
100.58	-0.00535016	3.1075E-05	0.006652122	1.496727374	4.404896706	2.559847661
100.585	-0.004146403	2.50054E-05	0.005428345	1.221377614	4.404901052	2.559847661
100.59	-0.003381897	2.11089E-05	0.00464298	1.044670507	4.404903942	2.559847661
100.595	-0.003943656	2.39524E-05	0.005217228	1.173876405	4.404907873	2.559847661
100.6	-0.003563834	2.20734E-05	0.00483775	1.088493809	4.404911083	2.559847661
100.605	-0.002286301	1.56E-05	0.003532977	0.794919746	4.404912404	2.559847661
100.61	-0.002357099	1.59309E-05	0.003600183	0.810041115	4.404913809	2.559847661
100.615	-0.002574752	1.705E-05	0.003826179	0.860890212	4.404915484	2.559847661
100.62	-0.001951803	1.38985E-05	0.003190194	0.717793582	4.404916447	2.559847661
100.625	-0.002066977	1.44628E-05	0.003304386	0.743486791	4.404917527	2.559847661
100.63	-0.00242997	1.63109E-05	0.003677576	0.827454668	4.404919019	2.559847661
100.635	-0.00225476	1.54274E-05	0.003499136	0.787305569	4.404920304	2.559847661
100.64	-0.002606611	1.71986E-05	0.003856821	0.867784677	4.404922021	2.559847661
100.645	-0.003220349	2.03191E-05	0.004486777	1.009524716	4.404924642	2.559847661
100.65	-0.00345234	2.15093E-05	0.004727012	1.063577713	4.404927655	2.559847661
100.655	-0.00388256	2.36953E-05	0.005168194	1.162843559	4.404931465	2.559847661
100.66	-0.004495547	2.68199E-05	0.005798677	1.304702421	4.404936572	2.559847661
100.665	-0.004906597	2.89291E-05	0.006224207	1.400446518	4.404942657	2.559847661
100.67	-0.005297821	3.09343E-05	0.006628687	1.491454467	4.404949751	2.559847661
100.675	-0.005897183	3.40002E-05	0.007247005	1.630576075	4.40495854	2.559847661
100.68	-0.006363484	3.6413E-05	0.00773354	1.740046421	4.404968775	2.559847661
100.685	-0.006161641	3.54445E-05	0.007537943	1.696037101	4.40497837	2.559847661
100.69	-0.005855715	3.39283E-05	0.007231762	1.627146499	4.404987037	2.559847661
100.695	-0.005890749	3.4145E-05	0.007275527	1.636993567	4.404995807	2.559847661
100.7	-0.005510479	3.22698E-05	0.006896877	1.551797377	4.405003482	2.559847661
100.705	-0.004912304	2.92763E-05	0.006292574	1.415829082	4.40500958	2.559847661
100.71	-0.004438168	2.69158E-05	0.005816158	1.308635596	4.405014559	2.559847661
100.715	-0.003427275	2.18357E-05	0.004791111	1.077999901	4.405017527	2.559847661
100.72	-0.002552231	1.74167E-05	0.003899755	0.877444898	4.405019174	2.559847661
100.725	-0.002190647	1.56129E-05	0.003535988	0.795597397	4.405020387	2.559847661
100.73	-0.001122094	1.02418E-05	0.002453675	0.55207685	4.405020705	2.559847661
100.735	0.000119323	3.96415E-06	0.001189603	0.267660603	4.405020708	2.559847661
100.74	0.000802898	5.14622E-07	0.000495202	0.111420362	4.405020871	2.559847661
100.745	0.001915359	-5.09677E-06	-0.000634098	-0.142672154	4.405021799	2.559847661
100.75	0.003043944	-1.08143E-05	-0.001784389	-0.401487596	4.40502414	2.559847661
100.755	0.003672472	-1.39909E-05	-0.00242333	-0.545249317	4.405027549	2.559847661
100.76	0.004850968	-1.99406E-05	-0.003619723	-0.814437611	4.405033497	2.559847661
100.765	0.006233593	-2.69528E-05	-0.005029282	-1.13158838	4.405043318	2.559847661
100.77	0.007017986	-3.09414E-05	-0.005830821	-1.311934803	4.405055766	2.559847661
100.775	0.007881177	-3.53154E-05	-0.006709602	-1.509660449	4.405071464	2.559847661
100.78	0.008998533	-4.09866E-05	-0.007848696	-1.765956627	4.405091929	2.559847661
100.785	0.009945041	-4.58021E-05	-0.008815656	-1.983522593	4.405116927	2.559847661
100.79	0.010849038	-5.04025E-05	-0.009739204	-2.191320906	4.405146675	2.559847661
100.795	0.011792474	-5.5209E-05	-0.01070389	-2.408375236	4.405181821	2.559847661
100.8	0.012656766	-5.96225E-05	-0.011589496	-2.607636542	4.405222309	2.559847661
100.805	0.013452633	-6.36955E-05	-0.012406583	-2.791481136	4.405268048	2.559847661
100.81	0.014160101	-6.73308E-05	-0.013135737	-2.955540729	4.405318725	2.559847661
100.815	0.014509091	-6.9161E-05	-0.013502765	-3.038122065	4.405371931	2.559847661
100.82	0.014462251	-6.89807E-05	-0.013466318	-3.029921485	4.405424793	2.559847661
100.825	0.014481618	-6.91289E-05	-0.013496242	-3.036654382	4.405477797	2.559847661
100.83	0.014393393	-6.87428E-05	-0.013418203	-3.019095735	4.405530158	2.559847661
100.835	0.013796262	-6.57738E-05	-0.012818664	-2.884199296	4.405578263	2.559847661
100.84	0.013296519	-6.32798E-05	-0.012315151	-2.770908932	4.405622947	2.559847661
100.845	0.012989138	-6.17667E-05	-0.012009724	-2.702187856	4.405665589	2.559847661
100.85	0.012310365	-5.83735E-05	-0.011324911	-2.548105004	4.405703891	2.559847661
100.855	0.011619582	-5.49044E-05	-0.01062495	-2.390613828	4.405738015	2.559847661
100.86	0.011037685	-5.19861E-05	-0.010036258	-2.258158055	4.405768806	2.559847661
100.865	0.010302095	-4.82807E-05	-0.009288955	-2.090014922	4.405795631	2.559847661
100.87	0.009917295	-4.63385E-05	-0.008897317	-2.001896251	4.405820488	2.559847661
100.875	0.009839642	-4.59616E-05	-0.008821336	-1.984800583	4.405844958	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
100.88	0.009578581	-4.46599E-05	-0.008558888	-1.925749881	4.405868147	2.559847661
100.885	0.009376148	-4.36477E-05	-0.008354825	-1.879835591	4.405890366	2.559847661
100.89	0.009328795	-4.34207E-05	-0.008309061	-1.869538767	4.405912361	2.559847661
100.895	0.00942909	-4.39405E-05	-0.008414052	-1.893161761	4.405934832	2.559847661
100.9	0.009782394	-4.57481E-05	-0.008779096	-1.975296534	4.405959018	2.559847661
100.905	0.010098815	-4.73807E-05	-0.00910874	-2.049466395	4.405984794	2.559847661
100.91	0.010298989	-4.84304E-05	-0.009320669	-2.097150451	4.406011602	2.559847661
100.915	0.010293454	-4.84445E-05	-0.009323482	-2.09778352	4.406038381	2.559847661
100.92	0.010010053	-4.70437E-05	-0.009040583	-2.034131169	4.406063706	2.559847661
100.925	0.009965869	-4.68486E-05	-0.009001192	-2.025268284	4.406088808	2.559847661
100.93	0.009855066	-4.63321E-05	-0.008896888	-2.001799855	4.406113355	2.559847661
100.935	0.009187084	-4.29876E-05	-0.008221768	-1.84989785	4.406134687	2.559847661
100.94	0.008673235	-4.04083E-05	-0.007701853	-1.732917017	4.4061537	2.559847661
100.945	0.00818345	-3.79603E-05	-0.007208475	-1.621906771	4.406170625	2.559847661
100.95	0.007307692	-3.35476E-05	-0.006319338	-1.421851111	4.406184122	2.559847661
100.955	0.006752677	-3.07486E-05	-0.005755483	-1.294983782	4.406195647	2.559847661
100.96	0.006101012	-2.74764E-05	-0.0050964	-1.14668998	4.406205055	2.559847661
100.965	0.00490161	-2.14163E-05	-0.003876149	-0.872133521	4.406211127	2.559847661
100.97	0.004061088	-1.71569E-05	-0.003018737	-0.679215915	4.406215295	2.559847661
100.975	0.003209612	-1.28552E-05	-0.002153019	-0.484429308	4.406217899	2.559847661
100.98	0.001945935	-6.4507E-06	-0.000864493	-0.194510918	4.406218856	2.559847661
100.985	0.00115235	-2.41308E-06	-5.24015E-05	-0.011790343	4.406219191	2.559847661
100.99	0.000309255	1.8606E-06	0.000806972	0.181568612	4.406219216	2.559847661
100.995	-0.000867091	7.84269E-06	0.002009542	0.452146991	4.406219406	2.559847661
101	-0.001215578	9.64386E-06	0.002371553	0.533599515	4.406219779	2.559847661
101.005	-0.001517688	1.11761E-05	0.002679482	0.602883495	4.406220361	2.559847661
101.01	-0.002659508	1.69717E-05	0.003843991	0.864897877	4.406222149	2.559847661
101.015	-0.003221889	1.98623E-05	0.004424653	0.995546967	4.406224773	2.559847661
101.02	-0.003275055	2.01467E-05	0.004481784	1.008401363	4.406227483	2.559847661
101.025	-0.004120396	2.44346E-05	0.005342981	1.202170706	4.406231774	2.559847661
101.03	-0.004898499	2.84138E-05	0.006141989	1.381947626	4.406237839	2.559847661
101.035	-0.005000933	2.89635E-05	0.006252366	1.406782348	4.40624416	2.559847661
101.04	-0.005472794	3.13669E-05	0.006734862	1.515343863	4.40625173	2.559847661
101.045	-0.00619518	3.5059E-05	0.00747597	1.682093139	4.40626143	2.559847661
101.05	-0.006420843	3.6244E-05	0.007713803	1.735605739	4.40627185	2.559847661
101.055	-0.006556114	3.69595E-05	0.007857393	1.767913505	4.406282713	2.559847661
101.06	-0.006849567	3.84798E-05	0.008162476	1.836557146	4.406294571	2.559847661
101.065	-0.006999255	3.92795E-05	0.008322969	1.872667993	4.406306953	2.559847661
101.07	-0.006983956	3.92459E-05	0.008316062	1.871113918	4.40631928	2.559847661
101.075	-0.006709329	3.79003E-05	0.0080443	1.809967574	4.406330658	2.559847661
101.08	-0.006234566	3.55322E-05	0.007566127	1.702378584	4.406340482	2.559847661
101.085	-0.005894742	3.38431E-05	0.007225127	1.625653683	4.406349264	2.559847661
101.09	-0.005409769	3.14271E-05	0.006737448	1.515925865	4.40635666	2.559847661
101.095	-0.004520165	2.69547E-05	0.005834898	1.312852069	4.406361824	2.559847661
101.1	-0.003650348	2.25662E-05	0.004949555	1.113649791	4.406365192	2.559847661
101.105	-0.00289502	1.8754E-05	0.004180682	0.940653471	4.40636731	2.559847661
101.11	-0.00207532	1.46099E-05	0.003345116	0.752651098	4.406368399	2.559847661
101.115	-0.001380984	1.10897E-05	0.002635486	0.592984287	4.406368881	2.559847661
101.12	-0.000946973	8.88498E-06	0.002191141	0.493006642	4.406369108	2.559847661
101.125	-0.00063646	7.3106E-06	0.001873866	0.421619885	4.40636921	2.559847661
101.13	-0.000185643	5.02703E-06	0.00141373	0.31808919	4.406369219	2.559847661
101.135	0.000280491	2.65318E-06	0.000935468	0.21048019	4.406369239	2.559847661
101.14	0.000273409	2.67208E-06	0.000939445	0.211375138	4.406369258	2.559847661
101.145	0.000204227	3.02352E-06	0.001010421	0.22734481	4.406369268	2.559847661
101.15	0.00055499	1.24462E-06	0.000651716	0.146636142	4.406369346	2.559847661
101.155	0.000600156	9.96727E-07	0.000601941	0.135436762	4.406369437	2.559847661
101.16	0.000263864	2.69379E-06	0.000944666	0.21254994	4.406369455	2.559847661
101.165	0.000180875	3.11612E-06	0.001029947	0.231738108	4.406369463	2.559847661
101.17	2.92946E-06	4.01201E-06	0.001210845	0.272440029	4.406369463	2.559847661
101.175	-0.000344472	5.77651E-06	0.00156709	0.352595228	4.406369493	2.559847661
101.18	-0.000445854	6.29897E-06	0.001672562	0.376326558	4.406369543	2.559847661
101.185	-0.000642994	7.29942E-06	0.001874519	0.421766824	4.406369648	2.559847661
101.19	-0.00099346	9.08542E-06	0.002235012	0.502877651	4.406369897	2.559847661
101.195	-0.001154467	9.91784E-06	0.002403016	0.540678508	4.406370234	2.559847661
101.2	-0.001259338	1.04634E-05	0.002513123	0.565452719	4.406370635	2.559847661
101.205	-0.001339841	1.08879E-05	0.002598789	0.584727596	4.406371088	2.559847661
101.21	-0.001355732	1.09855E-05	0.002618471	0.589155928	4.406371553	2.559847661
101.215	-0.001316932	1.08072E-05	0.00258247	0.581055859	4.406371991	2.559847661
101.22	-0.001098588	9.71767E-06	0.002362426	0.531545937	4.406372296	2.559847661
101.225	-0.000906226	8.75298E-06	0.002167617	0.487713825	4.406372504	2.559847661
101.23	-0.000737643	7.9117E-06	0.001997742	0.449491962	4.406372641	2.559847661
101.235	-0.000315577	5.78347E-06	0.001568059	0.352813262	4.406372667	2.559847661
101.24	3.52588E-05	4.00433E-06	0.001208912	0.272005112	4.406372667	2.559847661
101.245	0.000230044	3.01859E-06	0.001009946	0.227237844	4.40637268	2.559847661
101.25	0.000637142	9.59195E-07	0.000594317	0.133721303	4.406372783	2.559847661
101.255	0.001100388	-1.39408E-06	0.00012022	0.027049421	4.406373089	2.559847661
101.26	0.001459332	-3.22262E-06	-0.000248042	-0.055809456	4.406373627	2.559847661
101.265	0.001812284	-5.02209E-06	-0.000610409	-0.137342074	4.406374457	2.559847661
101.27	0.002140519	-6.69907E-06	-0.000948077	-0.21331732	4.406375615	2.559847661
101.275	0.002425417	-8.1589E-06	-0.001241996	-0.279449001	4.406377102	2.559847661
101.28	0.002593277	-9.02465E-06	-0.001416291	-0.318665435	4.406378802	2.559847661
101.285	0.002855467	-1.0361E-05	-0.001685314	-0.379195656	4.406380863	2.559847661
101.29	0.00336474	-1.29545E-05	-0.002207346	-0.496652815	4.406383724	2.559847661
101.295	0.003663913	-1.4491E-05	-0.002516581	-0.566230632	4.406387117	2.559847661
101.3	0.003928823	-1.58421E-05	-0.002788494	-0.627411228	4.406391018	2.559847661
101.305	0.004575181	-1.91268E-05	-0.003449453	-0.776126822	4.406396308	2.559847661
101.31	0.005142041	-2.20183E-05	-0.00403118	-0.907015489	4.406402991	2.559847661
101.315	0.005767301	-2.51994E-05	-0.004671057	-1.050987932	4.406411398	2.559847661
101.32	0.006729323	-3.00975E-05	-0.005656088	-1.272619743	4.406422843	2.559847661
101.325	0.007398349	-3.35261E-05	-0.006345459	-1.427728236	4.406436677	2.559847661
101.33	0.007967499	-3.64429E-05	-0.006931806	-1.559656408	4.406452721	2.559847661
101.335	0.008716026	-4.028E-05	-0.007703024	-1.73318042	4.406471921	2.559847661
101.34	0.009001949	-4.17855E-05	-0.008005555	-1.801249857	4.406492402	2.559847661
101.345	0.009100232	-4.23298E-05	-0.008114944	-1.82586245	4.406513333	2.559847661
101.35	0.009309592	-4.3444E-05	-0.008338836	-1.876238166	4.406535238	2.559847661
101.355	0.009064729	-4.22645E-05	-0.00810061	-1.822637301	4.406556005	2.559847661
101.36	0.008631736	-4.01207E-05	-0.007667712	-1.725235149	4.406574836	2.559847661
101.365	0.008214988	-3.8064E-05	-0.007252475	-1.631806874	4.406591893	2.559847661
101.37	0.007333921	-3.36586E-05	-0.006363284	-1.431739009	4.406605487	2.559847661
101.375	0.006189361	-2.79066E-05	-0.005202719	-1.170611844	4.406615169	2.559847661
101.38	0.004917597	-2.15073E-05	-0.003912078	-0.880217524	4.406621281	2.559847661
101.385	0.003254846	-1.31214E-05	-0.002221579	-0.499855376	4.406623958	2.559847661
101.39	0.001352222	-3.50514E-06	-0.000284133	-0.0639299	4.40662442	2.559847661
101.395	-0.000747291	7.124E-06	0.001856093	0.417620861	4.406624562	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
101.4	-0.002883267	1.79625E-05	0.004037119	0.908351673	4.406626663	2.559847661
101.405	-0.004677596	2.70891E-05	0.005872647	1.321345502	4.406632193	2.559847661
101.41	-0.006207845	3.48868E-05	0.007440187	1.674042015	4.406641933	2.559847661
101.415	-0.00742706	4.11175E-05	0.008691759	1.955645779	4.406655874	2.559847661
101.42	-0.008358076	4.58866E-05	0.009648552	2.170924297	4.40667353	2.559847661
101.425	-0.009271684	5.05681E-05	0.010587519	2.382191797	4.406695257	2.559847661
101.43	-0.010056238	5.45995E-05	0.011394547	2.563773094	4.406720816	2.559847661
101.435	-0.010896386	5.8913E-05	0.012257174	2.75786426	4.406750824	2.559847661
101.44	-0.011723598	6.31815E-05	0.01311061	2.949887159	4.406785561	2.559847661
101.445	-0.011789715	6.3606E-05	0.013194788	2.968827385	4.406820692	2.559847661
101.45	-0.011497838	6.21968E-05	0.012910186	2.904791953	4.406854104	2.559847661
101.455	-0.011439816	6.19704E-05	0.012864477	2.894507303	4.40688718	2.559847661
101.46	-0.011052875	6.0088E-05	0.012484382	2.808985922	4.406918057	2.559847661
101.465	-0.010322503	5.64572E-05	0.011751435	2.64407285	4.406944987	2.559847661
101.47	-0.009485181	5.22802E-05	0.010908444	2.454400006	4.406967726	2.559847661
101.475	-0.008405619	4.68679E-05	0.009816565	2.208727172	4.406985583	2.559847661
101.48	-0.007457197	4.21094E-05	0.008856892	1.992800715	4.406999638	2.559847661
101.485	-0.006485313	3.72403E-05	0.007875215	1.77192342	4.407010268	2.559847661
101.49	-0.005031117	2.99209E-05	0.0064001	1.44002245	4.407016666	2.559847661
101.495	-0.003740417	2.34085E-05	0.005088188	1.144842373	4.407020202	2.559847661
101.5	-0.002704085	1.81924E-05	0.004037763	0.908496764	4.40702205	2.559847661
101.505	-0.001154483	1.03782E-05	0.002464754	0.55456976	4.407022387	2.559847661
101.51	0.000477916	2.11841E-06	0.00080279	0.180627806	4.407022444	2.559847661
101.515	0.001664843	-3.89052E-06	-0.00040579	-0.091302704	4.407023145	2.559847661
101.52	0.003041499	-1.08546E-05	-0.001805978	-0.406345075	4.407025483	2.559847661
101.525	0.004586632	-1.8693E-05	-0.003381339	-0.760801252	4.4070308	2.559847661
101.53	0.005596956	-2.38375E-05	-0.004414903	-0.993353202	4.407038717	2.559847661
101.535	0.006348357	-2.76606E-05	-0.005182824	-1.166135383	4.407048903	2.559847661
101.54	0.00728075	-3.24025E-05	-0.00613507	-1.38039082	4.407062301	2.559847661
101.545	0.008012493	-3.61413E-05	-0.006885709	-1.54928443	4.407078527	2.559847661
101.55	0.008399578	-3.81321E-05	-0.007285335	-1.639200354	4.407096358	2.559847661
101.555	0.008786779	-4.01188E-05	-0.007684113	-1.728925484	4.407115872	2.559847661
101.56	0.009121941	-4.18484E-05	-0.008031238	-1.807028499	4.407136903	2.559847661
101.565	0.009158939	-4.20699E-05	-0.008075594	-1.817008731	4.407158104	2.559847661
101.57	0.008979999	-4.11913E-05	-0.007898147	-1.777083183	4.407178485	2.559847661
101.575	0.008758925	-4.00933E-05	-0.007676407	-1.727191506	4.407197875	2.559847661
101.58	0.008527086	-3.89383E-05	-0.007443183	-1.674716066	4.407216252	2.559847661
101.585	0.008211418	-3.73568E-05	-0.00712388	-1.602873037	4.407233294	2.559847661
101.59	0.007842757	-3.55014E-05	-0.00674933	-1.518599283	4.40724884	2.559847661
101.595	0.00756483	-3.41015E-05	-0.006466767	-1.455022647	4.407263303	2.559847661
101.6	0.007313254	-3.28365E-05	-0.006211446	-1.39757524	4.407276821	2.559847661
101.605	0.006989953	-3.12067E-05	-0.005882552	-1.323574302	4.40728917	2.559847661
101.61	0.006693022	-2.97063E-05	-0.005579802	-1.255455474	4.407300492	2.559847661
101.615	0.006455619	-2.85058E-05	-0.005337587	-1.200956976	4.407311025	2.559847661
101.62	0.006268402	-2.75591E-05	-0.00514659	-1.157982676	4.407320955	2.559847661
101.625	0.006094482	-2.66798E-05	-0.004969207	-1.118071472	4.407330343	2.559847661
101.63	0.005931832	-2.58529E-05	-0.004802403	-1.080540634	4.407339236	2.559847661
101.635	0.006040476	-2.63971E-05	-0.00491231	-1.105269835	4.407348458	2.559847661
101.64	0.006311588	-2.77756E-05	-0.005190696	-1.167906644	4.407358526	2.559847661
101.645	0.006343894	-2.79496E-05	-0.005225831	-1.175811902	4.407368698	2.559847661
101.65	0.006412196	-2.82982E-05	-0.005296225	-1.191650628	4.407379089	2.559847661
101.655	0.006663837	-2.95804E-05	-0.005555133	-1.249905008	4.407390313	2.559847661
101.66	0.00675741	-3.00657E-05	-0.005653102	-1.271947997	4.407401854	2.559847661
101.665	0.006917623	-3.08814E-05	-0.005817782	-1.309000952	4.407413948	2.559847661
101.67	0.007240286	-3.25245E-05	-0.006149483	-1.38363368	4.407427197	2.559847661
101.675	0.007469546	-3.36951E-05	-0.006385767	-1.436797654	4.407441299	2.559847661
101.68	0.007902239	-3.58912E-05	-0.006828977	-1.536519929	4.407457081	2.559847661
101.685	0.008459504	-3.8728E-05	-0.007401412	-1.665317806	4.407475168	2.559847661
101.69	0.008866377	-4.08026E-05	-0.00781997	-1.759493161	4.407495037	2.559847661
101.695	0.009601357	-4.45354E-05	-0.008570468	-1.928355347	4.407518336	2.559847661
101.7	0.010476375	-4.89963E-05	-0.009465511	-2.129739973	4.407546076	2.559847661
101.705	0.010971167	-5.15369E-05	-0.009975165	-2.244412203	4.407576497	2.559847661
101.71	0.011551098	-5.45009E-05	-0.010569694	-2.378181198	4.40761022	2.559847661
101.715	0.012288109	-5.82681E-05	-0.01132518	-2.548165439	4.407648383	2.559847661
101.72	0.013021355	-6.20172E-05	-0.012076889	-2.717300104	4.407691237	2.559847661
101.725	0.014200526	-6.80343E-05	-0.013283047	-2.988685598	4.407742203	2.559847661
101.73	0.015257533	-7.34708E-05	-0.014372535	-3.233820458	4.40780104	2.559847661
101.735	0.015272619	-7.36423E-05	-0.014406018	-3.241354014	4.407859992	2.559847661
101.74	0.014902669	-7.18398E-05	-0.01404201	-3.159452296	4.407916123	2.559847661
101.745	0.014861233	-7.1698E-05	-0.014013387	-3.153011984	4.407971943	2.559847661
101.75	0.014616861	-7.05466E-05	-0.013780883	-3.10069875	4.408025942	2.559847661
101.755	0.013686211	-6.5919E-05	-0.012846734	-2.890515145	4.408073283	2.559847661
101.76	0.012484563	-5.98984E-05	-0.011631849	-2.617166032	4.408112676	2.559847661
101.765	0.011505152	-5.49947E-05	-0.010642712	-2.394610194	4.408146131	2.559847661
101.77	0.010441578	-4.96735E-05	-0.009569738	-2.153190946	4.408173687	2.559847661
101.775	0.008934085	-4.21014E-05	-0.008043502	-1.809787957	4.40819386	2.559847661
101.78	0.007271271	-3.37298E-05	-0.006356939	-1.43031123	4.408207223	2.559847661
101.785	0.005484506	-2.47275E-05	-0.004544249	-1.022456036	4.408214825	2.559847661
101.79	0.003226703	-1.33273E-05	-0.002250082	-0.506268557	4.408217457	2.559847661
101.795	0.000990924	-2.00453E-06	2.70689E-05	0.006090511	4.408217705	2.559847661
101.8	-0.000489504	5.50805E-06	0.001537162	0.345861434	4.408217766	2.559847661
101.805	-0.001614115	1.12061E-05	0.002682106	0.603473949	4.408218424	2.559847661
101.81	-0.002789921	1.71589E-05	0.003877877	0.872522311	4.408220391	2.559847661
101.815	-0.00390528	2.28012E-05	0.005010932	1.127459763	4.408224246	2.559847661
101.82	-0.005391625	3.03203E-05	0.00652036	1.467080977	4.408231593	2.559847661
101.825	-0.006955395	3.82602E-05	0.008113618	1.825564025	4.40824382	2.559847661
101.83	-0.007539973	4.12494E-05	0.008713274	1.96048668	4.408258189	2.559847661
101.835	-0.0079117	4.31256E-05	0.009089595	2.045158881	4.408274009	2.559847661
101.84	-0.009012667	4.86941E-05	0.010206346	2.296427819	4.408294539	2.559847661
101.845	-0.009861832	5.30113E-05	0.011071925	2.491183231	4.408319119	2.559847661
101.85	-0.010210443	5.47826E-05	0.01142701	2.571077236	4.408345468	2.559847661
101.855	-0.010805623	5.77919E-05	0.012030202	2.706795479	4.408374979	2.559847661
101.86	-0.011479441	6.12084E-05	0.012714892	2.860850811	4.408408284	2.559847661
101.865	-0.011999551	6.38516E-05	0.013244538	2.980021064	4.408444676	2.559847661
101.87	-0.012286762	6.53175E-05	0.013537633	3.045967351	4.408482831	2.559847661
101.875	-0.012367847	6.573E-05	0.013620079	3.064517783	4.408521491	2.559847661
101.88	-0.012700665	6.74142E-05	0.013956731	3.14026448	4.40856226	2.559847661
101.885	-0.012826687	6.80653E-05	0.014086662	3.16949894	4.408603842	2.559847661
101.89	-0.012454733	6.61792E-05	0.013705745	3.083792605	4.408643048	2.559847661
101.895	-0.012557434	6.66811E-05	0.013807135	3.106605289	4.408682902	2.559847661
101.9	-0.012719226	6.75037E-05	0.013973244	3.14397984	4.40872379	2.559847661
101.905	-0.012176306	6.47489E-05	0.01341694	3.018811388	4.408761262	2.559847661
101.91	-0.011947724	6.35608E-05	0.013177068	2.964840372	4.408797341	2.559847661
101.915	-0.01199288	6.37717E-05	0.013219673	2.974426423	4.408833692	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
101.92	-0.011497138	6.12391E-05	0.012708394	2.85938863	4.4088671	2.559847661
101.925	-0.011221616	5.97972E-05	0.012417356	2.793905198	4.408898927	2.559847661
101.93	-0.011365175	6.04805E-05	0.012555348	2.824953396	4.408931573	2.559847661
101.935	-0.011349219	6.03552E-05	0.01253004	2.819258928	4.408964127	2.559847661
101.94	-0.011567594	6.14031E-05	0.01274168	2.866878034	4.408997946	2.559847661
101.945	-0.012095887	6.40248E-05	0.013271038	2.985983568	4.409034925	2.559847661
101.95	-0.012574857	6.63973E-05	0.013749998	3.093749493	4.40907489	2.559847661
101.955	-0.013285809	6.99351E-05	0.014460583	3.253631218	4.409119502	2.559847661
101.96	-0.014394277	7.54887E-05	0.015570356	3.503330027	4.409171869	2.559847661
101.965	-0.015654147	8.18207E-05	0.016835326	3.787948386	4.409233803	2.559847661
101.97	-0.016879897	8.79841E-05	0.01806626	4.064908579	4.409305817	2.559847661
101.975	-0.01827719	9.50118E-05	0.019469362	4.380606505	4.409390247	2.559847661
101.98	-0.020146379	0.000104439	0.021350837	4.803938215	4.409034925	2.559847661
101.985	-0.022006077	0.000113844	0.02322698	5.22607044	4.409615223	2.559847661
101.99	-0.023503116	0.000121415	0.024736747	5.565767968	4.409754836	2.559847661
101.995	-0.025244194	0.000130219	0.026491859	5.960668322	4.4099159	2.559847661
102	-0.027121168	0.000139735	0.028375939	6.384586272	4.410101806	2.559847661
102.005	-0.028631977	0.000147406	0.029893509	6.726039577	4.410309001	2.559847661
102.01	-0.030297075	0.000155859	0.031565095	7.102146427	4.410540995	2.559847661
102.015	-0.032089129	0.00016498	0.033368138	7.507831002	4.410801246	2.559847661
102.02	-0.033449907	0.000171936	0.03474283	7.817136812	4.411084037	2.559847661
102.025	-0.034497893	0.000177319	0.035806326	8.056423242	4.411384825	2.559847661
102.03	-0.034947791	0.000179692	0.036274976	8.161869679	4.41169351	2.559847661
102.035	-0.034472512	0.000177377	0.035807612	8.056712608	4.411993856	2.559847661
102.04	-0.033372145	0.000171886	0.034698983	7.807271247	4.412275334	2.559847661
102.045	-0.031241732	0.000161165	0.032535846	7.320565371	4.412522021	2.559847661
102.05	-0.028137304	0.000145447	0.029367314	6.607645746	4.412722118	2.559847661
102.055	-0.025732208	0.000133179	0.026896542	6.051721963	4.41288947	2.559847661
102.06	-0.02549621	0.000131837	0.026626881	5.991048181	4.413053766	2.559847661
102.065	-0.028382204	0.000146305	0.029546997	6.648074354	4.413257361	2.559847661
102.07	-0.033955963	0.000173921	0.035113096	7.900446516	4.413548774	2.559847661
102.075	-0.038902789	0.000198971	0.040081703	9.018383077	4.413931279	2.559847661
102.08	-0.041081188	0.000210183	0.042293976	9.51614469	4.414357821	2.559847661
102.085	-0.041006615	0.000209956	0.042244049	9.504910983	4.414782816	2.559847661
102.09	-0.04023655	0.000206144	0.041474284	9.331713828	4.415191999	2.559847661
102.095	-0.040298513	0.00020651	0.041548251	9.348356582	4.415602443	2.559847661
102.1	-0.040874532	0.000209501	0.042152252	9.484256762	4.416024704	2.559847661
102.105	-0.040829962	0.000209348	0.042121403	9.477315738	4.416446045	2.559847661
102.11	-0.04138865	0.00021222	0.042695854	9.606567064	4.416878996	2.559847661
102.115	-0.043128706	0.000221119	0.044450939	10.00146134	4.417349116	2.559847661
102.12	-0.043617032	0.000223739	0.044966724	10.11751289	4.417829942	2.559847661
102.125	-0.042396094	0.000217662	0.043739671	9.841426032	4.418284227	2.559847661
102.13	-0.041839783	0.000214893	0.043180941	9.715711791	4.418726667	2.559847661
102.135	-0.042379365	0.00021769	0.043745701	9.842782765	4.419180593	2.559847661
102.14	-0.042928957	0.000220565	0.044326207	9.973396475	4.419646368	2.559847661
102.145	-0.043353501	0.000222822	0.044781806	10.07590639	4.420121402	2.559847661
102.15	-0.043332061	0.000222837	0.044784757	10.07657037	4.420595965	2.559847661
102.155	-0.042679552	0.000219645	0.044140174	9.931539125	4.421056345	2.559847661
102.16	-0.042305864	0.000217851	0.043778003	9.850050729	4.421508697	2.559847661
102.165	-0.042090498	0.000216882	0.043582413	9.806042892	4.421956456	2.559847661
102.17	-0.041085811	0.000211925	0.042582024	9.580955434	4.422383094	2.559847661
102.175	-0.039650722	0.00020477	0.04113853	9.256169229	4.422780448	2.559847661
102.18	-0.038175329	0.000197397	0.039652042	8.921709476	4.423148782	2.559847661
102.185	-0.036957945	0.000191318	0.038426719	8.646011866	4.423493999	2.559847661
102.19	-0.036278117	0.000187977	0.037753585	8.494556523	4.423826632	2.559847661
102.195	-0.034967288	0.000181471	0.036443107	8.199699151	4.424135661	2.559847661
102.2	-0.032785323	0.000170534	0.034241241	7.704279185	4.424407327	2.559847661
102.205	-0.030842898	0.000160795	0.032281671	7.263375894	4.424647756	2.559847661
102.21	-0.028508868	0.000149089	0.02992779	6.733752738	4.424853172	2.559847661
102.215	-0.025152464	0.000132181	0.026530418	5.969344033	4.425013068	2.559847661
102.22	-0.021898405	0.000115745	0.023230849	5.226940986	4.425134268	2.559847661
102.225	-0.019140678	0.000101806	0.020434884	4.597849001	4.425226863	2.559847661
102.23	-0.01665206	8.92207E-05	0.017911927	4.030183586	4.425296946	2.559847661
102.235	-0.014552609	7.86003E-05	0.015784163	3.551436698	4.425350471	2.559847661
102.24	-0.012517841	6.83049E-05	0.013722572	3.087578769	4.425390075	2.559847661
102.245	-0.010741798	5.93023E-05	0.011920695	2.682156328	4.425419238	2.559847661
102.25	-0.009770793	5.43766E-05	0.010935147	2.46040818	4.425443366	2.559847661
102.255	-0.009136569	5.11773E-05	0.010295157	2.316410358	4.425464464	2.559847661
102.26	-0.008477494	4.78649E-05	0.009632636	2.167343139	4.425482628	2.559847661
102.265	-0.007769327	4.43151E-05	0.008922755	2.007619979	4.425497885	2.559847661
102.27	-0.006819228	3.9544E-05	0.007968823	1.79298517	4.425509637	2.559847661
102.275	-0.005826753	3.45595E-05	0.006972444	1.56879996	4.425518218	2.559847661
102.28	-0.004540728	2.80965E-05	0.00568088	1.27819799	4.425523429	2.559847661
102.285	-0.00283265	1.9479E-05	0.003959383	0.890861135	4.425525457	2.559847661
102.29	-0.001560032	1.30559E-05	0.002676695	0.602256295	4.425526072	2.559847661
102.295	-0.00017705	6.09798E-06	0.001287636	0.28971818	4.42552608	2.559847661
102.3	0.002144284	-5.62745E-06	-0.001052177	-0.236739914	4.425527242	2.559847661
102.305	0.004187757	-1.59812E-05	-0.003117221	-0.701374793	4.425531675	2.559847661
102.31	0.005870744	-2.45004E-05	-0.004815636	-1.083518104	4.425540386	2.559847661
102.315	0.00803326	-3.5458E-05	-0.006999222	-1.574824991	4.425556696	2.559847661
102.32	0.009798296	-4.44246E-05	-0.008785255	-1.976682468	4.425580961	2.559847661
102.325	0.011416615	-5.26313E-05	-0.010419277	-2.344337329	4.425613903	2.559847661
102.33	0.013766447	-6.45599E-05	-0.012793315	-2.878495964	4.425661801	2.559847661
102.335	0.015551466	-7.36644E-05	-0.014604445	-3.286000162	4.425722926	2.559847661
102.34	0.016677561	-7.94104E-05	-0.015747111	-3.543099876	4.425793224	2.559847661
102.345	0.018505958	-8.8706E-05	-0.017595058	-3.958887987	4.42587978	2.559847661
102.35	0.020418733	-9.84621E-05	-0.019533716	-4.39508611	4.425985154	2.559847661
102.355	0.021775919	-0.000105409	-0.020913696	-4.705581579	4.426105002	2.559847661
102.36	0.023145899	-0.000112416	-0.022305046	-5.018635407	4.426240403	2.559847661
102.365	0.024544383	-0.000119574	-0.023726069	-5.338365413	4.426392661	2.559847661
102.37	0.025938565	-0.000126716	-0.025143445	-5.657275197	4.426562708	2.559847661
102.375	0.027289853	-0.000133654	-0.026520018	-5.96700406	4.426750933	2.559847661
102.38	0.028226369	-0.000138501	-0.027481333	-6.183299959	4.426952299	2.559847661
102.385	0.028838467	-0.000141701	-0.028116015	-6.326103363	4.427162493	2.559847661
102.39	0.029136383	-0.000143307	-0.028434421	-6.39774462	4.427377052	2.559847661
102.395	0.029152208	-0.000143467	-0.028466186	-6.404891751	4.427591845	2.559847661
102.4	0.029390669	-0.000144738	-0.02871817	-6.461588281	4.427810165	2.559847661
102.405	0.02985154	-0.000147129	-0.029192308	-6.568269255	4.428035387	2.559847661
102.41	0.030687712	-0.000151409	-0.030040701	-6.759157648	4.428273402	2.559847661
102.415	0.03241739	-0.000160223	-0.031787465	-7.152179722	4.428539004	2.559847661
102.42	0.034477688	-0.000170748	-0.03387253	-7.621319175	4.428839441	2.559847661
102.425	0.036305867	-0.000180123	-0.035728945	-8.039012705	4.429172583	2.559847661
102.43	0.037883976	-0.000188256	-0.037338804	-8.401230801	4.429535316	2.559847661
102.435	0.038651625	-0.000192302	-0.038139585	-8.581406595	4.429912898	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
102.44	0.038727105	-0.00019283	-0.038244054	-8.604912151	4.430291956	2.559847661
102.445	0.038744067	-0.000193057	-0.038288907	-8.615004122	4.430671346	2.559847661
102.45	0.038238569	-0.000190642	-0.037801147	-8.505258017	4.431040902	2.559847661
102.455	0.037200692	-0.000185506	-0.036764306	-8.271968958	4.431390668	2.559847661
102.46	0.036434858	-0.000181729	-0.036001997	-8.100449437	4.431726181	2.559847661
102.465	0.035761654	-0.000178423	-0.03533508	-7.950393091	4.432049411	2.559847661
102.47	0.03508442	-0.000175089	-0.034662533	-7.799069987	4.432360514	2.559847661
102.475	0.034925007	-0.000174389	-0.034521244	-7.767279918	4.432668797	2.559847661
102.48	0.034255859	-0.000171149	-0.033868019	-7.620304232	4.432965379	2.559847661
102.485	0.031862106	-0.000159169	-0.0314531	-7.076947597	4.433221961	2.559847661
102.49	0.028975325	-0.000144631	-0.028525106	-6.418148787	4.433434154	2.559847661
102.495	0.026794432	-0.000133647	-0.026314552	-5.92077417	4.433615608	2.559847661
102.5	0.024549694	-0.000122346	-0.024041724	-5.409387861	4.433767932	2.559847661
102.505	0.022044081	-0.000109713	-0.021502436	-4.838048085	4.433890749	2.559847661
102.51	0.019308974	-9.59119E-05	-0.018730427	-4.214346005	4.43398498	2.559847661
102.515	0.015937023	-7.88609E-05	-0.015308395	-3.444388967	4.434049174	2.559847661
102.52	0.012819101	-6.30523E-05	-0.012138363	-2.731131683	4.434090706	2.559847661
102.525	0.01029247	-5.02307E-05	-0.009569149	-2.153058576	4.43411748	2.559847661
102.53	0.007668436	-3.69047E-05	-0.006900584	-1.552631473	4.434132343	2.559847661
102.535	0.0055981	-2.63573E-05	-0.004789649	-1.077671053	4.434140263	2.559847661
102.54	0.004169196	-1.90693E-05	-0.003331682	-0.749628358	4.434144657	2.559847661
102.545	0.002542374	-1.0783E-05	-0.001674612	-0.376787734	4.43414629	2.559847661
102.55	0.001191393	-3.88106E-06	-0.000294887	-0.066349484	4.434146649	2.559847661
102.555	1.48669E-05	2.12553E-06	0.000905492	0.203735609	4.434146649	2.559847661
102.56	-0.001591728	1.03209E-05	0.00254274	0.572116464	4.434147289	2.559847661
102.565	-0.002656264	1.57963E-05	0.003636242	0.818154395	4.434149073	2.559847661
102.57	-0.00309081	1.80609E-05	0.004088434	0.919897712	4.434151487	2.559847661
102.575	-0.004100914	2.32282E-05	0.005120047	1.152010504	4.434155738	2.559847661
102.58	-0.005290953	2.93391E-05	0.006339728	1.426438839	4.434162813	2.559847661
102.585	-0.005590613	3.09558E-05	0.006662332	1.499024687	4.434170712	2.559847661
102.59	-0.005324826	2.96847E-05	0.006405624	1.441265476	4.434177878	2.559847661
102.595	-0.005384101	3.00437E-05	0.006478142	1.457581926	4.434185205	2.559847661
102.6	-0.005645257	3.14392E-05	0.006758806	1.520731421	4.43419326	2.559847661
102.605	-0.005449113	3.05256E-05	0.006574285	1.479214228	4.434200764	2.559847661
102.61	-0.005016874	2.84041E-05	0.006145879	1.382822884	4.434207125	2.559847661
102.615	-0.004549696	2.61023E-05	0.005681152	1.278259161	4.434212357	2.559847661
102.62	-0.003863776	2.26822E-05	0.004990799	1.122929709	4.43421613	2.559847661
102.625	-0.003460327	2.06811E-05	0.004586972	1.032068609	4.434219157	2.559847661
102.63	-0.003108392	1.89533E-05	0.004238317	0.953621269	4.434221599	2.559847661
102.635	-0.002273081	1.47634E-05	0.003393045	0.763435118	4.434222904	2.559847661
102.64	-0.002049695	1.36492E-05	0.00316835	0.712878747	4.434223966	2.559847661
102.645	-0.00240049	1.54735E-05	0.003536776	0.795774546	4.434225423	2.559847661
102.65	-0.001935737	1.31828E-05	0.003074243	0.691704682	4.43422637	2.559847661
102.655	-0.001213739	9.56385E-06	0.002344417	0.527493873	4.434226742	2.559847661
102.66	-0.000747852	7.24187E-06	0.001876242	0.422154504	4.434226883	2.559847661
102.665	2.75809E-05	3.34921E-06	0.001091529	0.245594125	4.434226884	2.559847661
102.67	0.000668874	1.20714E-07	0.000440851	0.099191403	4.434226997	2.559847661
102.675	0.001241968	-2.75813E-06	-0.00013925	-0.031331246	4.434227387	2.559847661
102.68	0.001992171	-6.54929E-06	-0.000903032	-0.203182184	4.43422839	2.559847661
102.685	0.002111281	-7.1504E-06	-0.001024039	-0.230408839	4.434229516	2.559847661
102.69	0.002313374	-8.14629E-06	-0.001224717	-0.275561409	4.434230869	2.559847661
102.695	0.003140965	-1.23313E-05	-0.002067554	-0.46519972	4.434233362	2.559847661
102.7	0.003111427	-1.21969E-05	-0.002039977	-0.458994867	4.434235809	2.559847661
102.705	0.002684986	-1.00147E-05	-0.001599307	-0.359844008	4.434237631	2.559847661
102.71	0.003103786	-1.21088E-05	-0.00202223	-0.455001748	4.434240066	2.559847661
102.715	0.003371901	-1.34628E-05	-0.002295418	-0.516469066	4.434242939	2.559847661
102.72	0.003345624	-1.33109E-05	-0.002264731	-0.50956444	4.434245768	2.559847661
102.725	0.003785184	-1.55133E-05	-0.002708261	-0.609358673	4.43424939	2.559847661
102.73	0.004351258	-1.83683E-05	-0.003283036	-0.738683075	4.434254175	2.559847661
102.735	0.004965021	-2.14723E-05	-0.003907806	-0.87925645	4.434260405	2.559847661
102.74	0.005338952	-2.33753E-05	-0.004290804	-0.965430977	4.43426761	2.559847661
102.745	0.005229952	-2.28187E-05	-0.004178394	-0.940138724	4.434274523	2.559847661
102.75	0.005615842	-2.47534E-05	-0.004568127	-1.027828517	4.434282493	2.559847661
102.755	0.006142127	-2.74227E-05	-0.005105218	-1.148674027	4.434292028	2.559847661
102.76	0.005968881	-2.6539E-05	-0.004926737	-1.108515779	4.434301033	2.559847661
102.765	0.006367946	-2.85232E-05	-0.00532663	-1.198491859	4.434311282	2.559847661
102.77	0.007570777	-3.46011E-05	-0.006549202	-1.47357036	4.434325768	2.559847661
102.775	0.008437813	-3.89977E-05	-0.00743333	-1.672499143	4.434343762	2.559847661
102.78	0.009350648	-4.36218E-05	-0.008362981	-1.881670827	4.434365861	2.559847661
102.785	0.010418391	-4.90488E-05	-0.009453749	-2.127093618	4.434393294	2.559847661
102.79	0.0110143	-5.2095E-05	-0.010065862	-2.264819021	4.434423955	2.559847661
102.795	0.01147076	-5.44299E-05	-0.010534977	-2.370369775	4.43445721	2.559847661
102.8	0.011732743	-5.57857E-05	-0.010807339	-2.431651349	4.434492002	2.559847661
102.805	0.011609519	-5.51794E-05	-0.010684883	-2.404098638	4.434526067	2.559847661
102.81	0.011623857	-5.52572E-05	-0.010700599	-2.407634801	4.434560216	2.559847661
102.815	0.0116291	-5.52883E-05	-0.010706895	-2.409051285	4.434594395	2.559847661
102.82	0.011715857	-5.57191E-05	-0.010793897	-2.428626736	4.434629087	2.559847661
102.825	0.012264461	-5.84955E-05	-0.011351672	-2.554126203	4.434667103	2.559847661
102.83	0.012435728	-5.93743E-05	-0.011528139	-2.593831386	4.434706189	2.559847661
102.835	0.012441594	-5.93894E-05	-0.011531192	-2.594518268	4.434745312	2.559847661
102.84	0.013355147	-6.40029E-05	-0.012457715	-2.802985778	4.434790391	2.559847661
102.845	0.014115211	-6.78749E-05	-0.013235144	-2.977907341	4.434840747	2.559847661
102.85	0.014175035	-6.81886E-05	-0.013298114	-2.992075659	4.43489153	2.559847661
102.855	0.014749252	-7.10942E-05	-0.013881381	-3.123310736	4.434946512	2.559847661
102.86	0.015408996	-7.44585E-05	-0.014556628	-3.275241317	4.435006522	2.559847661
102.865	0.015496815	-7.49227E-05	-0.014649785	-3.296201567	4.435067218	2.559847661
102.87	0.015918677	-7.7068E-05	-0.015080303	-3.393068235	4.435131264	2.559847661
102.875	0.016403721	-7.9558E-05	-0.015579922	-3.505482376	4.435199272	2.559847661
102.88	0.016099439	-7.80532E-05	-0.015276005	-3.43710113	4.43526478	2.559847661
102.885	0.01559466	-7.55095E-05	-0.014762392	-3.321538237	4.435326245	2.559847661
102.89	0.015277549	-7.39084E-05	-0.014439148	-3.248808327	4.435385236	2.559847661
102.895	0.015030569	-7.26575E-05	-0.014186634	-3.191992568	4.435442335	2.559847661
102.9	0.015051704	-7.27656E-05	-0.014208482	-3.196908522	4.435499594	2.559847661
102.905	0.014957282	-7.23018E-05	-0.014114847	-3.175840479	4.435556137	2.559847661
102.91	0.014417154	-6.95738E-05	-0.013564266	-3.051959916	4.435608671	2.559847661
102.915	0.013995097	-6.74266E-05	-0.013130976	-2.954469614	4.435658173	2.559847661
102.92	0.013837338	-6.66182E-05	-0.012967852	-2.917766771	4.435706566	2.559847661
102.925	0.013704603	-6.59366E-05	-0.012830343	-2.886827093	4.435754035	2.559847661
102.93	0.013772343	-6.62696E-05	-0.012897598	-2.901959657	4.435801974	2.559847661
102.935	0.013870586	-6.67661E-05	-0.012997882	-2.924523512	4.4358506	2.559847661
102.94	0.013734708	-6.60747E-05	-0.012858225	-2.893100711	4.435898278	2.559847661
102.945	0.013741222	-6.60936E-05	-0.012862073	-2.893966336	4.435946	2.559847661
102.95	0.014014993	-6.74689E-05	-0.013139819	-2.956459333	4.435995644	2.559847661
102.955	0.014305297	-6.89329E-05	-0.013435443	-3.022974565	4.436047365	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
102.96	0.014648431	-7.06642E-05	-0.013784991	-3.101622983	4.436101598	2.559847661
102.965	0.015046311	-7.26731E-05	-0.014190535	-3.19287038	4.436158816	2.559847661
102.97	0.015602044	-7.54799E-05	-0.014757032	-3.320332249	4.436220339	2.559847661
102.975	0.016503375	-8.00464E-05	-0.015677915	-3.527530898	4.436289176	2.559847661
102.98	0.017315013	-8.41779E-05	-0.016506742	-3.714016943	4.43636495	2.559847661
102.985	0.017775475	-8.65346E-05	-0.016979449	-3.820376023	4.436444808	2.559847661
102.99	0.018145292	-8.84319E-05	-0.017359964	-3.905991941	4.436528024	2.559847661
102.995	0.01824413	-8.89573E-05	-0.017465341	-3.929701743	4.436612148	2.559847661
103	0.018252851	-8.90099E-05	-0.017475879	-3.932072854	4.436696353	2.559847661
103.005	0.018831918	-9.19496E-05	-0.018065383	-4.064711193	4.436785985	2.559847661
103.01	0.019420751	-9.49664E-05	-0.018670232	-4.200802256	4.436881311	2.559847661
103.015	0.019257102	-9.41742E-05	-0.018510211	-4.164797482	4.436975036	2.559847661
103.02	0.018985853	-9.28117E-05	-0.018235058	-4.102888108	4.43706614	2.559847661
103.025	0.019190885	-9.3858E-05	-0.018446374	-4.150434169	4.437159222	2.559847661
103.03	0.019472759	-9.53085E-05	-0.018738823	-4.216235134	4.437255058	2.559847661
103.035	0.01946024	-9.52714E-05	-0.01873107	-4.214490698	4.437350772	2.559847661
103.04	0.019337186	-9.46658E-05	-0.018608761	-4.186971271	4.437445278	2.559847661
103.045	0.019453582	-9.52718E-05	-0.018731159	-4.214510851	4.437540926	2.559847661
103.05	0.019625188	-9.61701E-05	-0.018911541	-4.255096668	4.437638269	2.559847661
103.055	0.019472075	-9.54292E-05	-0.018761902	-4.22142796	4.437734099	2.559847661
103.06	0.019219063	-9.41788E-05	-0.018509389	-4.164612579	4.437827454	2.559847661
103.065	0.018899275	-9.25967E-05	-0.01818994	-4.092736482	4.437917729	2.559847661
103.07	0.018147586	-8.88275E-05	-0.017429037	-3.921533275	4.438000966	2.559847661
103.075	0.017250784	-8.43102E-05	-0.016517387	-3.716412102	4.438076179	2.559847661
103.08	0.016414282	-8.00962E-05	-0.01566721	-3.525122274	4.438144274	2.559847661
103.085	0.0153313	-7.46286E-05	-0.014564479	-3.277007787	4.438203681	2.559847661
103.09	0.014383793	-6.98312E-05	-0.013597259	-3.059383237	4.438255971	2.559847661
103.095	0.013806641	-6.6915E-05	-0.013009438	-2.92712366	4.43830415	2.559847661
103.1	0.012981005	-6.27487E-05	-0.012169836	-2.738213092	4.438346738	2.559847661
103.105	0.011949812	-5.75275E-05	-0.011117958	-2.501540542	4.438382829	2.559847661
103.11	0.011143294	-5.34321E-05	-0.010293113	-2.315950316	4.438414213	2.559847661
103.115	0.010657472	-5.09534E-05	-0.009793967	-2.203642593	4.43844292	2.559847661
103.12	0.010780783	-5.15616E-05	-0.009916891	-2.231300419	4.438472294	2.559847661
103.125	0.011201952	-5.37031E-05	-0.01034934	-2.32860149	4.438504009	2.559847661
103.13	0.011292843	-5.41846E-05	-0.010446554	-2.350474628	4.438536241	2.559847661
103.135	0.011332844	-5.44038E-05	-0.010490818	-2.360434117	4.438568701	2.559847661
103.14	0.011448338	-5.50095E-05	-0.010613113	-2.387950526	4.438601827	2.559847661
103.145	0.011556671	-5.55789E-05	-0.010728064	-2.413814355	4.438635582	2.559847661
103.15	0.011910599	-5.73978E-05	-0.011095256	-2.496432704	4.438671437	2.559847661
103.155	0.01206134	-5.8202E-05	-0.01125757	-2.532953352	4.438708204	2.559847661
103.16	0.011947125	-5.76536E-05	-0.011146825	-2.508035539	4.438744279	2.559847661
103.165	0.012308231	-5.9511E-05	-0.011521785	-2.592401713	4.438782567	2.559847661
103.17	0.01259478	-6.1015E-05	-0.011825314	-2.660695731	4.438822659	2.559847661
103.175	0.01229517	-5.95454E-05	-0.011528503	-2.593913179	4.438860866	2.559847661
103.18	0.012216655	-5.91805E-05	-0.011454824	-2.577335335	4.438898587	2.559847661
103.185	0.012379046	-6.00473E-05	-0.011629896	-2.616726712	4.438937318	2.559847661
103.19	0.012298557	-5.96914E-05	-0.011558006	-2.600551259	4.438975546	2.559847661
103.195	0.012092875	-5.86987E-05	-0.011357536	-2.55544554	4.439012506	2.559847661
103.2	0.011870592	-5.76194E-05	-0.011139595	-2.506408919	4.43904812	2.559847661
103.205	0.011794506	-5.72838E-05	-0.011071831	-2.491162044	4.439083279	2.559847661
103.21	0.011554215	-5.61328E-05	-0.010839462	-2.438879042	4.43911702	2.559847661
103.215	0.010762808	-5.21863E-05	-0.010042834	-2.25963757	4.439146297	2.559847661
103.22	0.010095128	-4.88546E-05	-0.009371389	-2.108562613	4.439172054	2.559847661
103.225	0.009376836	-4.52847E-05	-0.008652732	-1.946864661	4.439194276	2.559847661
103.23	0.007872519	-3.77277E-05	-0.007131921	-1.604682154	4.43920994	2.559847661
103.235	0.006482468	-3.07247E-05	-0.005723179	-1.287715343	4.439220561	2.559847661
103.24	0.005248888	-2.45298E-05	-0.004477446	-1.007425345	4.439227524	2.559847661
103.245	0.003164924	-1.40247E-05	-0.002365955	-0.53233998	4.439230056	2.559847661
103.25	0.001025293	-3.20256E-06	-0.000191955	-0.043189925	4.439230322	2.559847661
103.255	-0.000653082	5.28428E-06	0.001512048	0.340210744	4.43923043	2.559847661
103.26	-0.002636486	1.53121E-05	0.003524488	0.79300979	4.439232186	2.559847661
103.265	-0.004772873	2.61331E-05	0.005694946	1.281362843	4.439237944	2.559847661
103.27	-0.006748028	3.61468E-05	0.00769807	1.732065766	4.439249453	2.559847661
103.275	-0.008677006	4.59361E-05	0.009650585	2.171381693	4.439268482	2.559847661
103.28	-0.010358231	5.44806E-05	0.011354119	2.554676875	4.439295599	2.559847661
103.285	-0.011812846	6.18775E-05	0.012828314	2.886370567	4.439330867	2.559847661
103.29	-0.013160964	6.87362E-05	0.01419482	3.193834562	4.439374645	2.559847661
103.295	-0.014371901	7.49017E-05	0.015422855	3.470142294	4.439426849	2.559847661
103.3	-0.015518711	8.0745E-05	0.01658639	3.73193769	4.439487717	2.559847661
103.305	-0.016486157	8.56845E-05	0.017569726	3.953188351	4.43955641	2.559847661
103.31	-0.017263232	8.96604E-05	0.01836107	4.13124072	4.439631732	2.559847661
103.315	-0.017847962	9.26667E-05	0.018959332	4.26584979	4.439712242	2.559847661
103.32	-0.017982941	9.33905E-05	0.019103354	4.298254585	4.439793975	2.559847661
103.325	-0.01808174	9.39142E-05	0.019207574	4.321704099	4.439876609	2.559847661
103.33	-0.018374093	9.54237E-05	0.019507921	4.389282181	4.439961936	2.559847661
103.335	-0.018210914	9.46288E-05	0.019347388	4.353162219	4.440045755	2.559847661
103.34	-0.017956245	9.3349E-05	0.019088935	4.295010277	4.440127245	2.559847661
103.345	-0.018095461	9.40676E-05	0.019234059	4.327663386	4.440210004	2.559847661
103.35	-0.017853714	9.28652E-05	0.018991228	4.273026357	4.440290567	2.559847661
103.355	-0.017478852	9.09648E-05	0.01860752	4.186692099	4.440367782	2.559847661
103.36	-0.017739456	9.22814E-05	0.018873429	4.246521572	4.440447316	2.559847661
103.365	-0.017973911	9.34852E-05	0.019116527	4.30121849	4.440528967	2.559847661
103.37	-0.018013933	9.37014E-05	0.019160184	4.311041504	4.440610982	2.559847661
103.375	-0.018266567	9.5003E-05	0.019422981	4.370170697	4.440695314	2.559847661
103.38	-0.018055667	9.39748E-05	0.019215313	4.323445354	4.440777709	2.559847661
103.385	-0.017188461	8.96081E-05	0.018333645	4.125070106	4.44085238	2.559847661
103.39	-0.016342077	8.53264E-05	0.017469423	3.930620118	4.440919878	2.559847661
103.395	-0.015620083	8.16645E-05	0.01673055	3.764373736	4.440981543	2.559847661
103.4	-0.015172804	7.93838E-05	0.016270432	3.66084723	4.441039728	2.559847661
103.405	-0.01509646	7.89879E-05	0.016190582	3.642880924	4.441097328	2.559847661
103.41	-0.01475063	7.72324E-05	0.01583649	3.563210234	4.44115232	2.559847661
103.415	-0.014435452	7.5607E-05	0.015508674	3.489451658	4.441204987	2.559847661
103.42	-0.015125435	7.9068E-05	0.016207585	3.64670666	4.441262808	2.559847661
103.425	-0.016077604	8.38906E-05	0.017181122	3.865752461	4.441328139	2.559847661
103.43	-0.016485061	8.59542E-05	0.0175976	3.959460017	4.441396824	2.559847661
103.435	-0.017367339	9.0402E-05	0.01849502	4.161379541	4.441473057	2.559847661
103.44	-0.018948883	9.84142E-05	0.020102904	4.523153356	4.441563806	2.559847661
103.445	-0.020301944	0.000105291	0.021470775	4.830924436	4.441667978	2.559847661
103.45	-0.021702887	0.00011241	0.022886384	5.149436512	4.441787023	2.559847661
103.455	-0.023137251	0.000119721	0.024339789	5.476452547	4.441922323	2.559847661
103.46	-0.023753026	0.000122889	0.024969301	5.618092642	4.442064921	2.559847661
103.465	-0.024473854	0.000126547	0.025696148	5.781633374	4.442216306	2.559847661
103.47	-0.026512668	0.000136879	0.027748711	6.243459877	4.442393963	2.559847661
103.475	-0.029227581	0.000150684	0.03048954	6.860146393	4.442609867	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
103.48	-0.031737701	0.0001635	0.033032724	7.432362863	4.442864449	2.559847661
103.485	-0.032987425	0.000169971	0.034316195	7.721143831	4.443139474	2.559847661
103.49	-0.032592158	0.00016808	0.033934287	7.635214617	4.443407948	2.559847661
103.495	-0.032933997	0.000169858	0.034293489	7.716034987	4.443682083	2.559847661
103.5	-0.034849843	0.000179653	0.036235987	8.153097089	4.44398904	2.559847661
103.505	-0.03525624	0.000181871	0.036673284	8.251488964	4.444303198	2.559847661
103.51	-0.033999296	0.000175606	0.035408397	7.966889375	4.444595355	2.559847661
103.515	-0.034279941	0.000177085	0.035707087	8.034094519	4.444892355	2.559847661
103.52	-0.035113767	0.000181441	0.036586595	8.231983767	4.445203978	2.559847661
103.525	-0.033816801	0.00017502	0.035290087	7.940269506	4.445493007	2.559847661
103.53	-0.032360493	0.000167722	0.033817368	7.608907861	4.445757678	2.559847661
103.535	-0.032178938	0.000166907	0.033652865	7.57189473	4.446019387	2.559847661
103.54	-0.030510952	0.000158608	0.031979346	7.195352769	4.446254669	2.559847661
103.545	-0.027775653	0.000144832	0.029203028	6.570681237	4.446449655	2.559847661
103.55	-0.026885789	0.000140397	0.028309716	6.369686085	4.446632348	2.559847661
103.555	-0.025112555	0.00013158	0.026534547	5.970273122	4.446791737	2.559847661
103.56	-0.020424773	0.000108399	0.021871446	4.92107543	4.446897173	2.559847661
103.565	-0.015922026	8.60391E-05	0.017379223	3.910325187	4.446961246	2.559847661
103.57	-0.010478554	5.89627E-05	0.011946358	2.68793044	4.446988997	2.559847661
103.575	-0.003454045	2.38208E-05	0.004906181	1.103890644	4.446992012	2.559847661
103.58	-6.52987E-05	6.6716E-06	0.001474954	0.331864725	4.446992013	2.559847661
103.585	-0.000588138	9.14365E-06	0.001974183	0.444191257	4.446992101	2.559847661
103.59	-0.000897878	1.06535E-05	0.002279037	0.51278335	4.446992304	2.559847661
103.595	1.84537E-05	6.07032E-06	0.0013547	0.304807425	4.446992305	2.559847661
103.6	0.002788038	-7.79424E-06	-0.001417194	-0.318868552	4.446994269	2.559847661
103.605	0.005428016	-2.11271E-05	-0.004081084	-0.918243985	4.447001716	2.559847661
103.61	0.004113087	-1.47054E-05	-0.00278444	-0.626499041	4.447005991	2.559847661
103.615	0.002430367	-6.29223E-06	-0.001086682	-0.244503413	4.447007484	2.559847661
103.62	0.004432999	-1.62976E-05	-0.003106626	-0.698990955	4.447012451	2.559847661
103.625	0.005723268	-2.28703E-05	-0.004429244	-0.99657991	4.44702073	2.559847661
103.63	0.003951932	-1.41082E-05	-0.002660206	-0.598546377	4.447024677	2.559847661
103.635	0.003055107	-9.62028E-06	-0.00175459	-0.394782662	4.447027036	2.559847661
103.64	0.00397148	-1.42239E-05	-0.002684197	-0.603944378	4.447031022	2.559847661
103.645	0.004024709	-1.45702E-05	-0.002754033	-0.619657502	4.447035116	2.559847661
103.65	0.002757887	-8.2896E-06	-0.001486124	-0.334377926	4.447037039	2.559847661
103.655	0.002043356	-4.71946E-06	-0.000765969	-0.172342945	4.447038094	2.559847661
103.66	0.002362764	-6.33742E-06	-0.001092729	-0.24586405	4.447039505	2.559847661
103.665	0.001926846	-4.21363E-06	-0.000663949	-0.149388564	4.447040443	2.559847661
103.67	0.00067385	2.03655E-06	0.000596364	0.134181806	4.447040558	2.559847661
103.675	0.000661342	2.11392E-06	0.000611607	0.137611493	4.447040669	2.559847661
103.68	0.000938796	6.93421E-07	0.00032475	0.07306881	4.447040891	2.559847661
103.685	-0.00015314	6.12901E-06	0.00142131	0.319794781	4.447040897	2.559847661
103.69	-0.000412651	7.4563E-06	0.001688543	0.379922214	4.44704094	2.559847661
103.695	0.000430224	3.23008E-06	0.000835177	0.187914901	4.447040987	2.559847661
103.7	-0.000162454	6.15703E-06	0.001426261	0.320908718	4.447040994	2.559847661
103.705	-0.000708275	8.90366E-06	0.001980496	0.445611548	4.447041121	2.559847661
103.71	-0.000110243	5.90846E-06	0.001375631	0.309517087	4.447041124	2.559847661
103.715	-0.000794285	9.29611E-06	0.002059581	0.463405758	4.447041283	2.559847661
103.72	-0.001719627	1.39462E-05	0.002996502	0.674212843	4.447042031	2.559847661
103.725	-0.001500635	1.28678E-05	0.002778706	0.625208838	4.4470426	2.559847661
103.73	-0.00218518	1.62863E-05	0.003467886	0.780274351	4.447043807	2.559847661
103.735	-0.002888508	1.98508E-05	0.004185802	0.941805442	4.447045915	2.559847661
103.74	-0.002381833	1.73595E-05	0.003682689	0.828605012	4.447047349	2.559847661
103.745	-0.002400857	1.74752E-05	0.003706071	0.833865866	4.447048806	2.559847661
103.75	-0.00218936	1.64698E-05	0.003503045	0.78818506	4.447050017	2.559847661
103.755	-0.001175174	1.14312E-05	0.0024859	0.55932747	4.447050366	2.559847661
103.76	-0.000832581	9.73712E-06	0.002144003	0.482400607	4.447050542	2.559847661
103.765	-1.98553E-05	5.71954E-06	0.001333353	0.300004534	4.447050542	2.559847661
103.77	0.001438051	-1.55522E-06	-0.000133947	-0.030138012	4.447051064	2.559847661
103.775	0.00209856	-4.8586E-06	-0.000799999	-0.179999853	4.447052177	2.559847661
103.78	0.003070425	-9.70082E-06	-0.001776069	-0.399615583	4.44705456	2.559847661
103.785	0.004216366	-1.54438E-05	-0.002933325	-0.659998209	4.447059053	2.559847661
103.79	0.004481481	-1.67862E-05	-0.003203787	-0.720852185	4.447064129	2.559847661
103.795	0.004975151	-1.9254E-05	-0.00370089	-0.832700203	4.447070385	2.559847661
103.8	0.005378607	-2.12859E-05	-0.004110151	-0.924784082	4.447077697	2.559847661
103.805	0.005420898	-2.14956E-05	-0.004152387	-0.934286997	4.447085124	2.559847661
103.81	0.006192861	-2.53523E-05	-0.004924909	-1.108104526	4.447094817	2.559847661
103.815	0.006507488	-2.69548E-05	-0.005244908	-1.180104338	4.44710552	2.559847661
103.82	0.006062758	-2.47391E-05	-0.004797453	-1.079426849	4.44711481	2.559847661
103.825	0.006134822	-2.50922E-05	-0.004868773	-1.095473988	4.447124322	2.559847661
103.83	0.005971559	-2.42762E-05	-0.004703967	-1.058392649	4.447133335	2.559847661
103.835	0.005857129	-2.36771E-05	-0.004583027	-1.031181171	4.447142005	2.559847661
103.84	0.006601164	-2.73763E-05	-0.005329079	-1.199042725	4.447153018	2.559847661
103.845	0.007101682	-2.98757E-05	-0.005828135	-1.311330341	4.447165765	2.559847661
103.85	0.007853411	-3.3618E-05	-0.006575237	-1.47942835	4.447181353	2.559847661
103.855	0.009133762	-4.00371E-05	-0.007856425	-1.767695697	4.447202438	2.559847661
103.86	0.009312907	-4.09772E-05	-0.0080431	-1.809697481	4.447224359	2.559847661
103.865	0.009048668	-3.96678E-05	-0.007778658	-1.750198161	4.447245053	2.559847661
103.87	0.009353862	-4.11996E-05	-0.00808801	-1.819802149	4.447267166	2.559847661
103.875	0.009623032	-4.25612E-05	-0.008360092	-1.881020718	4.447290571	2.559847661
103.88	0.009975933	-4.43444E-05	-0.008715903	-1.961078114	4.447315723	2.559847661
103.885	0.010087033	-4.4931E-05	-0.008832731	-1.987364485	4.447341439	2.559847661
103.89	0.010030515	-4.46609E-05	-0.008778178	-1.975090039	4.447366868	2.559847661
103.895	0.010964183	-4.93471E-05	-0.009713935	-2.1856353	4.447397251	2.559847661
103.9	0.011532194	-5.22666E-05	-0.010296267	-2.316659987	4.447430863	2.559847661
103.905	0.010285626	-4.61152E-05	-0.009054191	-2.037193024	4.447457602	2.559847661
103.91	0.008711097	-3.82745E-05	-0.007471901	-1.681177615	4.447476781	2.559847661
103.915	0.007482514	-3.21496E-05	-0.006236462	-1.403203921	4.447490931	2.559847661
103.92	0.005966984	-2.45791E-05	-0.00471011	-1.059774841	4.44749993	2.559847661
103.925	0.00462866	-1.78567E-05	-0.003355379	-0.754960189	4.447505345	2.559847661
103.93	0.004393975	-1.66303E-05	-0.003108377	-0.699384844	4.447510224	2.559847661
103.935	0.004936644	-1.93135E-05	-0.003650227	-0.821300978	4.447516384	2.559847661
103.94	0.005250057	-2.08656E-05	-0.00396362	-0.891814419	4.44752335	2.559847661
103.945	0.005916406	-2.41662E-05	-0.004629888	-1.041724773	4.447532197	2.559847661
103.95	0.007397617	-3.15683E-05	-0.006123537	-1.377795751	4.447546028	2.559847661
103.955	0.008210647	-3.56689E-05	-0.006950655	-1.563897435	4.447563067	2.559847661
103.96	0.008424412	-3.67555E-05	-0.007169793	-1.61320347	4.447581004	2.559847661
103.965	0.008986038	-3.95805E-05	-0.00773942	-1.741369432	4.447601412	2.559847661
103.97	0.009145813	-4.04008E-05	-0.007904823	-1.778585068	4.447622553	2.559847661
103.975	0.009801836	-4.36679E-05	-0.008563444	-1.926774863	4.447646836	2.559847661
103.98	0.01188234	-5.40963E-05	-0.010661182	-2.398765886	4.44768252	2.559847661
103.985	0.012762182	-5.85996E-05	-0.011559188	-2.600817295	4.447723685	2.559847661
103.99	0.011700442	-5.33641E-05	-0.010502005	-2.362951205	4.447758285	2.559847661
103.995	0.011243291	-5.10951E-05	-0.010043982	-2.259895994	4.447790235	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
104	0.011728331	-5.35511E-05	-0.010539983	-2.371496201	4.447825	2.559847661
104.005	0.012079865	-5.53611E-05	-0.010905437	-2.453723326	4.447861881	2.559847661
104.01	0.012215693	-5.61035E-05	-0.011055315	-2.487445878	4.447899596	2.559847661
104.015	0.01188253	-5.45086E-05	-0.010733213	-2.414972897	4.447935281	2.559847661
104.02	0.011302677	-5.16633E-05	-0.0101587	-2.285707481	4.447967569	2.559847661
104.025	0.011247431	-5.14396E-05	-0.010113565	-2.275552111	4.447999542	2.559847661
104.03	0.011020147	-5.03894E-05	-0.009901546	-2.22784774	4.448030236	2.559847661
104.035	0.009676083	-4.37583E-05	-0.008563504	-1.92678841	4.448053899	2.559847661
104.04	0.008080871	-3.58428E-05	-0.00696708	-1.567593012	4.448070403	2.559847661
104.045	0.006563817	-2.83204E-05	-0.005450676	-1.22640211	4.448081292	2.559847661
104.05	0.004100384	-1.60564E-05	-0.002979974	-0.67049412	4.448085542	2.559847661
104.055	0.001655556	-3.82372E-06	-0.000517355	-0.11640493	4.448086234	2.559847661
104.06	0.000645004	1.25765E-06	0.000505094	0.113646085	4.44808634	2.559847661
104.065	-8.56487E-05	4.91602E-06	0.001241032	0.279232187	4.448086341	2.559847661
104.07	-0.000762184	8.31527E-06	0.001924712	0.433060278	4.448086488	2.559847661
104.075	-0.000660713	7.81251E-06	0.001823168	0.410212855	4.448086599	2.559847661
104.08	-0.001171084	1.03354E-05	0.002330957	0.524465214	4.448086945	2.559847661
104.085	-0.002331426	1.6135E-05	0.003496978	0.786820154	4.448088319	2.559847661
104.09	-0.002757941	1.82832E-05	0.003928795	0.883978863	4.448090241	2.559847661
104.095	-0.003145724	2.02205E-05	0.004318159	0.97158586	4.448092742	2.559847661
104.1	-0.003645353	2.27238E-05	0.004821235	1.084777951	4.448096101	2.559847661
104.105	-0.003898084	2.39846E-05	0.005074579	1.141780288	4.448099941	2.559847661
104.11	-0.004774626	2.83605E-05	0.00595377	1.339598164	4.448105703	2.559847661
104.115	-0.005487032	3.19443E-05	0.006673639	1.501568699	4.448113313	2.559847661
104.12	-0.005603781	3.25328E-05	0.006791834	1.528162638	4.448121249	2.559847661
104.125	-0.006667265	3.78418E-05	0.007857975	1.768044392	4.448132484	2.559847661
104.13	-0.007804076	4.35601E-05	0.009005992	2.02634816	4.448147877	2.559847661
104.135	-0.007912916	4.41338E-05	0.009121151	2.052258978	4.448163702	2.559847661
104.14	-0.008587508	4.75048E-05	0.009797731	2.204489442	4.448182341	2.559847661
104.145	-0.009989495	5.45364E-05	0.011208634	2.521942658	4.448207562	2.559847661
104.15	-0.010941759	5.93445E-05	0.012173113	2.738950338	4.44823782	2.559847661
104.155	-0.011489578	6.21269E-05	0.012731126	2.864503335	4.448271185	2.559847661
104.16	-0.012095848	6.5187E-05	0.013344753	3.002569326	4.448308163	2.559847661
104.165	-0.013371734	7.15942E-05	0.014629246	3.291580387	4.448353354	2.559847661
104.17	-0.01477574	7.8681E-05	0.016049503	3.611138199	4.448408533	2.559847661
104.175	-0.015111338	8.04333E-05	0.016400602	3.690135449	4.448466247	2.559847661
104.18	-0.015708514	8.34545E-05	0.017005866	3.826319757	4.448528613	2.559847661
104.185	-0.017407654	9.20129E-05	0.018719991	4.211997921	4.4486052	2.559847661
104.19	-0.018112359	9.56493E-05	0.01944807	4.375815752	4.448688114	2.559847661
104.195	-0.017799363	9.41662E-05	0.019148543	4.308422271	4.448768187	2.559847661
104.2	-0.018339061	9.69282E-05	0.019704111	4.433425015	4.448853189	2.559847661
104.205	-0.01877875	9.92309E-05	0.020165072	4.537141155	4.448942316	2.559847661
104.21	-0.018002158	9.54449E-05	0.019400542	4.365122026	4.449024224	2.559847661
104.215	-0.017578077	9.33815E-05	0.018983979	4.271395189	4.449102318	2.559847661
104.22	-0.017870553	9.49208E-05	0.019294842	4.341339515	4.449183033	2.559847661
104.225	-0.017388821	9.26138E-05	0.018828997	4.23652432	4.449259454	2.559847661
104.23	-0.016461627	8.80598E-05	0.017909902	4.029727905	4.449327943	2.559847661
104.235	-0.015695238	8.4315E-05	0.017154332	3.859724611	4.449390204	2.559847661
104.24	-0.013990378	7.58869E-05	0.015454562	3.477276531	4.449439673	2.559847661
104.245	-0.011762967	6.48043E-05	0.013220833	2.974687527	4.449474644	2.559847661
104.25	-0.010111747	5.65857E-05	0.011565313	2.60219545	4.449500486	2.559847661
104.255	-0.008088604	4.65117E-05	0.00953716	2.145860892	4.449517022	2.559847661
104.26	-0.005928203	3.57138E-05	0.007364558	1.657025529	4.449525904	2.559847661
104.265	-0.004588282	2.90094E-05	0.006016256	1.353657586	4.449531225	2.559847661
104.27	-0.002999565	2.10749E-05	0.004421192	0.994768163	4.449533499	2.559847661
104.275	-0.001337706	1.27479E-05	0.002747967	0.618292656	4.449533951	2.559847661
104.28	-0.000354991	7.82008E-06	0.001758128	0.395578692	4.449533983	2.559847661
104.285	0.001220562	-5.37998E-08	0.000177042	0.039834461	4.449534359	2.559847661
104.29	0.003154317	-9.75375E-06	-0.001769831	-0.39821202	4.449536874	2.559847661
104.295	0.004319504	-1.56258E-05	-0.002947929	-0.663283961	4.44954159	2.559847661
104.3	0.005460497	-2.13658E-05	-0.004099205	-0.922321031	4.449549126	2.559847661
104.305	0.00658111	-2.70176E-05	-0.005232468	-1.177305218	4.449560072	2.559847661
104.31	0.007279327	-3.0553E-05	-0.005941194	-1.336768761	4.449573465	2.559847661
104.315	0.0083428	-3.59038E-05	-0.00701361	-1.578062309	4.449591056	2.559847661
104.32	0.009639735	-4.24434E-05	-0.008323893	-1.872875834	4.449614542	2.559847661
104.325	0.01044891	-4.65599E-05	-0.009148473	-2.058406513	4.449642136	2.559847661
104.33	0.010898329	-4.88728E-05	-0.00961169	-2.162630301	4.449672155	2.559847661
104.335	0.011360699	-5.12448E-05	-0.010086691	-2.269505527	4.449704775	2.559847661
104.34	0.011886692	-5.39429E-05	-0.010626946	-2.391062956	4.449740486	2.559847661
104.345	0.012010565	-5.46409E-05	-0.010766649	-2.422496087	4.449776945	2.559847661
104.35	0.011813342	-5.37224E-05	-0.010581153	-2.380759422	4.449812216	2.559847661
104.355	0.011725245	-5.33474E-05	-0.01050542	-2.36371939	4.449846963	2.559847661
104.36	0.011260047	-5.10892E-05	-0.010049422	-2.26111991	4.449879008	2.559847661
104.365	0.010869056	-4.91773E-05	-0.009663443	-2.174274713	4.449908866	2.559847661
104.37	0.011243411	-5.11027E-05	-0.010052286	-2.261764282	4.449940816	2.559847661
104.375	0.011086901	-5.04077E-05	-0.00991191	-2.230179657	4.449971883	2.559847661
104.38	0.010305024	-4.65705E-05	-0.009137241	-2.055879294	4.449998722	2.559847661
104.385	0.009849461	-4.4365E-05	-0.008692126	-1.955728259	4.450023241	2.559847661
104.39	0.008711128	-3.87665E-05	-0.007562565	-1.701577167	4.45004242	2.559847661
104.395	0.006928254	-2.99174E-05	-0.005778017	-1.300053728	4.450054552	2.559847661
104.4	0.005572544	-2.31924E-05	-0.004422524	-0.99506783	4.4500624	2.559847661
104.405	0.003659915	-1.36973E-05	-0.002509618	-0.564664005	4.450065786	2.559847661
104.41	0.00105292	-6.92041E-07	0.000108724	0.024462881	4.450066066	2.559847661
104.415	-0.000793626	8.54966E-06	0.001968163	0.442836626	4.450066225	2.559847661
104.42	-0.002087803	1.50235E-05	0.003270124	0.735777998	4.450067327	2.559847661
104.425	-0.003430163	2.17427E-05	0.004620964	1.03971693	4.4500703	2.559847661
104.43	-0.004412322	2.66714E-05	0.005611507	1.262589161	4.450075221	2.559847661
104.435	-0.00519329	3.05891E-05	0.00639869	1.439705337	4.450082038	2.559847661
104.44	-0.005960329	3.44437E-05	0.007173029	1.613931568	4.450091016	2.559847661
104.445	-0.006322945	3.62814E-05	0.007542161	1.696986141	4.450101121	2.559847661
104.45	-0.006537222	3.73671E-05	0.007760213	1.746047927	4.450111922	2.559847661
104.455	-0.006841603	3.8908E-05	0.008069664	1.815674448	4.450123752	2.559847661
104.46	-0.006668502	3.80674E-05	0.007899884	1.777473982	4.450134991	2.559847661
104.465	-0.006277285	3.61152E-05	0.007505675	1.688776912	4.45014495	2.559847661
104.47	-0.006334775	3.6403E-05	0.007563793	1.701853378	4.450155092	2.559847661
104.475	-0.006093461	3.52128E-05	0.007323456	1.647777499	4.450164477	2.559847661
104.48	-0.005377075	3.16283E-05	0.006599845	1.484965139	4.450171784	2.559847661
104.485	-0.005137594	3.04149E-05	0.006354937	1.429860757	4.450178455	2.559847661
104.49	-0.00476839	2.85653E-05	0.005981645	1.345870217	4.450184202	2.559847661
104.495	-0.004047482	2.49325E-05	0.005248637	1.180943349	4.450188343	2.559847661
104.5	-0.004269735	2.60012E-05	0.005464504	1.229513422	4.45019295	2.559847661
104.505	-0.004561189	2.74487E-05	0.005756804	1.29528086	4.450198208	2.559847661
104.51	-0.004037456	2.48063E-05	0.00522318	1.175215597	4.450202328	2.559847661
104.515	-0.004296366	2.6048E-05	0.005473997	1.231649323	4.450206994	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
104.52	-0.005055995	2.98205E-05	0.00623571	1.403034695	4.450213454	2.559847661
104.525	-0.0051893	3.04625E-05	0.006365324	1.432197937	4.45022026	2.559847661
104.53	-0.005828309	3.36118E-05	0.00700099	1.575222765	4.450228846	2.559847661
104.535	-0.006930302	3.90957E-05	0.008107366	1.824157356	4.450240985	2.559847661
104.54	-0.007771711	4.32834E-05	0.00894824	2.013353967	4.45025625	2.559847661
104.545	-0.008949039	4.91535E-05	0.010126609	2.278487128	4.450276491	2.559847661
104.55	-0.00983073	5.35651E-05	0.011011974	2.47769425	4.450300917	2.559847661
104.555	-0.010387628	5.63323E-05	0.011567221	2.602624744	4.450328188	2.559847661
104.56	-0.011907347	6.39099E-05	0.013087301	2.944642668	4.450364023	2.559847661
104.565	-0.013363391	7.1208E-05	0.014550733	3.273914817	4.450409158	2.559847661
104.57	-0.01414458	7.51262E-05	0.015336215	3.450648447	4.450459723	2.559847661
104.575	-0.015436318	8.15899E-05	0.016631651	3.742121369	4.450519946	2.559847661
104.58	-0.016666059	8.77673E-05	0.017869295	4.020591453	4.450590147	2.559847661
104.585	-0.017574049	9.23306E-05	0.018783344	4.226252394	4.450668206	2.559847661
104.59	-0.018904292	9.90135E-05	0.020121542	4.527346899	4.450758528	2.559847661
104.595	-0.019757591	0.000103336	0.020986706	4.722008926	4.450857189	2.559847661
104.6	-0.020161217	0.000105394	0.02139867	4.814700767	4.450959922	2.559847661
104.605	-0.021007188	0.000109667	0.022253649	5.007071109	4.451071457	2.559847661
104.61	-0.021397334	0.000111682	0.022656669	5.097750543	4.451187173	2.559847661
104.615	-0.021374969	0.000111616	0.022643289	5.094739975	4.451302648	2.559847661
104.62	-0.021763321	0.000113604	0.023041248	5.184280877	4.451422357	2.559847661
104.625	-0.021598963	0.00011285	0.022888327	5.149873497	4.451540265	2.559847661
104.63	-0.020781783	0.000108806	0.022071803	4.966155628	4.451649419	2.559847661
104.635	-0.020434042	0.000107084	0.021724177	4.88793978	4.451754951	2.559847661
104.64	-0.020342477	0.000106645	0.02163558	4.868005419	4.45185954	2.559847661
104.645	-0.02036271	0.000106752	0.021657249	4.872880916	4.451964336	2.559847661
104.65	-0.021317381	0.000111523	0.022620606	5.089636308	4.452079189	2.559847661
104.655	-0.023162279	0.000120784	0.024477175	5.507364397	4.452214783	2.559847661
104.66	-0.024499158	0.00012757	0.025833817	5.812608875	4.45236648	2.559847661
104.665	-0.02403244	0.000125361	0.025387473	5.712181528	4.452512453	2.559847661
104.67	-0.022328597	0.000116918	0.02368334	5.328751603	4.452638461	2.559847661
104.675	-0.021252798	0.000111561	0.022602341	5.085526654	4.45275262	2.559847661
104.68	-0.021471491	0.000112677	0.022827885	5.136274032	4.45286914	2.559847661
104.685	-0.021869219	0.000114733	0.02324294	5.229661475	4.452990016	2.559847661
104.69	-0.02118573	0.000111406	0.022571227	5.078525978	4.453103455	2.559847661
104.695	-0.019662013	0.000103852	0.021047832	4.735762262	4.453201164	2.559847661
104.7	-0.018477557	9.79627E-05	0.019860605	4.468636061	4.453287455	2.559847661
104.705	-0.017632189	9.37718E-05	0.019016074	4.278616578	4.45336603	2.559847661
104.71	-0.016596512	8.86294E-05	0.017980099	4.045522171	4.453435646	2.559847661
104.715	-0.015714268	8.42438E-05	0.017096834	3.84678755	4.453498058	2.559847661
104.72	-0.014887971	8.01457E-05	0.016271671	3.661125895	4.453554078	2.559847661
104.725	-0.013672793	7.4101E-05	0.015054911	3.387354924	4.453601327	2.559847661
104.73	-0.012576578	6.86325E-05	0.01395451	3.139764638	4.453641303	2.559847661
104.735	-0.011757601	6.4556E-05	0.013134421	2.9552447	4.453676243	2.559847661
104.74	-0.010378268	5.7684E-05	0.011752392	2.644288175	4.453703465	2.559847661
104.745	-0.00876565	4.96092E-05	0.01012912	2.279052036	4.453722885	2.559847661
104.75	-0.008267713	4.70895E-05	0.009622726	2.165113272	4.453740161	2.559847661
104.755	-0.007971034	4.56176E-05	0.00932695	2.098563676	4.453756219	2.559847661
104.76	-0.00645791	3.80564E-05	0.007807887	1.756774601	4.45376676	2.559847661
104.765	-0.005653917	3.39842E-05	0.006990037	1.57275822	4.453774839	2.559847661
104.77	-0.006272873	3.706E-05	0.007611171	1.712513518	4.453784784	2.559847661
104.775	-0.005716996	3.43065E-05	0.007055122	1.587402471	4.453793045	2.559847661
104.78	-0.004606964	2.87307E-05	0.005935172	1.335413616	4.453798409	2.559847661
104.785	-0.005022292	3.07758E-05	0.006348198	1.428344603	4.453804784	2.559847661
104.79	-0.005059828	3.09896E-05	0.006391335	1.43805039	4.453811255	2.559847661
104.795	-0.003868238	2.50357E-05	0.005193428	1.168521199	4.453815037	2.559847661
104.8	-0.003509648	2.32104E-05	0.004827074	1.086091546	4.45381815	2.559847661
104.805	-0.003669155	2.40089E-05	0.004988334	1.12237516	4.453821552	2.559847661
104.81	-0.002932805	2.0341E-05	0.004251208	0.956521849	4.453823726	2.559847661
104.815	-0.002010898	1.57164E-05	0.003323258	0.747733161	4.453824748	2.559847661
104.82	-0.001580518	1.35451E-05	0.002887661	0.649723616	4.45382538	2.559847661
104.825	-0.00098191	1.05429E-05	0.002285449	0.514226025	4.453825623	2.559847661
104.83	-0.000154312	6.3779E-06	0.001450138	0.326280946	4.453825629	2.559847661
104.835	5.32447E-05	5.30241E-06	0.001234472	0.277756228	4.45382563	2.559847661
104.84	0.000167749	4.71687E-06	0.00111706	0.251338554	4.453825637	2.559847661
104.845	0.000989284	5.87268E-07	0.000289091	0.065045374	4.453825884	2.559847661
104.85	0.001184028	-4.37908E-07	8.40511E-05	0.018911498	4.453826239	2.559847661
104.855	0.000765013	1.63927E-06	0.000503532	0.113294763	4.453826387	2.559847661
104.86	0.001449695	-1.78903E-06	-0.000187269	-0.042135561	4.453826918	2.559847661
104.865	0.001978862	-4.48456E-06	-0.000727556	-0.163700122	4.453827908	2.559847661
104.87	0.001482238	-2.03197E-06	-0.000232256	-0.052257694	4.453828463	2.559847661
104.875	0.001859731	-3.92288E-06	-0.000614135	-0.138180341	4.453829337	2.559847661
104.88	0.002391965	-6.62723E-06	-0.001156977	-0.260319809	4.453830783	2.559847661
104.885	0.001890426	-4.15454E-06	-0.000657617	-0.147963767	4.453831686	2.559847661
104.89	0.001967854	-4.54712E-06	-0.000736927	-0.165808504	4.453832665	2.559847661
104.895	0.00227312	-6.10731E-06	-0.001051994	-0.236698672	4.453833971	2.559847661
104.9	0.001734587	-3.44154E-06	-0.000513649	-0.115571086	4.453834731	2.559847661
104.905	0.001714247	-3.33753E-06	-0.000492685	-0.110854195	4.453835474	2.559847661
104.91	0.002074799	-5.16098E-06	-0.000860921	-0.193707268	4.453836562	2.559847661
104.915	0.001772036	-3.67085E-06	-0.000559975	-0.125994371	4.453837356	2.559847661
104.92	0.001681834	-3.22118E-06	-0.000469175	-0.105564411	4.453838071	2.559847661
104.925	0.001907948	-4.36376E-06	-0.00069993	-0.157484256	4.453838991	2.559847661
104.93	0.001794883	-3.81455E-06	-0.000589007	-0.132526635	4.453839805	2.559847661
104.935	0.001798771	-3.83834E-06	-0.000593813	-0.13360799	4.453840623	2.559847661
104.94	0.001981511	-4.76255E-06	-0.000780464	-0.175604398	4.453841615	2.559847661
104.945	0.001986313	-4.8025E-06	-0.000788527	-0.177418666	4.453842612	2.559847661
104.95	0.001944499	-4.60848E-06	-0.000749342	-0.168601945	4.453843568	2.559847661
104.955	0.001712254	-3.46588E-06	-0.000518584	-0.116681399	4.453844309	2.559847661
104.96	0.001172936	-7.81874E-07	2.33145E-05	0.005245756	4.453844656	2.559847661
104.965	0.000661796	1.77291E-06	0.000538996	0.121274138	4.453844767	2.559847661
104.97	0.0002197	3.98519E-06	0.000985464	0.221729455	4.453844779	2.559847661
104.975	-0.000310777	6.6417E-06	0.00152149	0.342335354	4.453844804	2.559847661
104.98	-0.000814641	9.17103E-06	0.002031761	0.457146336	4.453844972	2.559847661
104.985	-0.001282466	1.15216E-05	0.002505894	0.563826258	4.453845387	2.559847661
104.99	-0.001836336	1.43044E-05	0.0030671	0.690097577	4.453846239	2.559847661
104.995	-0.002354393	1.69111E-05	0.003592714	0.808360748	4.45384764	2.559847661
105	-0.003002593	2.01649E-05	0.004248683	0.955953583	4.453849919	2.559847661
105.005	-0.004091986	2.56347E-05	0.005351099	1.203997249	4.453854151	2.559847661
105.01	-0.005066715	3.05585E-05	0.006343135	1.427205402	4.453860639	2.559847661
105.015	-0.005493058	3.27494E-05	0.006784468	1.526505407	4.453868265	2.559847661
105.02	-0.005719423	3.39375E-05	0.007023782	1.58035104	4.453876533	2.559847661
105.025	-0.005720806	3.40027E-05	0.007036812	1.583282802	4.453884805	2.559847661
105.03	-0.005525225	3.30761E-05	0.006849673	1.54117639	4.45389252	2.559847661
105.035	-0.00541222	3.25593E-05	0.006745308	1.517694409	4.453899924	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
105.04	-0.005158216	3.1339E-05	0.006498883	1.462248656	4.453906648	2.559847661
105.045	-0.004930695	3.02456E-05	0.006278125	1.412578087	4.453912793	2.559847661
105.05	-0.004771185	2.95046E-05	0.006128516	1.378916075	4.453918546	2.559847661
105.055	-0.003934162	2.53821E-05	0.005296366	1.191682307	4.453922458	2.559847661
105.06	-0.002789389	1.96945E-05	0.004148715	0.933460899	4.453924425	2.559847661
105.065	-0.002062544	1.60842E-05	0.003420442	0.769599416	4.4539255	2.559847661
105.07	-0.001480057	1.31965E-05	0.002838071	0.638565906	4.453926054	2.559847661
105.075	-0.001103752	1.13408E-05	0.002463886	0.554374386	4.453926362	2.559847661
105.08	-0.00060835	8.90951E-06	0.001973702	0.444082958	4.453926455	2.559847661
105.085	0.000585973	2.97966E-06	0.000778476	0.175157076	4.453926542	2.559847661
105.09	0.001703657	-2.5907E-06	-0.000343893	-0.077375879	4.453927275	2.559847661
105.095	0.002627267	-7.18471E-06	-0.001268697	-0.285456758	4.45392902	2.559847661
105.1	0.003952371	-1.37899E-05	-0.002592143	-0.583232264	4.453932968	2.559847661
105.105	0.005192951	-1.99892E-05	-0.003833864	-0.862619397	4.453939784	2.559847661
105.11	0.00646744	-2.63572E-05	-0.005109007	-1.149526552	4.453950355	2.559847661
105.115	0.007949698	-3.37845E-05	-0.006595731	-1.484039563	4.453966328	2.559847661
105.12	0.008786861	-3.80039E-05	-0.007440104	-1.674023339	4.453985842	2.559847661
105.125	0.009412788	-4.11509E-05	-0.008069764	-1.815696919	4.454008235	2.559847661
105.13	0.010364588	-4.59337E-05	-0.009026532	-2.03096969	4.454035386	2.559847661
105.135	0.010937788	-4.88369E-05	-0.009607177	-2.161614751	4.454065622	2.559847661
105.14	0.011364142	-5.09984E-05	-0.010039446	-2.258875402	4.454098262	2.559847661
105.145	0.011738617	-5.29085E-05	-0.010421395	-2.344813783	4.454133089	2.559847661
105.15	0.011569713	-5.20931E-05	-0.010256705	-2.307758548	4.45416692	2.559847661
105.155	0.011759435	-5.30406E-05	-0.010447802	-2.350755472	4.45420187	2.559847661
105.16	0.012762166	-5.80599E-05	-0.011451306	-2.576543889	4.454243035	2.559847661
105.165	0.013950874	-6.4029E-05	-0.012641628	-2.844366266	4.454292225	2.559847661
105.17	0.015372028	-7.1177E-05	-0.014066291	-3.164915509	4.454351948	2.559847661
105.175	0.016604165	-7.74174E-05	-0.015309695	-3.444681374	4.454421628	2.559847661
105.18	0.016726442	-7.81301E-05	-0.015450484	-3.476358915	4.454492338	2.559847661
105.185	0.015974594	-7.44492E-05	-0.01470721	-3.309122331	4.454556835	2.559847661
105.19	0.015347439	-7.13543E-05	-0.014082441	-3.168549123	4.454616366	2.559847661
105.195	0.015627928	-7.27892E-05	-0.014372226	-3.233750793	4.454678094	2.559847661
105.2	0.016296717	-7.62052E-05	-0.015061965	-3.388942113	4.454745218	2.559847661
105.205	0.015802602	-7.38346E-05	-0.014583228	-3.281226403	4.454808333	2.559847661
105.21	0.014331572	-6.65409E-05	-0.013111022	-2.949979931	4.454860244	2.559847661
105.215	0.013712527	-6.34659E-05	-0.012490622	-2.810390047	4.454907768	2.559847661
105.22	0.014038508	-6.51402E-05	-0.012828773	-2.886474021	4.454957578	2.559847661
105.225	0.013546663	-6.27616E-05	-0.012348561	-2.778426211	4.455003959	2.559847661
105.23	0.012127691	-5.57155E-05	-0.010927525	-2.458693139	4.455041133	2.559847661
105.235	0.011756777	-5.38704E-05	-0.010555558	-2.375000651	4.455076067	2.559847661
105.24	0.012176818	-5.60248E-05	-0.010990655	-2.472897392	4.455113542	2.559847661
105.245	0.011169079	-5.10683E-05	-0.009990643	-2.24789472	4.455145071	2.559847661
105.25	0.009838392	-4.44381E-05	-0.00865446	-1.947253533	4.455169535	2.559847661
105.255	0.00999886	-4.52623E-05	-0.008821038	-1.98473358	4.455194803	2.559847661
105.26	0.009640201	-4.35469E-05	-0.008474911	-1.906855	4.455218291	2.559847661
105.265	0.008055579	-3.56719E-05	-0.006888652	-1.549946631	4.455234692	2.559847661
105.27	0.007459704	-3.2703E-05	-0.006290817	-1.415433855	4.455248757	2.559847661
105.275	0.007319715	-3.20526E-05	-0.006159853	-1.385966978	4.455262298	2.559847661
105.28	0.00613023	-2.61585E-05	-0.004973346	-1.119002791	4.455271796	2.559847661
105.285	0.005150167	-2.12762E-05	-0.003990826	-0.897935761	4.4552785	2.559847661
105.29	0.00478202	-1.94681E-05	-0.003627009	-0.816077122	4.455284279	2.559847661
105.295	0.003787195	-1.45392E-05	-0.002635491	-0.592985497	4.455287904	2.559847661
105.3	0.002672899	-8.98572E-06	-0.00151863	-0.341691688	4.45528971	2.559847661
105.305	0.002260732	-6.94548E-06	-0.001108405	-0.249391057	4.455291002	2.559847661
105.31	0.00148533	-3.11529E-06	-0.000338404	-0.07614092	4.45529156	2.559847661
105.315	4.81039E-06	4.25896E-06	0.001143628	0.257316351	4.45529156	2.559847661
105.32	-0.000937632	8.96373E-06	0.00208886	0.46999342	4.455291782	2.559847661
105.325	-0.001809065	1.32888E-05	0.002957594	0.665458629	4.455292609	2.559847661
105.33	-0.003682544	2.26362E-05	0.004834458	1.087753045	4.455296036	2.559847661
105.335	-0.00500538	2.92778E-05	0.006167452	1.38767677	4.455302368	2.559847661
105.34	-0.005406943	3.12907E-05	0.006571375	1.478559335	4.455309757	2.559847661
105.345	-0.006724079	3.78662E-05	0.007890516	1.775366102	4.455321185	2.559847661
105.35	-0.007888308	4.37222E-05	0.009064959	2.039615754	4.455336912	2.559847661
105.355	-0.007964604	4.41213E-05	0.009144995	2.057623763	4.455352944	2.559847661
105.36	-0.008969575	4.91338E-05	0.010149963	2.283741737	4.455373278	2.559847661
105.365	-0.010331385	5.59747E-05	0.011521126	2.592253307	4.455400255	2.559847661
105.37	-0.010652134	5.76133E-05	0.011849486	2.666134255	4.455428933	2.559847661
105.375	-0.011434201	6.15337E-05	0.012634995	2.842873836	4.455461977	2.559847661
105.38	-0.012419422	6.65013E-05	0.013630124	3.06677791	4.45550096	2.559847661
105.385	-0.012536479	6.71238E-05	0.013754793	3.094828399	4.455540682	2.559847661
105.39	-0.013284878	7.08746E-05	0.014505981	3.263845756	4.455585287	2.559847661
105.395	-0.014547024	7.72278E-05	0.015778032	3.550057166	4.455638771	2.559847661
105.4	-0.014957624	7.93373E-05	0.016200317	3.645071411	4.455695317	2.559847661
105.405	-0.015447734	8.182E-05	0.016697248	3.756880902	4.455755629	2.559847661
105.41	-0.016410147	8.66752E-05	0.017668898	3.975502097	4.455823691	2.559847661
105.415	-0.01708069	9.00834E-05	0.01835082	4.128934479	4.455897428	2.559847661
105.42	-0.01783637	9.39122E-05	0.019116767	4.301272577	4.455977834	2.559847661
105.425	-0.01872466	9.84184E-05	0.02001804	4.504059038	4.456066448	2.559847661
105.43	-0.019185839	0.000100797	0.020493761	4.611096269	4.456159482	2.559847661
105.435	-0.019616925	0.000103016	0.020937449	4.710925991	4.456256742	2.559847661
105.44	-0.020313568	0.00010657	0.021648018	4.870804144	4.456361034	2.559847661
105.445	-0.020719355	0.000108686	0.022070959	4.965965812	4.456469533	2.559847661
105.45	-0.020742513	0.000108885	0.022110686	4.974904283	4.456578276	2.559847661
105.455	-0.020865913	0.000109579	0.022249393	5.00611337	4.456688316	2.559847661
105.46	-0.020913516	0.000109903	0.022314137	5.020680732	4.456798858	2.559847661
105.465	-0.020563628	0.000108239	0.021977905	4.945028545	4.456905733	2.559847661
105.47	-0.020322344	0.000107104	0.021748807	4.893481671	4.457010115	2.559847661
105.475	-0.020241405	0.00010678	0.021683439	4.878773663	4.457113666	2.559847661
105.48	-0.019742679	0.000104376	0.021198002	4.769550462	4.457212178	2.559847661
105.485	-0.019015546	0.000100819	0.020480056	4.608012624	4.457303567	2.559847661
105.49	-0.018299634	9.73125E-05	0.019772468	4.448805195	4.457388204	2.559847661
105.495	-0.017583851	9.38017E-05	0.019064203	4.289445615	4.45746635	2.559847661
105.5	-0.017077836	9.13428E-05	0.018568231	4.177852063	4.457540062	2.559847661
105.505	-0.016315784	8.76177E-05	0.017817017	4.008828869	4.457607343	2.559847661
105.51	-0.015169203	8.19632E-05	0.016677075	3.752341866	4.4576655	2.559847661
105.515	-0.014129294	7.68433E-05	0.015645252	3.520181717	4.457715957	2.559847661
105.52	-0.012457196	6.85765E-05	0.013979901	3.145477835	4.457755177	2.559847661
105.525	-0.010103575	5.68764E-05	0.011624315	2.615470798	4.457780978	2.559847661
105.53	-0.008018308	4.64992E-05	0.009536384	2.145686317	4.457797227	2.559847661
105.535	-0.005553152	3.42242E-05	0.007068143	1.590332072	4.457805021	2.559847661
105.54	-0.002767891	2.03118E-05	0.004272649	0.96134611	4.457806958	2.559847661
105.545	-0.000764572	1.02887E-05	0.002259926	0.508483299	4.457807105	2.559847661
105.55	0.001299222	-2.24885E-08	0.00019045	0.042851279	4.457807532	2.559847661
105.555	0.003825291	-1.26695E-05	-0.002346336	-0.527925521	4.45781123	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
105.56	0.005795888	-2.25672E-05	-0.004330538	-0.97437105	4.45781972	2.559847661
105.565	0.007453078	-3.08987E-05	-0.006000003	-1.350000692	4.45783376	2.559847661
105.57	0.008914065	-3.82658E-05	-0.007475648	-1.682020811	4.457853843	2.559847661
105.575	0.009578366	-4.16535E-05	-0.008154021	-1.834654825	4.45787703	2.559847661
105.58	0.010092313	-4.42651E-05	-0.008676908	-1.952304282	4.457902773	2.559847661
105.585	0.011046907	-4.90775E-05	-0.009640281	-2.169063167	4.457933616	2.559847661
105.59	0.011951703	-5.36562E-05	-0.01055664	-2.375244005	4.457969719	2.559847661
105.595	0.012591501	-5.69138E-05	-0.011208494	-2.521911237	4.45800979	2.559847661
105.6	0.013067678	-5.93527E-05	-0.011696453	-2.631701827	4.458052949	2.559847661
105.605	0.013384869	-6.09929E-05	-0.012024576	-2.70552967	4.458098229	2.559847661
105.61	0.01382487	-6.32385E-05	-0.012473774	-2.806599157	4.458146534	2.559847661
105.615	0.014636778	-6.73499E-05	-0.013296077	-2.991617362	4.45820068	2.559847661
105.62	0.015276644	-7.06252E-05	-0.01395102	-3.138979461	4.458259664	2.559847661
105.625	0.015210148	-7.03701E-05	-0.013899039	-3.127283876	4.458318135	2.559847661
105.63	0.015111684	-6.99324E-05	-0.013810637	-3.10739336	4.458375852	2.559847661
105.635	0.015444367	-7.16526E-05	-0.014156453	-3.185201829	4.458436138	2.559847661
105.64	0.015549551	-7.22496E-05	-0.014275795	-3.212053767	4.458497248	2.559847661
105.645	0.015362305	-7.13759E-05	-0.014099324	-3.172347866	4.458556895	2.559847661
105.65	0.015307388	-7.11562E-05	-0.014054969	-3.162368114	4.458616116	2.559847661
105.655	0.015319118	-7.12707E-05	-0.014078097	-3.167571784	4.458675428	2.559847661
105.66	0.015431737	-7.18905E-05	-0.014203266	-3.195734902	4.458735616	2.559847661
105.665	0.015482654	-7.22109E-05	-0.014267977	-3.210294899	4.458796201	2.559847661
105.67	0.015227198	-7.09995E-05	-0.01402331	-3.155244818	4.458854804	2.559847661
105.675	0.014978148	-6.98131E-05	-0.013783736	-3.101340555	4.458911505	2.559847661
105.68	0.014671841	-6.83448E-05	-0.013487275	-3.034636798	4.458965911	2.559847661
105.685	0.014120937	-6.56512E-05	-0.012943484	-2.912283962	4.459016307	2.559847661
105.69	0.013531408	-6.27603E-05	-0.012360002	-2.781000389	4.459062584	2.559847661
105.695	0.012670719	-5.85145E-05	-0.011503282	-2.588238396	4.459103161	2.559847661
105.7	0.011558785	-5.29988E-05	-0.010390675	-2.337901812	4.459136928	2.559847661
105.705	0.010590997	-4.81917E-05	-0.009421339	-2.119801176	4.459165278	2.559847661
105.71	0.009674851	-4.364E-05	-0.008503801	-1.913355131	4.459188935	2.559847661
105.715	0.008771783	-3.91517E-05	-0.007599268	-1.709835197	4.459208382	2.559847661
105.72	0.00768632	-3.37531E-05	-0.006511639	-1.465118721	4.459223314	2.559847661
105.725	0.006302903	-2.68491E-05	-0.005121213	-1.1522729	4.459233355	2.559847661
105.73	0.005299066	-2.18239E-05	-0.004109521	-0.924642324	4.459240452	2.559847661
105.735	0.00457263	-1.81958E-05	-0.003379292	-0.760340771	4.459245736	2.559847661
105.74	0.003489743	-1.27861E-05	-0.00229074	-0.515416589	4.459248814	2.559847661
105.745	0.002504308	-7.84724E-06	-0.00129722	-0.291874528	4.459250399	2.559847661
105.75	0.001785566	-4.2448E-06	-0.000572714	-0.12886073	4.459251205	2.559847661
105.755	0.000936674	5.24712E-09	0.00028185	0.063416272	4.459251427	2.559847661
105.76	7.68264E-05	4.31461E-06	0.001148139	0.258331384	4.459251428	2.559847661
105.765	-0.000860659	9.01207E-06	0.002092218	0.470749061	4.459251616	2.559847661
105.77	-0.001876297	1.41098E-05	0.003116474	0.701206726	4.459252505	2.559847661
105.775	-0.002656123	1.80337E-05	0.003904686	0.878554331	4.459254289	2.559847661
105.78	-0.003522221	2.23838E-05	0.004778321	1.075122199	4.459257424	2.559847661
105.785	-0.00459078	2.77588E-05	0.00585752	1.3179421	4.459262751	2.559847661
105.79	-0.005300739	3.13559E-05	0.006579582	1.480405931	4.459269852	2.559847661
105.795	-0.00571332	3.34609E-05	0.007002053	1.575461932	4.459278102	2.559847661
105.8	-0.006254961	3.62105E-05	0.007553853	1.699616891	4.45928799	2.559847661
105.805	-0.006608854	3.80354E-05	0.007920016	1.782003557	4.459299029	2.559847661
105.81	-0.006429458	3.71905E-05	0.007749371	1.743608431	4.459309477	2.559847661
105.815	-0.006346439	3.68099E-05	0.00767251	1.726314786	4.459319657	2.559847661
105.82	-0.0065611	3.79294E-05	0.00789861	1.777187183	4.459330537	2.559847661
105.825	-0.006123561	3.58019E-05	0.007468967	1.6805176	4.459340014	2.559847661
105.83	-0.005323746	3.18382E-05	0.006668693	1.500455924	4.459347177	2.559847661
105.835	-0.005017331	3.03373E-05	0.006365749	1.432293531	4.45935354	2.559847661
105.84	-0.004195639	2.62792E-05	0.005546779	1.24802532	4.459357989	2.559847661
105.845	-0.002692101	1.87816E-05	0.0040343	0.907717423	4.459359821	2.559847661
105.85	-0.001873333	1.46784E-05	0.00320689	0.721550348	4.459360708	2.559847661
105.855	-0.001363598	1.21321E-05	0.002693532	0.60604459	4.459361178	2.559847661
105.86	-0.000660452	8.6096E-06	0.001983509	0.446289566	4.459361288	2.559847661
105.865	-0.00049057	7.74296E-06	0.001808847	0.40699068	4.459361349	2.559847661
105.87	-0.000503239	7.80421E-06	0.001821218	0.409774016	4.459361413	2.559847661
105.875	-0.000380019	7.18475E-06	0.00169635	0.381678834	4.459361449	2.559847661
105.88	-0.000531443	7.93934E-06	0.001848753	0.41596947	4.459361521	2.559847661
105.885	-0.000567834	8.13237E-06	0.001887733	0.424739857	4.459361602	2.559847661
105.89	-0.000334246	6.97406E-06	0.001653889	0.372125063	4.45936163	2.559847661
105.895	3.21688E-05	5.14725E-06	0.001285762	0.289296379	4.459361631	2.559847661
105.9	0.00052053	2.69643E-06	0.00079195	0.178188734	4.459361699	2.559847661
105.905	0.000488587	2.83569E-06	0.00082026	0.184558501	4.459361759	2.559847661
105.91	0.000302369	3.7646E-06	0.001007858	0.226768011	4.459361782	2.559847661
105.915	0.000605155	2.24229E-06	0.000700454	0.157602171	4.459361875	2.559847661
105.92	0.000383272	3.32519E-06	0.00091918	0.206815498	4.459361912	2.559847661
105.925	-0.000125004	5.8637E-06	0.001431776	0.322149601	4.459361916	2.559847661
105.93	-1.76209E-05	5.32264E-06	0.001322497	0.297561767	4.459361916	2.559847661
105.935	-0.000414806	7.2855E-06	0.001718828	0.386736293	4.45936196	2.559847661
105.94	-0.001115021	1.07936E-05	0.002426962	0.546066372	4.459362274	2.559847661
105.945	-0.000905113	9.75701E-06	0.002217597	0.498959307	4.459362481	2.559847661
105.95	-0.000811685	9.27408E-06	0.002120079	0.477017817	4.459362647	2.559847661
105.955	-0.001157654	1.09975E-05	0.002468102	0.555322965	4.459362986	2.559847661
105.96	-0.001139826	1.09062E-05	0.002449641	0.551169283	4.459363315	2.559847661
105.965	-0.001298068	1.1684E-05	0.002606658	0.586498137	4.45936374	2.559847661
105.97	-0.001540972	1.28978E-05	0.002851613	0.641612958	4.459364341	2.559847661
105.975	-0.001399128	1.21836E-05	0.002707358	0.609155562	4.459364835	2.559847661
105.98	-0.001572335	1.30332E-05	0.002878922	0.647757493	4.45936546	2.559847661
105.985	-0.001855019	1.44453E-05	0.003163863	0.71186918	4.45936633	2.559847661
105.99	-0.001811189	1.42238E-05	0.003119126	0.70180344	4.459367159	2.559847661
105.995	-0.002016473	1.52436E-05	0.003324928	0.748108692	4.459368187	2.559847661
106	-0.002081108	1.55783E-05	0.003392418	0.763294014	4.459369281	2.559847661
106.005	-0.001577145	1.30638E-05	0.002884634	0.649042588	4.45936991	2.559847661
106.01	-0.001269361	1.1513E-05	0.0025715	0.578587469	4.459370317	2.559847661
106.015	-0.001102591	1.06764E-05	0.002402618	0.540588971	4.459370624	2.559847661
106.02	-0.000530208	7.81325E-06	0.001824658	0.410548039	4.459370695	2.559847661
106.025	0.000148225	4.40378E-06	0.00113659	0.255732674	4.459370701	2.559847661
106.03	0.000685378	1.68988E-06	0.000589164	0.132561899	4.45937082	2.559847661
106.035	0.001001488	7.37467E-08	0.000263593	0.059308349	4.459371073	2.559847661
106.04	0.001038577	-1.46222E-07	0.000219282	0.049338486	4.459371346	2.559847661
106.045	0.001120851	-5.87742E-07	0.000130344	0.029327429	4.459371663	2.559847661
106.05	0.001208814	-1.06535E-06	3.41398E-05	0.007681461	4.459372033	2.559847661
106.055	0.000993074	-2.77825E-08	0.000243691	0.05483058	4.459372282	2.559847661
106.06	0.00064646	1.66898E-06	0.000586331	0.13192453	4.459372388	2.559847661
106.065	0.000206207	3.83433E-06	0.001023521	0.230292324	4.459372398	2.559847661
106.07	-0.000396855	6.8195E-06	0.00162611	0.365874807	4.459372438	2.559847661
106.075	-0.000951196	9.56623E-06	0.002180447	0.490600515	4.459372667	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
106.08	-0.001611406	1.28418E-05	0.00284137	0.639308198	4.459373323	2.559847661
106.085	-0.002340975	1.64777E-05	0.003574818	0.8043341	4.459374708	2.559847661
106.09	-0.002621766	1.7876E-05	0.003856856	0.867792646	4.459376445	2.559847661
106.095	-0.002801857	1.87542E-05	0.00403395	0.907638781	4.45937843	2.559847661
106.1	-0.003333799	2.13891E-05	0.004565286	1.02718931	4.459381239	2.559847661
106.105	-0.003847046	2.39353E-05	0.005078658	1.14269804	4.459384979	2.559847661
106.11	-0.004580506	2.75754E-05	0.00581242	1.307794415	4.459390282	2.559847661
106.115	-0.00572269	3.32727E-05	0.006960536	1.566120686	4.459398559	2.559847661
106.12	-0.006579072	3.75572E-05	0.007823687	1.760329525	4.459409499	2.559847661
106.125	-0.007437086	4.18432E-05	0.008683955	1.953889873	4.459423478	2.559847661
106.13	-0.008613595	4.77397E-05	0.00986666	2.219998502	4.45944223	2.559847661
106.135	-0.009079943	5.01101E-05	0.010342012	2.326952725	4.459463067	2.559847661
106.14	-0.008897484	4.92195E-05	0.010162148	2.28648332	4.459483075	2.559847661
106.145	-0.008863105	4.90561E-05	0.010129134	2.279055194	4.459502929	2.559847661
106.15	-0.008588665	4.76912E-05	0.009853515	2.217040973	4.459521573	2.559847661
106.155	-0.008200805	4.57339E-05	0.009458317	2.128121384	4.45953857	2.559847661
106.16	-0.008509318	4.7237E-05	0.009761888	2.196424812	4.459556871	2.559847661
106.165	-0.009667415	5.29896E-05	0.010919387	2.456862	4.459580492	2.559847661
106.17	-0.011634061	6.28118E-05	0.012888191	2.899843081	4.459614701	2.559847661
106.175	-0.013483723	7.21076E-05	0.014750589	3.31888263	4.459660652	2.559847661
106.18	-0.013813215	7.38295E-05	0.015095142	3.396406938	4.459708876	2.559847661
106.185	-0.013228167	7.094E-05	0.014511631	3.265116985	4.459753102	2.559847661
106.19	-0.013286059	7.12334E-05	0.014570914	3.278455645	4.459797716	2.559847661
106.195	-0.013984086	7.47441E-05	0.015278667	3.437700146	4.45984714	2.559847661
106.2	-0.014286253	7.62999E-05	0.015590247	3.507805497	4.459898724	2.559847661
106.205	-0.013949068	7.46483E-05	0.015256684	3.432753971	4.459947901	2.559847661
106.21	-0.013968783	7.47587E-05	0.015278998	3.437774654	4.459997218	2.559847661
106.215	-0.014499173	7.7441E-05	0.015818754	3.559219732	4.460050351	2.559847661
106.22	-0.014290881	7.64482E-05	0.015617945	3.514037648	4.460101968	2.559847661
106.225	-0.013759983	7.38079E-05	0.01508479	3.394077651	4.460149821	2.559847661
106.23	-0.014350378	7.67639E-05	0.015681749	3.528393567	4.460201869	2.559847661
106.235	-0.015044707	8.02873E-05	0.016388683	3.687453587	4.460259075	2.559847661
106.24	-0.014499985	7.76222E-05	0.015850481	3.566358295	4.460312214	2.559847661
106.245	-0.013961102	7.4944E-05	0.015309752	3.444694202	4.460361476	2.559847661
106.25	-0.014455309	7.74353E-05	0.015812868	3.557895273	4.460414288	2.559847661
106.255	-0.01463207	7.83828E-05	0.016004159	3.600935864	4.460468399	2.559847661
106.26	-0.013585031	7.32035E-05	0.014958392	3.365638283	4.460515044	2.559847661
106.265	-0.012766737	6.91223E-05	0.014134729	3.180314074	4.460556238	2.559847661
106.27	-0.012917305	6.98945E-05	0.014290701	3.215407667	4.460598409	2.559847661
106.275	-0.012465945	6.7689E-05	0.01384553	3.115244275	4.460637685	2.559847661
106.28	-0.011272415	6.17413E-05	0.01264571	2.84528466	4.4606698	2.559847661
106.285	-0.011011359	6.04253E-05	0.01238036	2.785580968	4.460700445	2.559847661
106.29	-0.011289589	6.18325E-05	0.012664553	2.849524396	4.460732658	2.559847661
106.295	-0.011066554	6.07401E-05	0.012443911	2.799879988	4.460763611	2.559847661
106.3	-0.011224081	6.15361E-05	0.012604678	2.836052526	4.460795451	2.559847661
106.305	-0.011750741	6.42046E-05	0.013143517	2.95729139	4.46083035	2.559847661
106.31	-0.011483213	6.29187E-05	0.012883814	2.898858195	4.460863677	2.559847661
106.315	-0.01102628	6.06639E-05	0.012428515	2.796415792	4.460894405	2.559847661
106.32	-0.011013011	6.06312E-05	0.012421912	2.794930185	4.460925059	2.559847661
106.325	-0.010666082	5.89436E-05	0.012081507	2.718338985	4.460953813	2.559847661
106.33	-0.010175861	5.65287E-05	0.011594588	2.608782261	4.460979984	2.559847661
106.335	-0.009905421	5.52188E-05	0.011330502	2.549362966	4.461004782	2.559847661
106.34	-0.009219782	5.1839E-05	0.010649193	2.396068422	4.461026266	2.559847661
106.345	-0.008559892	4.85714E-05	0.009990645	2.247895149	4.461044785	2.559847661
106.35	-0.008247061	4.70505E-05	0.009684164	2.178937003	4.461061975	2.559847661
106.355	-0.007362947	4.26852E-05	0.008804685	1.9810542	4.461075677	2.559847661
106.36	-0.006305345	3.74335E-05	0.007746921	1.743057223	4.461085725	2.559847661
106.365	-0.005442752	3.31603E-05	0.006886474	1.549456716	4.461093212	2.559847661
106.37	-0.00404675	2.62161E-05	0.005488666	1.234949826	4.461097351	2.559847661
106.375	-0.002926692	2.06225E-05	0.004363125	0.981703172	4.461099516	2.559847661
106.38	-0.00235955	1.78041E-05	0.003796128	0.854128804	4.461100923	2.559847661
106.385	-0.001364254	1.28497E-05	0.002799657	0.629922805	4.461101393	2.559847661
106.39	-0.000669811	9.38365E-06	0.002102701	0.473107662	4.461101507	2.559847661
106.395	-7.20494E-05	6.42306E-06	0.001507481	0.339183253	4.461101508	2.559847661
106.4	0.001351918	-6.80817E-07	7.96556E-05	0.017922507	4.46110197	2.559847661
106.405	0.002019102	-4.03456E-06	-0.000594232	-0.133702243	4.461103	2.559847661
106.41	0.002184938	-4.84635E-06	-0.000757331	-0.170399529	4.461104207	2.559847661
106.415	0.003450676	-1.11567E-05	-0.002024939	-0.455611177	4.461107216	2.559847661
106.42	0.004187108	-1.48618E-05	-0.002769006	-0.623026374	4.461111647	2.559847661
106.425	0.004202128	-1.4934E-05	-0.002783495	-0.626286302	4.46111611	2.559847661
106.43	0.004971139	-1.87679E-05	-0.003553271	-0.799485925	4.461122356	2.559847661
106.435	0.005344927	-2.06467E-05	-0.003930447	-0.884350646	4.461129576	2.559847661
106.44	0.005586448	-2.18348E-05	-0.004168947	-0.938013184	4.461137464	2.559847661
106.445	0.006781504	-2.77997E-05	-0.005366102	-1.207372864	4.461149087	2.559847661
106.45	0.007329661	-3.05597E-05	-0.005919907	-1.331979149	4.461162665	2.559847661
106.455	0.007637357	-3.20838E-05	-0.00622568	-1.400777951	4.461177408	2.559847661
106.46	0.009011523	-3.8947E-05	-0.007602369	-1.710533015	4.461197932	2.559847661
106.465	0.009861941	-4.3228E-05	-0.008460864	-1.903694369	4.461222513	2.559847661
106.47	0.010236931	-4.51095E-05	-0.008838103	-1.988573093	4.461248999	2.559847661
106.475	0.011266857	-5.02643E-05	-0.009871469	-2.22108058	4.461281083	2.559847661
106.48	0.011957062	-5.3739E-05	-0.01056787	-2.377770666	4.461317217	2.559847661
106.485	0.012575442	-5.68339E-05	-0.011188059	-2.517313214	4.461357186	2.559847661
106.49	0.013908598	-6.35073E-05	-0.012525033	-2.818132438	4.461406079	2.559847661
106.495	0.015114052	-6.95628E-05	-0.013737812	-3.091007749	4.461463814	2.559847661
106.5	0.016386611	-7.59516E-05	-0.015015922	-3.378582347	4.46153168	2.559847661
106.505	0.017971403	-8.39236E-05	-0.016605681	-3.736278294	4.461613308	2.559847661
106.51	0.018998948	-8.9131E-05	-0.017642674	-3.969601564	4.461704538	2.559847661
106.515	0.019766536	-9.30334E-05	-0.018419636	-4.144418148	4.461803288	2.559847661
106.52	0.020549862	-9.70255E-05	-0.01921432	-4.323222112	4.461910019	2.559847661
106.525	0.020783816	-9.8278E-05	-0.019463624	-4.379315435	4.462019195	2.559847661
106.53	0.020832891	-9.85941E-05	-0.019526538	-4.393471138	4.462128887	2.559847661
106.535	0.020929036	-9.9148E-05	-0.019636768	-4.418272772	4.462239594	2.559847661
106.54	0.020683098	-9.79907E-05	-0.019403039	-4.365683696	4.462347714	2.559847661
106.545	0.020472054	-9.69945E-05	-0.019201877	-4.32042235	4.462453639	2.559847661
106.55	0.020522629	-9.7311E-05	-0.019265801	-4.334805317	4.462560088	2.559847661
106.555	0.020326315	-9.6404E-05	-0.019082628	-4.293591314	4.462664511	2.559847661
106.56	0.019797792	-9.38321E-05	-0.018563376	-4.176759662	4.462763573	2.559847661
106.565	0.019170236	-9.07578E-05	-0.017942821	-4.03713462	4.462856455	2.559847661
106.57	0.018434987	-8.71394E-05	-0.017212598	-3.872834627	4.462942349	2.559847661
106.575	0.01769912	-8.35082E-05	-0.016480004	-3.708000904	4.463021522	2.559847661
106.58	0.017145984	-8.07852E-05	-0.015930756	-3.584420075	4.463095824	2.559847661
106.585	0.016678329	-7.84925E-05	-0.015468383	-3.480386176	4.463166128	2.559847661
106.59	0.016164752	-7.59739E-05	-0.014960526	-3.366118429	4.463232169	2.559847661
106.595	0.015460876	-7.25051E-05	-0.014261191	-3.208767962	4.463292584	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
106.6	0.014582134	-6.81524E-05	-0.013383897	-3.011376832	4.463346327	2.559847661
106.605	0.013972238	-6.51359E-05	-0.012776041	-2.874609206	4.463395668	2.559847661
106.61	0.013398187	-6.23114E-05	-0.012206988	-2.746572341	4.463441038	2.559847661
106.615	0.01232877	-5.70069E-05	-0.011138548	-2.506173339	4.463479454	2.559847661
106.62	0.011504541	-5.29093E-05	-0.010313415	-2.320518378	4.463512905	2.559847661
106.625	0.010926466	-5.00589E-05	-0.009739569	-2.191403034	4.46354308	2.559847661
106.63	0.009593692	-4.34382E-05	-0.008407007	-1.89157649	4.463566342	2.559847661
106.635	0.008358838	-3.72747E-05	-0.007166926	-1.612558256	4.463584001	2.559847661
106.64	0.00771701	-3.40844E-05	-0.0065252	-1.468170042	4.463599052	2.559847661
106.645	0.006576175	-2.84126E-05	-0.005384628	-1.211541301	4.463609982	2.559847661
106.65	0.005290406	-2.19983E-05	-0.004095146	-0.921407884	4.463617056	2.559847661
106.655	0.004063812	-1.58844E-05	-0.002866494	-0.644961106	4.46362123	2.559847661
106.66	0.00220704	-6.60889E-06	-0.001003225	-0.225725664	4.463622461	2.559847661
106.665	0.000689706	1.00491E-06	0.000525555	0.118249834	4.463622581	2.559847661
106.67	-0.000271821	5.83358E-06	0.001494793	0.336328397	4.4636226	2.559847661
106.675	-0.001574673	1.23703E-05	0.002806494	0.631461148	4.463623227	2.559847661
106.68	-0.002462954	1.68582E-05	0.003706817	0.83403393	4.46362476	2.559847661
106.685	-0.002797103	1.85597E-05	0.004048108	0.910824239	4.463626737	2.559847661
106.69	-0.003634474	2.27636E-05	0.004891195	1.100518933	4.463630076	2.559847661
106.695	-0.004710561	2.81815E-05	0.005977486	1.344934344	4.463635684	2.559847661
106.7	-0.005473388	3.20454E-05	0.006752008	1.519201798	4.463643255	2.559847661
106.705	-0.006049174	3.4974E-05	0.007338968	1.651267854	4.463652504	2.559847661
106.71	-0.00661593	3.78587E-05	0.007917036	1.781333038	4.463663566	2.559847661
106.715	-0.007178613	4.07319E-05	0.008492705	1.910858547	4.463676591	2.559847661
106.72	-0.007380246	4.18065E-05	0.008707991	1.959298015	4.463690357	2.559847661
106.725	-0.007420272	4.20627E-05	0.008759319	1.970846769	4.463704273	2.559847661
106.73	-0.007715604	4.35973E-05	0.009066741	2.040016645	4.463719319	2.559847661
106.735	-0.007737259	4.37751E-05	0.009101946	2.047937819	4.463734449	2.559847661
106.74	-0.007493605	4.26158E-05	0.008867821	1.995259726	4.463748642	2.559847661
106.745	-0.007520163	4.28029E-05	0.008905616	2.003763671	4.463762935	2.559847661
106.75	-0.007504204	4.27865E-05	0.0089023	2.00301756	4.463777168	2.559847661
106.755	-0.007301231	4.18346E-05	0.008710077	1.959767272	4.463790641	2.559847661
106.76	-0.007025848	4.05184E-05	0.008444292	1.899965704	4.463803117	2.559847661
106.765	-0.006726584	3.90752E-05	0.00815293	1.834409221	4.463814553	2.559847661
106.77	-0.006707467	3.90332E-05	0.008144449	1.832501022	4.463825923	2.559847661
106.775	-0.006545962	3.82919E-05	0.007994793	1.79882836	4.463836753	2.559847661
106.78	-0.00608289	3.60314E-05	0.007538495	1.696161336	4.463846105	2.559847661
106.785	-0.006122054	3.6275E-05	0.007587748	1.70724323	4.463855578	2.559847661
106.79	-0.006190819	3.66893E-05	0.007671403	1.726065586	4.463865264	2.559847661
106.795	-0.005719786	3.44022E-05	0.007209695	1.622181369	4.463873533	2.559847661
106.8	-0.005531712	3.35186E-05	0.007031385	1.58206157	4.463881267	2.559847661
106.805	-0.005451274	3.31913E-05	0.006965336	1.567200573	4.463888777	2.559847661
106.81	-0.004802086	3.00258E-05	0.006326631	1.423491996	4.463894606	2.559847661
106.815	-0.003986738	2.60167E-05	0.005517892	1.241525663	4.463898623	2.559847661
106.82	-0.003271318	2.24996E-05	0.004808601	1.081935232	4.463901327	2.559847661
106.825	-0.002790946	2.01565E-05	0.004336158	0.975635554	4.463903296	2.559847661
106.83	-0.002412333	1.83407E-05	0.003970082	0.893268354	4.463904767	2.559847661
106.835	-0.001368083	1.32086E-05	0.002935647	0.660520554	4.46390524	2.559847661
106.84	1.37206E-05	6.37016E-06	0.001557802	0.350505468	4.46390524	2.559847661
106.845	0.001139058	8.14395E-07	0.000438806	0.098731429	4.463905568	2.559847661
106.85	0.002841672	-7.61324E-06	-0.001257922	-0.283032521	4.463907609	2.559847661
106.855	0.005201891	-1.93543E-05	-0.003620386	-0.814586955	4.463914448	2.559847661
106.86	0.007288617	-2.97524E-05	-0.00571132	-1.285046951	4.463927875	2.559847661
106.865	0.009386338	-4.02046E-05	-0.007811958	-1.757690589	4.463950142	2.559847661
106.87	0.011757325	-5.20458E-05	-0.010190331	-2.292824383	4.463985079	2.559847661
106.875	0.013651899	-6.15284E-05	-0.012093908	-2.721129252	4.464032184	2.559847661
106.88	0.015181819	-6.91825E-05	-0.013629742	-3.066691996	4.464090438	2.559847661
106.885	0.016893385	-7.77504E-05	-0.015348234	-3.453352603	4.464162566	2.559847661
106.89	0.01834262	-8.50234E-05	-0.016806413	-3.781442992	4.464247602	2.559847661
106.895	0.019447381	-9.0569E-05	-0.017917906	-4.031528942	4.464343189	2.559847661
106.9	0.020695272	-9.68297E-05	-0.019172352	-4.313779241	4.464451436	2.559847661
106.905	0.021805462	-0.000102414	-0.020286684	-4.564503978	4.464571609	2.559847661
106.91	0.022691241	-0.000106872	-0.021173833	-4.764112435	4.464701743	2.559847661
106.915	0.023704783	-0.000111972	-0.022188374	-4.992384055	4.464843763	2.559847661
106.92	0.024553772	-0.000116259	-0.02304104	-5.184233946	4.464996137	2.559847661
106.925	0.025232498	-0.000119689	-0.023723098	-5.337697109	4.465157052	2.559847661
106.93	0.026042445	-0.000123777	-0.024535972	-5.520593737	4.465328464	2.559847661
106.935	0.026730974	-0.000127266	-0.025229635	-5.676667824	4.465509059	2.559847661
106.94	0.027387492	-0.000130592	-0.025890616	-5.825388517	4.465698633	2.559847661
106.945	0.028084248	-0.000134126	-0.026593035	-5.98343277	4.465897977	2.559847661
106.95	0.028507276	-0.000136296	-0.02702421	-6.080447296	4.46610337	2.559847661
106.955	0.029075278	-0.000139183	-0.027597745	-6.209492603	4.466317031	2.559847661
106.96	0.029744412	-0.000142591	-0.028274819	-6.361834211	4.466540638	2.559847661
106.965	0.029841016	-0.000143143	-0.028384351	-6.386478986	4.466765701	2.559847661
106.97	0.0300044	-0.00014401	-0.028556673	-6.425251503	4.466993235	2.559847661
106.975	0.030547111	-0.000146782	-0.029107381	-6.54916079	4.467229074	2.559847661
106.98	0.030674046	-0.00014749	-0.029247908	-6.58077928	4.467466877	2.559847661
106.985	0.030683612	-0.0001476	-0.029269675	-6.585676908	4.467704829	2.559847661
106.99	0.030849063	-0.000148493	-0.029447126	-6.625603301	4.467945354	2.559847661
106.995	0.030637884	-0.000147509	-0.029248363	-6.580881761	4.468182597	2.559847661
107	0.030296626	-0.000145864	-0.028916126	-6.506128428	4.468414584	2.559847661
107.005	0.029893172	-0.000143905	-0.028520638	-6.417143514	4.468640434	2.559847661
107.01	0.029267418	-0.000140819	-0.027897803	-6.277005784	4.468856928	2.559847661
107.015	0.029124565	-0.000140126	-0.027757821	-6.245509683	4.469071313	2.559847661
107.02	0.029599382	-0.000142517	-0.028240799	-6.354179887	4.469292745	2.559847661
107.025	0.030723918	-0.000148156	-0.029379009	-6.610276965	4.469531323	2.559847661
107.03	0.033056075	-0.000159862	-0.031704506	-7.133513892	4.469807494	2.559847661
107.035	0.035283316	-0.000171121	-0.033938757	-7.636220356	4.470122134	2.559847661
107.04	0.036078087	-0.000175257	-0.034759201	-7.82082023	4.470451109	2.559847661
107.045	0.035829623	-0.000174189	-0.03454304	-7.772184081	4.470775569	2.559847661
107.05	0.033703428	-0.000163739	-0.032433692	-7.297580787	4.471062663	2.559847661
107.055	0.030008114	-0.000145358	-0.028727014	-6.463578098	4.471290253	2.559847661
107.06	0.028328357	-0.000136963	-0.027035401	-6.08296519	4.471493077	2.559847661
107.065	0.02867004	-0.00013873	-0.02739241	-6.163292223	4.471700823	2.559847661
107.07	0.027448345	-0.00013276	-0.026188939	-5.892511324	4.471891241	2.559847661
107.075	0.023936665	-0.00011531	-0.022676433	-5.10219744	4.472036052	2.559847661
107.08	0.019725362	-9.43587E-05	-0.018463911	-4.154379956	4.472134391	2.559847661
107.085	0.017748558	-8.4421E-05	-0.016467412	-3.705167756	4.472214008	2.559847661
107.09	0.01948265	-9.29914E-05	-0.018197747	-4.094493084	4.472309941	2.559847661
107.095	0.020853228	-9.98893E-05	-0.019589603	-4.407660743	4.472419848	2.559847661
107.1	0.019690093	-9.4179E-05	-0.01843656	-4.148226099	4.472517835	2.559847661
107.105	0.019219971	-9.18821E-05	-0.017972937	-4.043910816	4.4726112	2.559847661
107.11	0.018132708	-8.65882E-05	-0.016904636	-3.80354318	4.4726943	2.559847661
107.115	0.013692148	-6.45418E-05	-0.012476808	-2.807281719	4.472741682	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
107.12	0.010533555	-4.86992E-05	-0.009299416	-2.092368653	4.472769726	2.559847661
107.125	0.011452953	-5.32175E-05	-0.010211801	-2.29765531	4.472802878	2.559847661
107.13	0.011860255	-5.53222E-05	-0.010636592	-2.393233246	4.47283843	2.559847661
107.135	0.009022182	-4.12441E-05	-0.007805107	-1.756149106	4.472859003	2.559847661
107.14	0.005615851	-2.422E-05	-0.004394838	-0.988838655	4.472866974	2.559847661
107.145	0.004686462	-1.94993E-05	-0.003449683	-0.776178743	4.472872525	2.559847661
107.15	0.005134755	-2.17263E-05	-0.003899433	-0.877372517	4.472879188	2.559847661
107.155	0.003565179	-1.3941E-05	-0.002337132	-0.525854729	4.472882401	2.559847661
107.16	0.000943706	-8.32214E-07	0.000285596	0.064259135	4.472882626	2.559847661
107.165	0.000352749	2.18734E-06	0.000889495	0.200136392	4.472882657	2.559847661
107.17	0.000275939	2.5765E-06	0.00096732	0.217646906	4.472882676	2.559847661
107.175	-0.001229683	1.00817E-05	0.002467927	0.555283504	4.472883059	2.559847661
107.18	-0.002658487	1.72479E-05	0.003900259	0.877558361	4.472884845	2.559847661
107.185	-0.003343001	2.07017E-05	0.004590391	1.032838072	4.472887669	2.559847661
107.19	-0.004033654	2.41693E-05	0.00528319	1.188717761	4.472891782	2.559847661
107.195	-0.004925334	2.86339E-05	0.006175008	1.389376797	4.472897913	2.559847661
107.2	-0.006226807	3.51495E-05	0.007476187	1.682142181	4.472907712	2.559847661
107.205	-0.007419736	4.11528E-05	0.008674703	1.951808243	4.472921626	2.559847661
107.21	-0.007745273	4.28331E-05	0.009010111	2.027275047	4.472936788	2.559847661
107.215	-0.008114215	4.47026E-05	0.00938324	2.111229072	4.472953429	2.559847661
107.22	-0.00913038	4.98141E-05	0.010403288	2.340739725	4.472974498	2.559847661
107.225	-0.009442566	5.14525E-05	0.010729984	2.414246433	4.472997033	2.559847661
107.23	-0.008513631	4.68815E-05	0.009806967	2.20656768	4.473015352	2.559847661
107.235	-0.007868295	4.3678E-05	0.009160303	2.06106824	4.473031	2.559847661
107.24	-0.008073463	4.47254E-05	0.009371837	2.108663316	4.473047473	2.559847661
107.245	-0.007733242	4.308E-05	0.009039607	2.033911603	4.473062588	2.559847661
107.25	-0.006692786	3.7916E-05	0.007997566	1.799452288	4.473073909	2.559847661
107.255	-0.006271101	3.58141E-05	0.00757352	1.704042098	4.473083849	2.559847661
107.26	-0.006108303	3.50233E-05	0.007414011	1.668152569	4.473093279	2.559847661
107.265	-0.005321422	3.11166E-05	0.006626072	1.490866192	4.473100436	2.559847661
107.27	-0.004755527	2.82875E-05	0.006055607	1.362511561	4.473106152	2.559847661
107.275	-0.004644648	2.7737E-05	0.005944606	1.33753633	4.473111604	2.559847661
107.28	-0.004121645	2.5135E-05	0.005420036	1.219508049	4.473115897	2.559847661
107.285	-0.003658045	2.28082E-05	0.004951029	1.113981522	4.473119279	2.559847661
107.29	-0.003704778	2.30321E-05	0.00499625	1.124156145	4.473122748	2.559847661
107.295	-0.003384457	2.14347E-05	0.004674201	1.05169533	4.473125643	2.559847661
107.3	-0.002944818	1.9216E-05	0.004227095	0.951096351	4.473127835	2.559847661
107.305	-0.003349795	2.12015E-05	0.004628063	1.041314101	4.473130671	2.559847661
107.31	-0.003945736	2.41628E-05	0.00522598	1.175845499	4.473134606	2.559847661
107.315	-0.004239246	2.56135E-05	0.005518833	1.241737523	4.473139148	2.559847661
107.32	-0.004981429	2.92913E-05	0.006261139	1.40875624	4.47314542	2.559847661
107.325	-0.006062515	3.46787E-05	0.007348131	1.653329377	4.473154709	2.559847661
107.33	-0.00691749	3.89522E-05	0.008210105	1.847273667	4.473166803	2.559847661
107.335	-0.007676794	4.2749E-05	0.008975712	2.019535214	4.473181698	2.559847661
107.34	-0.008279285	4.57655E-05	0.009583843	2.156364632	4.473199023	2.559847661
107.345	-0.008939096	4.90611E-05	0.010248097	2.305821821	4.473219219	2.559847661
107.35	-0.009990294	5.43168E-05	0.011301659	2.542873383	4.473244444	2.559847661
107.355	-0.010793122	5.83514E-05	0.012106465	2.723954546	4.473273886	2.559847661
107.36	-0.011307735	6.0942E-05	0.012623158	2.840210443	4.473306203	2.559847661
107.365	-0.012078639	6.48103E-05	0.013394561	3.013776313	4.473343076	2.559847661
107.37	-0.012717837	6.80298E-05	0.014036473	3.158206465	4.473383955	2.559847661
107.375	-0.013412983	7.15161E-05	0.014731477	3.31458243	4.473429425	2.559847661
107.38	-0.014948888	7.92007E-05	0.016263042	3.659184542	4.473485905	2.559847661
107.385	-0.016802306	8.85171E-05	0.018119131	4.076804492	4.473557258	2.559847661
107.39	-0.017611659	9.2678E-05	0.018947841	4.263264196	4.473635651	2.559847661
107.395	-0.016563559	8.75714E-05	0.017916696	4.031256678	4.473704991	2.559847661
107.4	-0.014942752	7.95409E-05	0.016295984	3.666596456	4.473761425	2.559847661
107.405	-0.014772317	7.87189E-05	0.016130267	3.629310162	4.473816578	2.559847661
107.41	-0.014761834	7.87495E-05	0.016136427	3.630695967	4.473871653	2.559847661
107.415	-0.013023878	7.01624E-05	0.014404361	3.240981218	4.473914524	2.559847661
107.42	-0.011392534	6.20428E-05	0.01276759	2.872707681	4.473947327	2.559847661
107.425	-0.010994494	6.00766E-05	0.012371381	2.783560673	4.473977878	2.559847661
107.43	-0.010083901	5.55817E-05	0.011465747	2.579793089	4.474003578	2.559847661
107.435	-0.008737587	4.8878E-05	0.010115547	2.275998183	4.474022874	2.559847661
107.44	-0.008641065	4.839E-05	0.010017647	2.253970488	4.474041745	2.559847661
107.445	-0.00883278	4.93886E-05	0.010219324	2.299348005	4.474061464	2.559847661
107.45	-0.00783869	4.44844E-05	0.009230905	2.076953688	4.474076993	2.559847661
107.455	-0.006860983	3.96329E-05	0.008254334	1.857225211	4.474088891	2.559847661
107.46	-0.006050005	3.56339E-05	0.007449582	1.676155863	4.474098142	2.559847661
107.465	-0.003815004	2.45324E-05	0.005216447	1.173700579	4.47410182	2.559847661
107.47	-0.001324943	1.20895E-05	0.002715108	0.610899353	4.474102264	2.559847661
107.475	-0.000193789	6.39549E-06	0.001571021	0.353479675	4.474102273	2.559847661
107.48	0.000309801	3.83891E-06	0.001057446	0.237925396	4.474102297	2.559847661
107.485	4.03105E-05	5.14498E-06	0.001321245	0.297280033	4.474102298	2.559847661
107.49	-0.000326388	6.99695E-06	0.001695214	0.381423202	4.474102325	2.559847661
107.495	0.001533184	-2.24261E-06	-0.000163954	-0.03688959	4.474102919	2.559847661
107.5	0.003686089	-1.30461E-05	-0.002332746	-0.524867846	4.474106353	2.559847661
107.505	0.00316704	-1.05398E-05	-0.001826337	-0.410925724	4.474108888	2.559847661
107.51	0.002371288	-6.56396E-06	-0.001023656	-0.23032251	4.474110309	2.559847661
107.515	0.003501658	-1.2181E-05	-0.002157862	-0.485518946	4.474113408	2.559847661
107.52	0.005012593	-1.97448E-05	-0.003676905	-0.827303636	4.474119759	2.559847661
107.525	0.00582094	-2.38239E-05	-0.004495172	-1.011413792	4.474128322	2.559847661
107.53	0.0062298	-2.59017E-05	-0.004911922	-1.105182514	4.474138131	2.559847661
107.535	0.006959026	-2.95648E-05	-0.005646529	-1.27046907	4.474150371	2.559847661
107.54	0.008018429	-3.48994E-05	-0.006716097	-1.511121925	4.474166621	2.559847661
107.545	0.008079105	-3.5273E-05	-0.006790022	-1.527754954	4.474183118	2.559847661
107.55	0.007820902	-3.4013E-05	-0.00653557	-1.470503216	4.474198577	2.559847661
107.555	0.008859531	-3.92245E-05	-0.007583061	-1.706188747	4.474218415	2.559847661
107.56	0.009128763	-4.06616E-05	-0.007869962	-1.770741521	4.474239477	2.559847661
107.565	0.007610322	-3.31441E-05	-0.00635225	-1.429256221	4.474254115	2.559847661
107.57	0.007428751	-3.22323E-05	-0.006168381	-1.387885693	4.474268063	2.559847661
107.575	0.008243373	-3.63506E-05	-0.006999936	-1.574985532	4.474285238	2.559847661
107.58	0.006994136	-3.01992E-05	-0.005757928	-1.295533692	4.474297601	2.559847661
107.585	0.005670969	-2.36E-05	-0.004426599	-0.995984769	4.474305729	2.559847661
107.59	0.006159904	-2.60562E-05	-0.004922611	-1.107587502	4.47431532	2.559847661
107.595	0.005301596	-2.18538E-05	-0.004074409	-0.916741926	4.474322423	2.559847661
107.6	0.003155014	-1.1159E-05	-0.001918291	-0.431615427	4.474324939	2.559847661
107.605	0.003009851	-1.04129E-05	-0.001768354	-0.397879654	4.474327229	2.559847661
107.61	0.002794146	-9.3929E-06	-0.001562378	-0.351534943	4.474329202	2.559847661
107.615	0.000437958	2.32765E-06	0.000798643	0.179694733	4.47432925	2.559847661
107.62	-0.000809608	8.5955E-06	0.002060587	0.463631993	4.474329416	2.559847661
107.625	-0.000752942	8.31385E-06	0.002003702	0.450832994	4.474329559	2.559847661
107.63	-0.002164499	1.533E-05	0.003415968	0.768592724	4.474330743	2.559847661
107.635	-0.003774012	2.33922E-05	0.005037898	1.133527137	4.474334343	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
107.64	-0.004257191	2.58443E-05	0.005531058	1.244488038	4.474338924	2.559847661
107.645	-0.004730126	2.823E-05	0.006010795	1.352428846	4.474344579	2.559847661
107.65	-0.005076765	2.99932E-05	0.006365325	1.432198229	4.474351093	2.559847661
107.655	-0.005398581	3.16231E-05	0.006693015	1.505928408	4.474358459	2.559847661
107.66	-0.006019913	3.47648E-05	0.007324582	1.648030931	4.474367618	2.559847661
107.665	-0.005637961	3.29228E-05	0.006952576	1.564329585	4.474375652	2.559847661
107.67	-0.004826429	2.8896E-05	0.00613954	1.381396435	4.474381539	2.559847661
107.675	-0.005133265	3.04448E-05	0.00645234	1.45177656	4.474388199	2.559847661
107.68	-0.00479575	2.88301E-05	0.006126251	1.378406492	4.474394012	2.559847661
107.685	-0.003015094	1.99831E-05	0.004340901	0.97670273	4.47439631	2.559847661
107.69	-0.002309499	1.64482E-05	0.003627871	0.816270914	4.474397658	2.559847661
107.695	-0.00220177	1.59434E-05	0.003526054	0.793362242	4.474398883	2.559847661
107.7	-0.000353589	6.76242E-06	0.001674962	0.376866406	4.474398914	2.559847661
107.705	0.001241549	-1.23126E-06	6.4122E-05	0.014427455	4.474399304	2.559847661
107.71	0.00129436	-1.51643E-06	6.71228E-06	0.001510262	4.474399728	2.559847661
107.715	0.002459339	-7.3138E-06	-0.001161073	-0.261241476	4.474401256	2.559847661
107.72	0.003988877	-1.49937E-05	-0.002707397	-0.609164435	4.474405278	2.559847661
107.725	0.003737671	-1.37998E-05	-0.002466152	-0.554884178	4.474408808	2.559847661
107.73	0.003829343	-1.42686E-05	-0.002560848	-0.576190741	4.474412515	2.559847661
107.735	0.004483459	-1.7578E-05	-0.003227585	-0.726206616	4.474417595	2.559847661
107.74	0.003783639	-1.41441E-05	-0.002534141	-0.570181837	4.474421213	2.559847661
107.745	0.003149991	-1.09984E-05	-0.001899065	-0.427289597	4.474423721	2.559847661
107.75	0.002922716	-9.89248E-06	-0.001675845	-0.377065035	4.47442588	2.559847661
107.755	0.002070813	-5.66523E-06	-0.000822746	-0.185117739	4.474426964	2.559847661
107.76	0.001772402	-4.17884E-06	-0.000522841	-0.117639195	4.474427758	2.559847661
107.765	0.001395679	-2.33039E-06	-0.000149925	-0.033733115	4.47442825	2.559847661
107.77	0.000175764	3.74471E-06	0.001075364	0.241956866	4.474428258	2.559847661
107.775	-0.000111062	5.1925E-06	0.001367271	0.307635902	4.474428261	2.559847661
107.78	-0.000264858	5.94056E-06	0.001518126	0.341578308	4.474428279	2.559847661
107.785	-0.001243522	1.08112E-05	0.002500002	0.562500477	4.47442867	2.559847661
107.79	-0.001758869	1.33838E-05	0.003018482	0.679158396	4.474429452	2.559847661
107.795	-0.002842064	1.8772E-05	0.004104174	0.923439149	4.474431493	2.559847661
107.8	-0.004352766	2.63424E-05	0.005628967	1.266517575	4.474436282	2.559847661
107.805	-0.004247117	2.58688E-05	0.005532901	1.244902624	4.474440841	2.559847661
107.81	-0.004100867	2.51463E-05	0.005387006	1.212076256	4.474445091	2.559847661
107.815	-0.004577542	2.7547E-05	0.005871533	1.321094943	4.474450387	2.559847661
107.82	-0.00418352	2.56089E-05	0.00548012	1.233027007	4.47445481	2.559847661
107.825	-0.004152751	2.54501E-05	0.005448086	1.225819275	4.474459169	2.559847661
107.83	-0.004565757	2.75259E-05	0.005867263	1.320134284	4.474464438	2.559847661
107.835	-0.004383929	2.66305E-05	0.005686432	1.279447312	4.474469295	2.559847661
107.84	-0.004962472	2.9512E-05	0.006267179	1.410115294	4.474475519	2.559847661
107.845	-0.005640776	3.2934E-05	0.006956068	1.565115337	4.474483561	2.559847661
107.85	-0.005205461	3.07966E-05	0.006524416	1.467993527	4.474490409	2.559847661
107.855	-0.005256372	3.10554E-05	0.006576692	1.479755779	4.474497392	2.559847661
107.86	-0.005569283	3.26438E-05	0.006897469	1.551930602	4.474505232	2.559847661
107.865	-0.005479439	3.22142E-05	0.00681071	1.532409678	4.47451282	2.559847661
107.87	-0.00629425	3.62943E-05	0.007631993	1.717198383	4.474522833	2.559847661
107.875	-0.006913603	3.9457E-05	0.008267617	1.86021374	4.474534913	2.559847661
107.88	-0.005849831	3.4227E-05	0.007211541	1.622596739	4.474543562	2.559847661
107.885	-0.00459438	2.79887E-05	0.005952464	1.339304488	4.474548897	2.559847661
107.89	-0.004216151	2.61118E-05	0.005573758	1.25409547	4.47455339	2.559847661
107.895	-0.004247963	2.63019E-05	0.005612156	1.262735181	4.474557951	2.559847661
107.9	-0.003757132	2.39104E-05	0.005129638	1.154168474	4.474561518	2.559847661
107.905	-0.002325714	1.68118E-05	0.003697997	0.832049381	4.474562886	2.559847661
107.91	-0.0012528	1.14619E-05	0.00261948	0.589383046	4.474563282	2.559847661
107.915	-0.00094955	9.95915E-06	0.002316585	0.521231605	4.47456351	2.559847661
107.92	-0.000290604	6.69574E-06	0.001658927	0.373258579	4.474563531	2.559847661
107.925	0.000344113	3.53678E-06	0.001022444	0.23004992	4.474563561	2.559847661
107.93	0.000600113	2.27514E-06	0.000768275	0.172861777	4.474563652	2.559847661
107.935	0.001306045	-1.22265E-06	6.37175E-05	0.01433643	4.474564084	2.559847661
107.94	0.002046938	-4.9161E-06	-0.000680094	-0.153021257	4.474565142	2.559847661
107.945	0.0022413	-5.88521E-06	-0.000875232	-0.196927296	4.474566412	2.559847661
107.95	0.0024732	-7.02758E-06	-0.001105245	-0.248680226	4.474567958	2.559847661
107.955	0.002936379	-9.32582E-06	-0.001567942	-0.352786873	4.474570137	2.559847661
107.96	0.003340478	-1.13375E-05	-0.001972894	-0.443901254	4.474572958	2.559847661
107.965	0.003519037	-1.22271E-05	-0.002151952	-0.484189199	4.474576087	2.559847661
107.97	0.003555008	-1.23987E-05	-0.002186506	-0.491963884	4.474579282	2.559847661
107.975	0.00372671	-1.32432E-05	-0.002356477	-0.530207384	4.474582792	2.559847661
107.98	0.0038509	-1.38544E-05	-0.002479496	-0.557886645	4.47458654	2.559847661
107.985	0.003867247	-1.39214E-05	-0.00249298	-0.560920477	4.47459032	2.559847661
107.99	0.004127865	-1.52039E-05	-0.002751078	-0.618992484	4.474594626	2.559847661
107.995	0.004325571	-1.618E-05	-0.002947509	-0.663189431	4.474599355	2.559847661
108	0.0043851	-1.64585E-05	-0.00300356	-0.67580093	4.474604215	2.559847661
108.005	0.004831871	-1.86655E-05	-0.003447648	-0.775720854	4.474610116	2.559847661
108.01	0.005251017	-2.07495E-05	-0.003866919	-0.870056849	4.474617085	2.559847661
108.015	0.00535503	-2.12556E-05	-0.003968739	-0.892966329	4.474624332	2.559847661
108.02	0.005820191	-2.35536E-05	-0.00443103	-0.996981833	4.474632894	2.559847661
108.025	0.006413489	-2.6506E-05	-0.005024842	-1.130589495	4.47464329	2.559847661
108.03	0.006621724	-2.75366E-05	-0.005232123	-1.17722762	4.474654372	2.559847661
108.035	0.007127055	-3.00331E-05	-0.005734139	-1.290181265	4.47466721	2.559847661
108.04	0.0080987	-3.48685E-05	-0.006706323	-1.508922762	4.474683787	2.559847661
108.045	0.008724821	-3.79968E-05	-0.007335132	-1.650404733	4.474703026	2.559847661
108.05	0.009202712	-4.03718E-05	-0.007812463	-1.757804248	4.474724431	2.559847661
108.055	0.010290063	-4.57866E-05	-0.008898084	-2.002068854	4.474751192	2.559847661
108.06	0.011342009	-5.10573E-05	-0.009953986	-2.239646844	4.474783705	2.559847661
108.065	0.011439374	-5.15695E-05	-0.010056106	-2.262623795	4.474816779	2.559847661
108.07	0.011496186	-5.1839E-05	-0.010110538	-2.274870985	4.474850182	2.559847661
108.075	0.012724478	-5.79426E-05	-0.011332947	-2.549913068	4.474891104	2.559847661
108.08	0.014437969	-6.65038E-05	-0.01304689	-2.935550342	4.474943789	2.559847661
108.085	0.015722479	-7.2949E-05	-0.014336757	-3.225770426	4.475006265	2.559847661
108.09	0.016728698	-7.80184E-05	-0.015351015	-3.453978335	4.475076995	2.559847661
108.095	0.017065697	-7.97617E-05	-0.015699745	-3.53244255	4.475150603	2.559847661
108.1	0.016845502	-7.86963E-05	-0.015484564	-3.48402682	4.475222323	2.559847661
108.105	0.017574897	-8.23424E-05	-0.016215923	-3.648582766	4.475300389	2.559847661
108.11	0.018997121	-8.94862E-05	-0.017644481	-3.970008259	4.475391601	2.559847661
108.115	0.019377677	-9.14693E-05	-0.018040965	-4.059217081	4.475486504	2.559847661
108.12	0.018902436	-8.91612E-05	-0.017574845	-3.954340179	4.475576809	2.559847661
108.125	0.018716931	-8.82734E-05	-0.017395569	-3.914002989	4.47566535	2.559847661
108.13	0.019045443	-8.99506E-05	-0.017734292	-3.990215628	4.475757027	2.559847661
108.135	0.019509256	-9.23236E-05	-0.018211741	-4.097641832	4.475853223	2.559847661
108.14	0.019370318	-9.17066E-05	-0.018086658	-4.069498063	4.475948053	2.559847661
108.145	0.018755215	-8.86948E-05	-0.017478501	-3.932662666	4.476036957	2.559847661
108.15	0.018674083	-8.83332E-05	-0.017405506	-3.916238801	4.476125093	2.559847661
108.155	0.018677121	-8.84165E-05	-0.017422334	-3.920025152	4.476213258	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
108.16	0.017876747	-8.44933E-05	-0.016630345	-3.741827703	4.476294029	2.559847661
108.165	0.017137765	-8.08465E-05	-0.015894392	-3.576238119	4.47636826	2.559847661
108.17	0.017050547	-8.04545E-05	-0.015815302	-3.558442953	4.476441737	2.559847661
108.175	0.016734421	-7.89442E-05	-0.015510578	-3.489880052	4.476512515	2.559847661
108.18	0.015834294	-7.45155E-05	-0.014617202	-3.288870469	4.476575883	2.559847661
108.185	0.015017674	-7.04827E-05	-0.01380392	-3.10588206	4.476632884	2.559847661
108.19	0.014639014	-6.86358E-05	-0.013431524	-3.022092939	4.476687047	2.559847661
108.195	0.014136439	-6.61869E-05	-0.012937836	-2.911013089	4.476737554	2.559847661
108.2	0.013268946	-6.19105E-05	-0.012075892	-2.717075717	4.476782053	2.559847661
108.205	0.012741419	-5.93206E-05	-0.011553989	-2.599647585	4.476823084	2.559847661
108.21	0.012242729	-5.68971E-05	-0.011065691	-2.489780543	4.476860966	2.559847661
108.215	0.010949858	-5.05122E-05	-0.009779582	-2.200405987	4.476891269	2.559847661
108.22	0.00971018	-4.43642E-05	-0.008541637	-1.921868431	4.4769151	2.559847661
108.225	0.008912379	-4.04256E-05	-0.007748807	-1.743481486	4.476935175	2.559847661
108.23	0.00774331	-3.46414E-05	-0.006584786	-1.481576779	4.476950329	2.559847661
108.235	0.006566298	-2.88021E-05	-0.005410065	-1.217264637	4.476961226	2.559847661
108.24	0.005554992	-2.37935E-05	-0.004402767	-0.990622507	4.476969025	2.559847661
108.245	0.004273048	-1.74301E-05	-0.003123389	-0.702762633	4.47697364	2.559847661
108.25	0.003295497	-1.25738E-05	-0.002147311	-0.483144888	4.476976385	2.559847661
108.255	0.002303091	-7.66027E-06	-0.001159996	-0.260999148	4.476977726	2.559847661
108.26	0.000678203	4.19022E-07	0.000462883	0.104148611	4.476977842	2.559847661
108.265	-0.000532104	6.45855E-06	0.001675587	0.377007018	4.476977913	2.559847661
108.27	-0.001272358	1.0142E-05	0.002415024	0.54338047	4.476978323	2.559847661
108.275	-0.002266545	1.50872E-05	0.003407507	0.766689002	4.476979621	2.559847661
108.28	-0.00312027	1.93368E-05	0.00426019	0.958542791	4.476982082	2.559847661
108.285	-0.004121402	2.43115E-05	0.005258138	1.183081156	4.476986375	2.559847661
108.29	-0.005499894	3.11818E-05	0.006635938	1.493086042	4.47699402	2.559847661
108.295	-0.0065257	3.63086E-05	0.007663781	1.724350761	4.477004783	2.559847661
108.3	-0.007371612	4.05339E-05	0.008510681	1.914903262	4.477018517	2.559847661
108.305	-0.008158935	4.44707E-05	0.009299596	2.092409079	4.477035341	2.559847661
108.31	-0.008773217	4.75368E-05	0.009913923	2.230632754	4.477054795	2.559847661
108.315	-0.009795956	5.26382E-05	0.010935846	2.460565368	4.477079048	2.559847661
108.32	-0.010656937	5.69562E-05	0.011800629	2.655141453	4.477107752	2.559847661
108.325	-0.010872605	5.80441E-05	0.012018469	2.704155576	4.477137629	2.559847661
108.33	-0.01157667	6.15469E-05	0.012719822	2.86196	4.477171502	2.559847661
108.335	-0.012634546	6.68343E-05	0.013778267	3.100109978	4.477211847	2.559847661
108.34	-0.013254216	6.99411E-05	0.014400075	3.240016895	4.477256247	2.559847661
108.345	-0.014031468	7.38229E-05	0.015176844	3.414789853	4.477306007	2.559847661
108.35	-0.015019559	7.87681E-05	0.016166204	3.637395831	4.477363023	2.559847661
108.355	-0.015749606	8.24321E-05	0.016899095	3.802296453	4.477425715	2.559847661
108.36	-0.016487321	8.61298E-05	0.017638602	3.968685367	4.477494418	2.559847661
108.365	-0.017331193	9.03617E-05	0.018484767	4.159072554	4.477570334	2.559847661
108.37	-0.01812467	9.43485E-05	0.019280513	4.338115328	4.47765336	2.559847661
108.375	-0.018778153	9.76418E-05	0.019936265	4.485659523	4.477742482	2.559847661
108.38	-0.019276314	0.000100159	0.020437426	4.598420907	4.477836394	2.559847661
108.385	-0.019815247	0.000102877	0.020978502	4.72016299	4.477935632	2.559847661
108.39	-0.020356494	0.000105611	0.021522613	4.84258788	4.478040364	2.559847661
108.395	-0.020821701	0.000107967	0.021991632	4.948117199	4.478149938	2.559847661
108.4	-0.02118161	0.000109803	0.022356893	5.030300964	4.478263333	2.559847661
108.405	-0.021251603	0.000110188	0.022433629	5.047566447	4.478377479	2.559847661
108.41	-0.021502697	0.000111462	0.022687166	5.104612254	4.478494338	2.559847661
108.415	-0.022166585	0.000114805	0.02335225	5.254256225	4.478618524	2.559847661
108.42	-0.022510095	0.000116564	0.023702156	5.332985019	4.478746589	2.559847661
108.425	-0.022751848	0.000117805	0.023949019	5.388529276	4.47887742	2.559847661
108.43	-0.023304462	0.000120604	0.024505815	5.513808264	4.479014683	2.559847661
108.435	-0.023450541	0.00012139	0.024662181	5.548990662	4.479153672	2.559847661
108.44	-0.023309543	0.000120733	0.024529312	5.519095156	4.479290995	2.559847661
108.445	-0.023418984	0.000121321	0.024648238	5.545853581	4.479429611	2.559847661
108.45	-0.023373225	0.000121145	0.024612464	5.537804321	4.479567685	2.559847661
108.455	-0.023125932	0.000119959	0.024373009	5.483926977	4.479702854	2.559847661
108.46	-0.022829123	0.000118523	0.024083012	5.418677652	4.479834574	2.559847661
108.465	-0.022498419	0.000116909	0.02375704	5.345333941	4.479962507	2.559847661
108.47	-0.022549931	0.000117196	0.023815163	5.35841171	4.480091025	2.559847661
108.475	-0.022678162	0.000117884	0.023954035	5.389657897	4.48022101	2.559847661
108.48	-0.022410873	0.000116601	0.023694906	5.331353855	4.480347948	2.559847661
108.485	-0.022203712	0.00011561	0.023494895	5.286351333	4.480472551	2.559847661
108.49	-0.021978895	0.000114539	0.023278635	5.237692926	4.480594643	2.559847661
108.495	-0.021479973	0.000112096	0.022785588	5.126757374	4.480711255	2.559847661
108.5	-0.021184096	0.000110659	0.022495645	5.06152021	4.480824677	2.559847661
108.505	-0.020885435	0.000109222	0.022205571	4.996253569	4.480934923	2.559847661
108.51	-0.020061111	0.000105163	0.021386772	4.812023677	4.481036638	2.559847661
108.515	-0.019070934	0.000100257	0.020397212	4.58937265	4.48112856	2.559847661
108.52	-0.018517225	9.75118E-05	0.019843768	4.464847842	4.481215222	2.559847661
108.525	-0.018447099	9.719E-05	0.019778892	4.450250593	4.481301229	2.559847661
108.53	-0.01805277	9.52714E-05	0.019392095	4.363221429	4.481383597	2.559847661
108.535	-0.01718163	9.09593E-05	0.018522958	4.167665541	4.481458209	2.559847661
108.54	-0.016864817	8.93965E-05	0.018208001	4.096800238	4.481530094	2.559847661
108.545	-0.016788312	8.90533E-05	0.018138857	4.081242806	4.481601328	2.559847661
108.55	-0.016328433	8.67997E-05	0.017684756	3.979070043	4.481668714	2.559847661
108.555	-0.016192822	8.61617E-05	0.017556213	3.950147963	4.481734984	2.559847661
108.56	-0.015789904	8.42178E-05	0.017164606	3.862036246	4.481797998	2.559847661
108.565	-0.014541133	7.80429E-05	0.015920901	3.58220268	4.481851439	2.559847661
108.57	-0.013708894	7.39231E-05	0.015091353	3.395554518	4.481898937	2.559847661
108.575	-0.012961943	7.02508E-05	0.014352096	3.229221708	4.481941401	2.559847661
108.58	-0.011452442	6.27692E-05	0.012846496	2.890461685	4.48197455	2.559847661
108.585	-0.010135741	5.62263E-05	0.011530292	2.59431569	4.482000515	2.559847661
108.59	-0.008904914	5.01171E-05	0.010301786	2.317901826	4.482020557	2.559847661
108.595	-0.007472133	4.29877E-05	0.00886864	1.995443971	4.482034668	2.559847661
108.6	-0.006463525	3.79687E-05	0.007860046	1.768510281	4.482045227	2.559847661
108.605	-0.005153675	3.14598E-05	0.006552455	1.474302479	4.48205194	2.559847661
108.61	-0.003546509	2.34405E-05	0.004942052	1.111961602	4.482055118	2.559847661
108.615	-0.002811207	1.97566E-05	0.004202502	0.945563014	4.482057116	2.559847661
108.62	-0.002154363	1.6492E-05	0.003547238	0.798128532	4.482058289	2.559847661
108.625	-0.000868921	1.00861E-05	0.002261779	0.508900253	4.48205848	2.559847661
108.63	0.000142141	5.02598E-06	0.001246673	0.280501428	4.482058485	2.559847661
108.635	0.0007417	2.02184E-06	0.000644138	0.144931109	4.482058624	2.559847661
108.64	0.001322569	-8.82907E-07	6.16255E-05	0.013865737	4.482059066	2.559847661
108.645	0.001908448	-3.81214E-06	-0.000525711	-0.11828507	4.482059986	2.559847661
108.65	0.002489931	-6.72056E-06	-0.001108788	-0.249477343	4.482061553	2.559847661
108.655	0.003003829	-9.29057E-06	-0.001623952	-0.365389115	4.482063834	2.559847661
108.66	0.003626338	-1.23994E-05	-0.002247033	-0.505582483	4.482067157	2.559847661
108.665	0.004322032	-1.58807E-05	-0.002944645	-0.662545181	4.482071879	2.559847661
108.67	0.004817361	-1.83623E-05	-0.003441865	-0.774419623	4.482077744	2.559847661
108.675	0.005502711	-2.17827E-05	-0.004127075	-0.928591932	4.482085397	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
108.68	0.006515501	-2.68461E-05	-0.005141238	-1.156778606	4.482096126	2.559847661
108.685	0.007379929	-3.11825E-05	-0.006009561	-1.352151158	4.482109891	2.559847661
108.69	0.008085026	-3.47243E-05	-0.006718652	-1.511696751	4.482126413	2.559847661
108.695	0.008817551	-3.84023E-05	-0.007454883	-1.677348709	4.482146063	2.559847661
108.7	0.009686772	-4.27639E-05	-0.00832776	-1.873745938	4.482169779	2.559847661
108.705	0.010637008	-4.7541E-05	-0.009283597	-2.088809229	4.482198375	2.559847661
108.71	0.011283194	-5.08111E-05	-0.009937783	-2.236001222	4.482230552	2.559847661
108.715	0.011777508	-5.33173E-05	-0.01043907	-2.348790663	4.482265609	2.559847661
108.72	0.012411409	-5.65215E-05	-0.011079884	-2.492974007	4.482304542	2.559847661
108.725	0.012860426	-5.88108E-05	-0.011537678	-2.595977509	4.482346343	2.559847661
108.73	0.013144039	-6.02698E-05	-0.01182941	-2.661617234	4.482390008	2.559847661
108.735	0.01348985	-6.20365E-05	-0.01218263	-2.74109175	4.482436001	2.559847661
108.74	0.013810699	-6.36794E-05	-0.012511073	-2.814991364	4.482484208	2.559847661
108.745	0.014144706	-6.53874E-05	-0.01285251	-2.891814765	4.482534775	2.559847661
108.75	0.01444677	-6.69373E-05	-0.013162308	-2.961519225	4.482587524	2.559847661
108.755	0.014818011	-6.88298E-05	-0.013540561	-3.046626311	4.482643019	2.559847661
108.76	0.015340724	-7.1488E-05	-0.014071798	-3.166154599	4.482702499	2.559847661
108.765	0.015449266	-7.20923E-05	-0.014192372	-3.193283592	4.482762823	2.559847661
108.77	0.015300854	-7.14007E-05	-0.014052709	-3.16185951	4.482821994	2.559847661
108.775	0.015533211	-7.2606E-05	-0.014295215	-3.216423367	4.482882975	2.559847661
108.78	0.015619692	-7.31001E-05	-0.014393782	-3.238601026	4.482944638	2.559847661
108.785	0.015366157	-7.18937E-05	-0.014150129	-3.183778917	4.483004315	2.559847661
108.79	0.015254626	-7.13927E-05	-0.014048967	-3.161017575	4.483063128	2.559847661
108.795	0.01497554	-7.00649E-05	-0.013780837	-3.100688365	4.48311981	2.559847661
108.8	0.014476779	-6.76358E-05	-0.013290427	-2.990346052	4.483172779	2.559847661
108.805	0.014104734	-6.58381E-05	-0.012927533	-2.908694991	4.48322306	2.559847661
108.81	0.013577166	-6.32747E-05	-0.012410177	-2.792289872	4.48326965	2.559847661
108.815	0.012679033	-5.88655E-05	-0.011520502	-2.592112887	4.48331028	2.559847661
108.82	0.011397684	-5.25383E-05	-0.010244299	-2.304967241	4.483343113	2.559847661
108.825	0.009980481	-4.55161E-05	-0.008828531	-1.986419416	4.483368289	2.559847661
108.83	0.008802258	-3.96799E-05	-0.007652356	-1.721780046	4.483387871	2.559847661
108.835	0.007394905	-3.27035E-05	-0.006246937	-1.405560725	4.483401692	2.559847661
108.84	0.00586343	-2.50881E-05	-0.004713449	-1.060525983	4.483410381	2.559847661
108.845	0.004763869	-1.96228E-05	-0.003613347	-0.813003141	4.483416117	2.559847661
108.85	0.003369489	-1.2694E-05	-0.002219148	-0.499308409	4.483418986	2.559847661
108.855	0.001834312	-5.03714E-06	-0.000679069	-0.152790502	4.483419837	2.559847661
108.86	0.000931592	-5.27253E-07	0.000227731	0.05123958	4.483420056	2.559847661
108.865	-8.27412E-05	4.5302E-06	0.001244364	0.279981873	4.483420058	2.559847661
108.87	-0.001116803	9.7069E-06	0.002284682	0.514053504	4.483420373	2.559847661
108.875	-0.001484221	1.15635E-05	0.00265772	0.597987065	4.48342093	2.559847661
108.88	-0.001675201	1.253E-05	0.002851887	0.641674634	4.483421639	2.559847661
108.885	-0.001587718	1.21066E-05	0.002766277	0.622412435	4.483422276	2.559847661
108.89	-0.001326937	1.07978E-05	0.002501948	0.562938336	4.483422721	2.559847661
108.895	-0.001554274	1.19161E-05	0.002727806	0.613756319	4.483423332	2.559847661
108.9	-0.001645812	1.23672E-05	0.0028189	0.634252448	4.483424016	2.559847661
108.905	-0.00161402	1.21866E-05	0.002782425	0.626045683	4.483424675	2.559847661
108.91	-0.002047977	1.43254E-05	0.003212576	0.72282963	4.483425735	2.559847661
108.915	-0.002403611	1.60784E-05	0.003564722	0.802062436	4.483427195	2.559847661
108.92	-0.003039103	1.92136E-05	0.004194405	0.943741215	4.483429529	2.559847661
108.925	-0.00422672	2.51192E-05	0.005380257	1.210557722	4.483434045	2.559847661
108.93	-0.00496356	2.87931E-05	0.006117812	1.376507613	4.483440271	2.559847661
108.935	-0.005660781	3.22536E-05	0.006812372	1.53278377	4.48344837	2.559847661
108.94	-0.006816683	3.80099E-05	0.007967463	1.792679157	4.483460115	2.559847661
108.945	-0.007754615	4.26919E-05	0.008906746	2.004017794	4.483475313	2.559847661
108.95	-0.008700694	4.7412E-05	0.009853425	2.217020576	4.483494446	2.559847661
108.955	-0.009635838	5.20894E-05	0.010791337	2.428050756	4.483517913	2.559847661
108.96	-0.010245892	5.51412E-05	0.011403144	2.565707351	4.483544445	2.559847661
108.965	-0.011226377	6.00333E-05	0.012383713	2.786335527	4.483576299	2.559847661
108.97	-0.012238169	6.51031E-05	0.01339965	3.014921272	4.483614152	2.559847661
108.975	-0.012739012	6.76223E-05	0.013904366	3.128482409	4.483655168	2.559847661
108.98	-0.013535372	7.16046E-05	0.014702103	3.307973194	4.483701471	2.559847661
108.985	-0.014369298	7.57937E-05	0.015541086	3.496744292	4.483753657	2.559847661
108.99	-0.014640165	7.71732E-05	0.015817333	3.558899885	4.483807828	2.559847661
108.995	-0.015052842	7.92442E-05	0.016232024	3.6522053	4.483865096	2.559847661
109	-0.015648468	8.22351E-05	0.016830821	3.786934719	4.483926986	2.559847661
109.005	-0.016049237	8.42555E-05	0.017235287	3.877939486	4.483992086	2.559847661
109.01	-0.016581017	8.6927E-05	0.017770026	3.998255806	4.484061572	2.559847661
109.015	-0.017055719	8.93258E-05	0.018250116	4.106276162	4.484135094	2.559847661
109.02	-0.017091819	8.95369E-05	0.018292135	4.115730448	4.484208928	2.559847661
109.025	-0.017078434	8.94866E-05	0.018281974	4.113444252	4.484282645	2.559847661
109.03	-0.017324791	9.07287E-05	0.018530859	4.169443215	4.484358505	2.559847661
109.035	-0.017580749	9.2025E-05	0.01879025	4.227806219	4.484436623	2.559847661
109.04	-0.017740708	9.28416E-05	0.018953655	4.264572378	4.484516169	2.559847661
109.045	-0.017991245	9.411E-05	0.019207436	4.321673049	4.484597977	2.559847661
109.05	-0.018141196	9.48842E-05	0.019362349	4.356528606	4.484681155	2.559847661
109.055	-0.018048719	9.44449E-05	0.019273621	4.336564793	4.484763487	2.559847661
109.06	-0.018140549	9.49175E-05	0.019369014	4.358028198	4.484846659	2.559847661
109.065	-0.018303062	9.57529E-05	0.019536151	4.395633927	4.484931328	2.559847661
109.07	-0.018141642	9.49736E-05	0.019378745	4.360217578	4.48501451	2.559847661
109.075	-0.01803747	9.44689E-05	0.019276826	4.337285753	4.485096739	2.559847661
109.08	-0.018123027	9.49135E-05	0.019366625	4.357490582	4.485179751	2.559847661
109.085	-0.018166899	9.51534E-05	0.019415065	4.368389617	4.485263164	2.559847661
109.09	-0.018285004	9.57643E-05	0.01953843	4.396146794	4.485347666	2.559847661
109.095	-0.018355573	9.61444E-05	0.019614469	4.413255459	4.485432822	2.559847661
109.1	-0.018339469	9.60914E-05	0.019603756	4.410845192	4.485517828	2.559847661
109.105	-0.018392071	9.63832E-05	0.019662239	4.424003882	4.485603322	2.559847661
109.11	-0.018282805	9.58717E-05	0.019558939	4.400761327	4.485687803	2.559847661
109.115	-0.018131513	9.51456E-05	0.019412291	4.367765363	4.485770892	2.559847661
109.12	-0.018059618	9.4819E-05	0.019346346	4.352927843	4.485853324	2.559847661
109.125	-0.017735167	9.32327E-05	0.019026027	4.280856156	4.48593282	2.559847661
109.13	-0.017494937	9.20541E-05	0.018788052	4.227311678	4.486010177	2.559847661
109.135	-0.017563495	9.24191E-05	0.018861767	4.243897492	4.486088142	2.559847661
109.14	-0.017528815	9.22749E-05	0.01883265	4.237346349	4.486165799	2.559847661
109.145	-0.017548821	9.24002E-05	0.018857965	4.24304211	4.486243634	2.559847661
109.15	-0.017658663	9.29798E-05	0.018975016	4.269378498	4.486322445	2.559847661
109.155	-0.017639385	9.29163E-05	0.018962189	4.266492599	4.486401085	2.559847661
109.16	-0.017744583	9.34734E-05	0.019074697	4.291806825	4.486480666	2.559847661
109.165	-0.017753459	9.35588E-05	0.019091944	4.295687508	4.486560326	2.559847661
109.17	-0.017586466	9.2761E-05	0.018930809	4.259431972	4.486638495	2.559847661
109.175	-0.017722155	9.34725E-05	0.019074512	4.291765296	4.486717875	2.559847661
109.18	-0.017705214	9.34383E-05	0.019067609	4.29021197	4.486797102	2.559847661
109.185	-0.017325526	9.1588E-05	0.018693946	4.206137818	4.486872969	2.559847661
109.19	-0.017256764	9.12823E-05	0.018632252	4.192256675	4.486948234	2.559847661
109.195	-0.01719558	9.10312E-05	0.018581556	4.1808501	4.487022967	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
109.2	-0.016707115	8.86528E-05	0.018101448	4.072825792	4.487093514	2.559847661
109.205	-0.016078163	8.55708E-05	0.017479443	3.932874781	4.487158849	2.559847661
109.21	-0.01511569	8.08273E-05	0.016522388	3.717537319	4.487216596	2.559847661
109.215	-0.013763049	7.41196E-05	0.015169578	3.413155129	4.487264471	2.559847661
109.22	-0.012834161	6.95006E-05	0.014238353	3.203629364	4.487306101	2.559847661
109.225	-0.012670475	6.87112E-05	0.014079216	3.167823565	4.487346677	2.559847661
109.23	-0.012096677	6.5916E-05	0.013515857	3.041067898	4.48738366	2.559847661
109.235	-0.010215226	5.65929E-05	0.011637476	2.618432086	4.487410034	2.559847661
109.24	-0.008276424	4.69366E-05	0.009693063	2.180939183	4.487427347	2.559847661
109.245	-0.007129258	4.12246E-05	0.008543385	1.922261546	4.487440192	2.559847661
109.25	-0.005646579	3.3856E-05	0.007060844	1.588689858	4.487448251	2.559847661
109.255	-0.003734712	2.43234E-05	0.005143804	1.157355861	4.487451776	2.559847661
109.26	-0.002338343	1.73419E-05	0.003740426	0.841595912	4.487453158	2.559847661
109.265	-0.001245626	1.18817E-05	0.002643241	0.59472916	4.48745355	2.559847661
109.27	-4.11826E-05	5.86661E-06	0.001434898	0.322851953	4.487453551	2.559847661
109.275	0.001237369	-5.24464E-07	0.000151452	0.03407662	4.487453938	2.559847661
109.28	0.00240607	-6.37886E-06	-0.001023843	-0.230364632	4.487455401	2.559847661
109.285	0.003248686	-1.06085E-05	-0.00187274	-0.421366513	4.487458068	2.559847661
109.29	0.004127949	-1.50137E-05	-0.002756674	-0.620251601	4.487462375	2.559847661
109.295	0.005081808	-1.98007E-05	-0.003717006	-0.836326239	4.487468902	2.559847661
109.3	0.00566772	-2.27564E-05	-0.004309825	-0.969710658	4.487477021	2.559847661
109.305	0.006287629	-2.58727E-05	-0.004934764	-1.110322008	4.487487013	2.559847661
109.31	0.006982236	-2.93724E-05	-0.005636471	-1.268206004	4.487499334	2.559847661
109.315	0.007210651	-3.05503E-05	-0.005872619	-1.3213392	4.487512475	2.559847661
109.32	0.007402473	-3.15326E-05	-0.006069547	-1.365648003	4.487526324	2.559847661
109.325	0.007733332	-3.32128E-05	-0.006406358	-1.44143048	4.487541439	2.559847661
109.33	0.007792304	-3.35389E-05	-0.00647172	-1.456137044	4.487556786	2.559847661
109.335	0.007842666	-3.38132E-05	-0.006526713	-1.468510527	4.487572331	2.559847661
109.34	0.00800567	-3.46512E-05	-0.006694676	-1.506301999	4.48758853	2.559847661
109.345	0.008085762	-3.50779E-05	-0.006780195	-1.525543972	4.487605054	2.559847661
109.35	0.008094873	-3.51504E-05	-0.006794701	-1.52880766	4.487621615	2.559847661
109.355	0.008006063	-3.47321E-05	-0.006710214	-1.509798087	4.487637815	2.559847661
109.36	0.008008844	-3.47673E-05	-0.006717323	-1.511397706	4.487654026	2.559847661
109.365	0.007955007	-3.45284E-05	-0.006669083	-1.500543603	4.48767002	2.559847661
109.37	0.007513807	-3.23528E-05	-0.006229741	-1.401691717	4.487684289	2.559847661
109.375	0.00723108	-3.09516E-05	-0.005946817	-1.338033862	4.487697505	2.559847661
109.38	0.007151567	-3.05695E-05	-0.005869675	-1.320676913	4.487710431	2.559847661
109.385	0.006822194	-2.89391E-05	-0.005540545	-1.246622684	4.487722194	2.559847661
109.39	0.006726898	-2.8465E-05	-0.005444847	-1.225090535	4.487733631	2.559847661
109.395	0.006759077	-2.86368E-05	-0.005479536	-1.232895677	4.487745178	2.559847661
109.4	0.006458792	-2.71463E-05	-0.005178662	-1.165198839	4.487755721	2.559847661
109.405	0.006422895	-2.69612E-05	-0.005141334	-1.156800181	4.487766148	2.559847661
109.41	0.006552862	-2.76125E-05	-0.005272879	-1.186397854	4.487777	2.559847661
109.415	0.006463488	-2.71652E-05	-0.005182538	-1.166071144	4.487787559	2.559847661
109.42	0.006742187	-2.85448E-05	-0.005461154	-1.228759734	4.487799048	2.559847661
109.425	0.007181542	-3.07411E-05	-0.005904606	-1.328536415	4.487812083	2.559847661
109.43	0.007310195	-3.13889E-05	-0.006035415	-1.357968455	4.487825589	2.559847661
109.435	0.007591756	-3.27909E-05	-0.006318442	-1.421649476	4.487840156	2.559847661
109.44	0.008019669	-3.49303E-05	-0.006750281	-1.518813239	4.487856411	2.559847661
109.445	0.00834435	-3.65575E-05	-0.007076753	-1.592269444	4.487874009	2.559847661
109.45	0.008740435	-3.85397E-05	-0.007474001	-1.681650212	4.487893317	2.559847661
109.455	0.009186833	-4.07767E-05	-0.007922265	-1.782509642	4.487914648	2.559847661
109.46	0.009677724	-4.32399E-05	-0.0084158	-1.893555105	4.487938319	2.559847661
109.465	0.010104933	-4.53938E-05	-0.008847306	-1.990643806	4.487964126	2.559847661
109.47	0.010317527	-4.64765E-05	-0.00906419	-2.039442828	4.487991031	2.559847661
109.475	0.010680519	-4.83046E-05	-0.009430376	-2.121834525	4.488019862	2.559847661
109.48	0.01120748	-5.09632E-05	-0.009962873	-2.241646451	4.488051608	2.559847661
109.485	0.011404941	-5.19915E-05	-0.010168794	-2.287978617	4.488084483	2.559847661
109.49	0.01121451	-5.1083E-05	-0.009985323	-2.24669772	4.488116269	2.559847661
109.495	0.010920323	-4.96484E-05	-0.009695612	-2.181512742	4.488146409	2.559847661
109.5	0.010743241	-4.87953E-05	-0.009523344	-2.142752458	4.48817558	2.559847661
109.505	0.010428015	-4.72609E-05	-0.009213551	-2.073049018	4.488203064	2.559847661
109.51	0.009791236	-4.41141E-05	-0.008578343	-1.930127219	4.488227294	2.559847661
109.515	0.009479221	-4.25725E-05	-0.008267194	-1.860118713	4.488250004	2.559847661
109.52	0.009421947	-4.23163E-05	-0.008215503	-1.848488203	4.488272441	2.559847661
109.525	0.008933757	-3.99165E-05	-0.007731221	-1.739524752	4.488292612	2.559847661
109.53	0.008556155	-3.80538E-05	-0.007355397	-1.654964345	4.488311115	2.559847661
109.535	0.008402362	-3.73204E-05	-0.007207451	-1.621676383	4.488328958	2.559847661
109.54	0.007701199	-3.38621E-05	-0.006509848	-1.464715908	4.488343948	2.559847661
109.545	0.007019603	-3.04783E-05	-0.00582744	-1.311173926	4.488356402	2.559847661
109.55	0.006820072	-2.95019E-05	-0.005630552	-1.266874224	4.488368158	2.559847661
109.555	0.006422594	-2.75478E-05	-0.005236577	-1.178229842	4.488378583	2.559847661
109.56	0.0060444	-2.56782E-05	-0.004859667	-1.093425052	4.488387817	2.559847661
109.565	0.006071335	-2.58358E-05	-0.004891522	-1.100592439	4.488397133	2.559847661
109.57	0.005911953	-2.50828E-05	-0.004739646	-1.066420389	4.488405967	2.559847661
109.575	0.005347196	-2.23089E-05	-0.004180527	-0.94061851	4.488413193	2.559847661
109.58	0.004541575	-1.83288E-05	-0.00337847	-0.760155858	4.488418407	2.559847661
109.585	0.003489077	-1.31064E-05	-0.002326365	-0.523432069	4.488421483	2.559847661
109.59	0.002577421	-8.56596E-06	-0.001411901	-0.31767769	4.488423162	2.559847661
109.595	0.002269124	-7.02876E-06	-0.001102361	-0.248031163	4.488424464	2.559847661
109.6	0.002292561	-7.16433E-06	-0.001129742	-0.25419194	4.488425792	2.559847661
109.605	0.002000968	-5.74769E-06	-0.000844416	-0.189993613	4.488426804	2.559847661
109.61	0.001160514	-1.5931E-06	-8.01989E-06	-0.001804476	4.488427144	2.559847661
109.615	3.77891E-05	3.98856E-06	0.001115357	0.25095525	4.488427145	2.559847661
109.62	-0.000732455	7.83404E-06	0.001889099	0.425047376	4.48842728	2.559847661
109.625	-0.000815197	8.24452E-06	0.001971609	0.443612041	4.488427448	2.559847661
109.63	-0.001028546	9.279E-06	0.002179795	0.490453921	4.488427716	2.559847661
109.635	-0.001942111	1.38091E-05	0.003091003	0.695475594	4.488428669	2.559847661
109.64	-0.002694886	1.75606E-05	0.00384543	0.865221835	4.488430504	2.559847661
109.645	-0.002977012	1.89572E-05	0.004126232	0.928402251	4.488432744	2.559847661
109.65	-0.00359482	2.20124E-05	0.004740485	1.06660909	4.48843601	2.559847661
109.655	-0.00460325	2.70275E-05	0.00574852	1.29341689	4.488441366	2.559847661
109.66	-0.005396725	3.09838E-05	0.006543568	1.472302835	4.488448727	2.559847661
109.665	-0.00600552	3.40113E-05	0.00715184	1.60916404	4.488457842	2.559847661
109.67	-0.007031853	3.91139E-05	0.008176807	1.839781514	4.48847034	2.559847661
109.675	-0.008423377	4.60585E-05	0.009571347	2.153553088	4.488488273	2.559847661
109.68	-0.009372575	5.0816E-05	0.010526411	2.368442585	4.488510475	2.559847661
109.685	-0.010118189	5.45467E-05	0.01127518	2.536915589	4.48853635	2.559847661
109.69	-0.011311192	6.05151E-05	0.012472754	2.806369755	4.488568686	2.559847661
109.695	-0.012165301	6.48184E-05	0.013336	3.000600055	4.48860609	2.559847661
109.7	-0.01249918	6.65165E-05	0.013676585	3.07723158	4.488645576	2.559847661
109.705	-0.013249919	7.02863E-05	0.014432596	3.247334211	4.488689947	2.559847661
109.71	-0.013941627	7.37848E-05	0.015134066	3.405164808	4.488739072	2.559847661
109.715	-0.014038851	7.43152E-05	0.01524041	3.429092332	4.488788885	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
109.72	-0.01434455	7.587E-05	0.015552111	3.499225059	4.488840891	2.559847661
109.725	-0.014884938	7.86078E-05	0.016100915	3.622705942	4.488896888	2.559847661
109.73	-0.015059754	7.95293E-05	0.016285615	3.664263328	4.488954209	2.559847661
109.735	-0.015160342	8.00683E-05	0.016393641	3.688569142	4.489012298	2.559847661
109.74	-0.015616861	8.23819E-05	0.016857329	3.792898993	4.489073938	2.559847661
109.745	-0.016105573	8.4872E-05	0.017356314	3.905170712	4.489139496	2.559847661
109.75	-0.016228311	8.55393E-05	0.017490011	3.935252472	4.489206058	2.559847661
109.755	-0.016457199	8.67243E-05	0.017727448	3.988675725	4.48927451	2.559847661
109.76	-0.017051873	8.9745E-05	0.01833263	4.124841662	4.489347999	2.559847661
109.765	-0.017317452	9.11397E-05	0.018612032	4.187707281	4.489423794	2.559847661
109.77	-0.017409526	9.166E-05	0.01871624	4.211154094	4.489500398	2.559847661
109.775	-0.017784976	9.35997E-05	0.019104774	4.298574256	4.489580341	2.559847661
109.78	-0.017829438	9.39015E-05	0.019164891	4.312100488	4.489660685	2.559847661
109.785	-0.017725113	9.34498E-05	0.019073667	4.291575071	4.489740091	2.559847661
109.79	-0.017915708	9.44756E-05	0.019280207	4.338046596	4.489821214	2.559847661
109.795	-0.017753663	9.37543E-05	0.019134524	4.30526793	4.489900876	2.559847661
109.8	-0.017516182	9.26452E-05	0.018910548	4.254873232	4.489978421	2.559847661
109.805	-0.017535482	9.28291E-05	0.018947675	4.263226854	4.490056138	2.559847661
109.81	-0.016991127	9.02142E-05	0.018419682	4.144428444	4.490129104	2.559847661
109.815	-0.016261153	8.66568E-05	0.017701559	3.982850774	4.490195935	2.559847661
109.82	-0.015763091	8.42649E-05	0.017218827	3.874236129	4.490258735	2.559847661
109.825	-0.014592099	7.85275E-05	0.016061231	3.613777082	4.490312551	2.559847661
109.83	-0.013090221	7.1114E-05	0.014566131	3.277379529	4.490355859	2.559847661
109.835	-0.012009703	6.5796E-05	0.013494097	3.036171931	4.490392312	2.559847661
109.84	-0.01066645	5.91792E-05	0.012160703	2.736158257	4.490421067	2.559847661
109.845	-0.008971529	5.07929E-05	0.010471517	2.356091429	4.49044141	2.559847661
109.85	-0.007586426	4.39416E-05	0.009092116	2.04572609	4.490455956	2.559847661
109.855	-0.006164483	3.6917E-05	0.007678416	1.727643691	4.490465561	2.559847661
109.86	-0.0043206	2.77841E-05	0.005841223	1.314275072	4.490470279	2.559847661
109.865	-0.002427769	1.83942E-05	0.003953306	0.889493769	4.490471768	2.559847661
109.87	-0.000469654	8.67622E-06	0.002000435	0.450097965	4.490471824	2.559847661
109.875	0.001783497	-2.5248E-06	-0.000249211	-0.056072386	4.490472628	2.559847661
109.88	0.003917055	-1.31517E-05	-0.002382334	-0.536025038	4.490476506	2.559847661
109.885	0.005655279	-2.18152E-05	-0.004120471	-0.927106007	4.490484589	2.559847661
109.89	0.007233469	-2.96807E-05	-0.005697865	-1.282019527	4.490497813	2.559847661
109.895	0.008627192	-3.66288E-05	-0.00709074	-1.595416505	4.490516625	2.559847661
109.9	0.009883031	-4.28832E-05	-0.008344161	-1.877436287	4.490541311	2.559847661
109.905	0.011295653	-4.99156E-05	-0.009753005	-2.194426189	4.490573559	2.559847661
109.91	0.01278323	-5.7325E-05	-0.011236761	-2.528271296	4.490614859	2.559847661
109.915	0.014424222	-6.55006E-05	-0.012873303	-2.896493111	4.490667444	2.559847661
109.92	0.01626036	-7.46649E-05	-0.014706621	-3.308989685	4.490734269	2.559847661
109.925	0.017645843	-8.15978E-05	-0.016091625	-3.620615704	4.490812966	2.559847661
109.93	0.018726862	-8.70009E-05	-0.017170702	-3.86340802	4.490901601	2.559847661
109.935	0.02013685	-9.40448E-05	-0.018577085	-4.179844034	4.491004086	2.559847661
109.94	0.021301293	-9.98806E-05	-0.019741901	-4.441927745	4.491118766	2.559847661
109.945	0.022114301	-0.000103953	-0.020554644	-4.62479479	4.491242367	2.559847661
109.95	0.023299088	-0.000109876	-0.021736253	-4.890656847	4.491379567	2.559847661
109.955	0.024399803	-0.000115398	-0.022837666	-5.138474746	4.491530037	2.559847661
109.96	0.025069592	-0.000118769	-0.023509776	-5.289699493	4.49168888	2.559847661
109.965	0.025889647	-0.000122882	-0.024329972	-5.474243699	4.491858286	2.559847661
109.97	0.02665472	-0.000126734	-0.025097798	-5.647004538	4.492037852	2.559847661
109.975	0.027036173	-0.000128673	-0.02548421	-5.733947322	4.492222595	2.559847661
109.98	0.027332548	-0.00013018	-0.025784561	-5.801526295	4.492411409	2.559847661
109.985	0.02754407	-0.000131261	-0.026000037	-5.850008231	4.492603158	2.559847661
109.99	0.027785976	-0.000132485	-0.026244038	-5.90490857	4.492798289	2.559847661
109.995	0.028276472	-0.000134951	-0.026735347	-6.015453023	4.493000371	2.559847661
110	0.028652065	-0.000136854	-0.02711453	-6.100769183	4.493207856	2.559847661
110.005	0.028794584	-0.000137592	-0.027261498	-6.13383704	4.493417411	2.559847661
110.01	0.029001052	-0.000138642	-0.027470729	-6.180914034	4.493629982	2.559847661
110.015	0.029266607	-0.000139988	-0.02773885	-6.241241216	4.493846463	2.559847661
110.02	0.029536089	-0.000141354	-0.028010907	-6.302454116	4.49406695	2.559847661
110.025	0.029876228	-0.000143071	-0.02835309	-6.379445293	4.494292544	2.559847661
110.03	0.030261946	-0.000145019	-0.028741079	-6.466742703	4.494524	2.559847661
110.035	0.030574512	-0.000146606	-0.029057098	-6.537847067	4.494760263	2.559847661
110.04	0.030770526	-0.000147608	-0.029256668	-6.5827502	4.494999565	2.559847661
110.045	0.031107423	-0.000149305	-0.029594592	-6.658783209	4.495244135	2.559847661
110.05	0.031697637	-0.000152269	-0.030184707	-6.791559079	4.495498074	2.559847661
110.055	0.032275733	-0.000155179	-0.030764033	-6.921907531	4.49576136	2.559847661
110.06	0.032878692	-0.000158212	-0.03136777	-7.057748348	4.496034576	2.559847661
110.065	0.033630875	-0.000161995	-0.03212061	-7.227137254	4.496320435	2.559847661
110.07	0.034299584	-0.000165369	-0.032792101	-7.378222638	4.496617775	2.559847661
110.075	0.034890785	-0.000168356	-0.033386455	-7.511952443	4.496925454	2.559847661
110.08	0.035536805	-0.00017162	-0.034035747	-7.658043066	4.497244632	2.559847661
110.085	0.036112541	-0.000174537	-0.034616061	-7.788613805	4.497574235	2.559847661
110.09	0.036734373	-0.000177683	-0.03524048	-7.929107973	4.497915288	2.559847661
110.095	0.037486511	-0.000181488	-0.035995184	-8.09891637	4.498270449	2.559847661
110.1	0.037899961	-0.000183621	-0.036418135	-8.194080391	4.498633488	2.559847661
110.105	0.037806143	-0.000183219	-0.036336971	-8.175818404	4.498994732	2.559847661
110.11	0.037665648	-0.00018257	-0.036205938	-8.146336013	4.499353297	2.559847661
110.115	0.037546751	-0.000182028	-0.03609639	-8.121687683	4.499709601	2.559847661
110.12	0.037195591	-0.00018032	-0.035751567	-8.044102565	4.500059271	2.559847661
110.125	0.037029412	-0.000179514	-0.035588818	-8.007484156	4.500405824	2.559847661
110.13	0.037598142	-0.000182368	-0.036165173	-8.137163924	4.500763104	2.559847661
110.135	0.03862139	-0.000187512	-0.037189575	-8.367654439	4.501140095	2.559847661
110.14	0.039461909	-0.000191774	-0.038034519	-8.557766754	4.501533675	2.559847661
110.145	0.039594979	-0.000192524	-0.03818242	-8.591044395	4.501929913	2.559847661
110.15	0.038952355	-0.000189388	-0.037549134	-8.448555121	4.502313393	2.559847661
110.155	0.038653679	-0.00018793	-0.037254855	-8.382342342	4.502691016	2.559847661
110.16	0.039666718	-0.000193023	-0.038282183	-8.613491175	4.503088691	2.559847661
110.165	0.0407832	-0.000198695	-0.039404434	-8.865997649	4.503509067	2.559847661
110.17	0.040374851	-0.000196796	-0.039020461	-8.779603837	4.503921068	2.559847661
110.175	0.039036884	-0.000190233	-0.037695514	-8.481490549	4.504306214	2.559847661
110.18	0.037971306	-0.000185021	-0.036643737	-8.244840847	4.504670622	2.559847661
110.185	0.036101765	-0.000175836	-0.034791294	-7.828041176	4.505000029	2.559847661
110.19	0.032085931	-0.000155969	-0.030787968	-6.927292807	4.505260227	2.559847661
110.195	0.027989999	-0.000135629	-0.026694208	-6.006196773	4.505458235	2.559847661
110.2	0.025726806	-0.000124377	-0.024431566	-5.497102272	4.505625516	2.559847661
110.205	0.022860606	-0.000110166	-0.021576011	-4.854602586	4.505757601	2.559847661
110.21	0.018859821	-9.01893E-05	-0.017565286	-3.95218941	4.505847499	2.559847661
110.215	0.017658414	-8.40786E-05	-0.016339291	-3.676340534	4.505926309	2.559847661
110.22	0.018665688	-8.90601E-05	-0.017345186	-3.902666857	4.506014366	2.559847661
110.225	0.017745125	-8.45032E-05	-0.016424995	-3.695623976	4.506093951	2.559847661
110.23	0.016046251	-7.60103E-05	-0.014721116	-3.312251054	4.506159027	2.559847661
110.235	0.015553076	-7.35122E-05	-0.014220217	-3.199548745	4.506220165	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
110.24	0.014943884	-7.0452E-05	-0.013606709	-3.061509546	4.506276607	2.559847661
110.245	0.014841457	-6.98962E-05	-0.013496245	-3.036655056	4.506332278	2.559847661
110.25	0.015607591	-7.37108E-05	-0.014266495	-3.209961432	4.506393845	2.559847661
110.255	0.014853254	-6.99871E-05	-0.013514542	-3.040771844	4.506449605	2.559847661
110.26	0.013551723	-6.34745E-05	-0.012208233	-2.746852338	4.50649602	2.559847661
110.265	0.014022842	-6.57867E-05	-0.012675177	-2.851914919	4.506545719	2.559847661
110.27	0.014100379	-6.62036E-05	-0.012759307	-2.870844035	4.50659597	2.559847661
110.275	0.012712059	-5.9291E-05	-0.011369979	-2.558245313	4.506636812	2.559847661
110.28	0.012342403	-5.74096E-05	-0.010993254	-2.473482118	4.506675313	2.559847661
110.285	0.012497047	-5.81809E-05	-0.01114901	-2.508527263	4.506714785	2.559847661
110.29	0.011594424	-5.36819E-05	-0.010246333	-2.305425024	4.506748761	2.559847661
110.295	0.011456683	-5.29534E-05	-0.010101595	-2.272858861	4.506781935	2.559847661
110.3	0.012136144	-5.6337E-05	-0.010784853	-2.426591914	4.50681916	2.559847661
110.305	0.011648548	-5.39275E-05	-0.010298239	-2.317103866	4.506853454	2.559847661
110.31	0.011252611	-5.19371E-05	-0.009896881	-2.226798198	4.506885457	2.559847661
110.315	0.011517433	-5.32615E-05	-0.010164357	-2.286980262	4.506918983	2.559847661
110.32	0.010787441	-4.96429E-05	-0.00943743	-2.123421834	4.506948394	2.559847661
110.325	0.010272097	-4.70526E-05	-0.00891874	-2.00671642	4.506975062	2.559847661
110.33	0.010648212	-4.89255E-05	-0.009296978	-2.09182002	4.507003719	2.559847661
110.335	0.010164227	-4.65364E-05	-0.008815378	-1.983459971	4.50702983	2.559847661
110.34	0.009678747	-4.4109E-05	-0.008329368	-1.87410774	4.507053507	2.559847661
110.345	0.009756772	-4.45062E-05	-0.008409594	-1.892158697	4.507077566	2.559847661
110.35	0.008997149	-4.07406E-05	-0.007655061	-1.722388739	4.507098025	2.559847661
110.355	0.008496647	-3.82343E-05	-0.007153407	-1.609516538	4.507116272	2.559847661
110.36	0.008566902	-3.85965E-05	-0.007226571	-1.62597851	4.507134821	2.559847661
110.365	0.007584921	-3.37278E-05	-0.006251562	-1.406601447	4.507149361	2.559847661
110.37	0.006718583	-2.93957E-05	-0.005384785	-1.21157657	4.50716077	2.559847661
110.375	0.006622522	-2.89152E-05	-0.005288659	-1.18994824	4.507171854	2.559847661
110.38	0.005847978	-2.50712E-05	-0.004519714	-1.016935621	4.507180498	2.559847661
110.385	0.004955124	-2.06132E-05	-0.003628126	-0.816328427	4.507186703	2.559847661
110.39	0.004445437	-1.80658E-05	-0.003118739	-0.701716307	4.507191698	2.559847661
110.395	0.003730802	-1.44975E-05	-0.002405322	-0.541197384	4.507195216	2.559847661
110.4	0.003299407	-1.23327E-05	-0.001972548	-0.443823297	4.507197967	2.559847661
110.405	0.00287447	-1.02156E-05	-0.001549373	-0.348608861	4.507200056	2.559847661
110.41	0.002016056	-5.9307E-06	-0.000693004	-0.155925856	4.507201083	2.559847661
110.415	0.001543677	-3.55534E-06	-0.000218345	-0.049127531	4.507201685	2.559847661
110.42	0.001162711	-1.65081E-06	0.000162191	0.036492873	4.507202027	2.559847661
110.425	0.000380222	2.25917E-06	0.000943321	0.212247215	4.507202063	2.559847661
110.43	-0.00013847	4.86921E-06	0.00146467	0.329550829	4.507202068	2.559847661
110.435	-0.000474981	6.56511E-06	0.001803388	0.405762371	4.507202125	2.559847661
110.44	-0.000939721	8.90205E-06	0.002270098	0.510772048	4.507202348	2.559847661
110.445	-0.001182225	1.01394E-05	0.002517181	0.566365653	4.507202702	2.559847661
110.45	-0.001137789	9.94236E-06	0.002477349	0.55740359	4.507203029	2.559847661
110.455	-0.001044285	9.4896E-06	0.002385906	0.536828823	4.507203304	2.559847661
110.46	-0.001168181	1.01133E-05	0.002511877	0.565172296	4.507203649	2.559847661
110.465	-0.001366292	1.11113E-05	0.002711265	0.610034643	4.507204121	2.559847661
110.47	-0.001446041	1.1514E-05	0.002791658	0.628123091	4.50720465	2.559847661
110.475	-0.001919964	1.38738E-05	0.003262829	0.734136552	4.507205581	2.559847661
110.48	-0.002571571	1.71383E-05	0.003914537	0.880770883	4.507207253	2.559847661
110.485	-0.002719637	1.79001E-05	0.004066618	0.914988992	4.507209122	2.559847661
110.49	-0.002865876	1.86406E-05	0.004214422	0.94824485	4.507211198	2.559847661
110.495	-0.003140508	2.00271E-05	0.004491175	1.010514266	4.507213691	2.559847661
110.5	-0.003133777	2.00128E-05	0.004488012	1.009802757	4.507216173	2.559847661
110.505	-0.003189866	2.03051E-05	0.004546667	1.023000182	4.507218744	2.559847661
110.51	-0.003220056	2.04744E-05	0.00458025	1.030556231	4.507221365	2.559847661
110.515	-0.003064783	1.9716E-05	0.004427089	0.99609512	4.507223739	2.559847661
110.52	-0.003009122	1.9457E-05	0.004374782	0.984325877	4.507226028	2.559847661
110.525	-0.002494954	1.69255E-05	0.003863599	0.86930973	4.507227601	2.559847661
110.53	-0.001450754	1.17373E-05	0.002816281	0.633663266	4.507228133	2.559847661
110.535	-0.000413461	6.57304E-06	0.001774209	0.399197019	4.507228176	2.559847661
110.54	0.001263788	-1.78652E-06	8.81515E-05	0.019834094	4.50722858	2.559847661
110.545	0.003127379	-1.11279E-05	-0.001794854	-0.403842085	4.507231052	2.559847661
110.55	0.003631551	-1.37288E-05	-0.002318946	-0.521762862	4.507234385	2.559847661
110.555	0.003373078	-1.25076E-05	-0.002072312	-0.466270219	4.50723726	2.559847661
110.56	0.003197067	-1.16873E-05	-0.001906645	-0.428995169	4.507239844	2.559847661
110.565	0.002842379	-9.97491E-06	-0.001560886	-0.351199424	4.507241886	2.559847661
110.57	0.002531227	-8.47439E-06	-0.001257946	-0.283037928	4.507243505	2.559847661
110.575	0.002050765	-6.13651E-06	-0.000786021	-0.176854763	4.507244568	2.559847661
110.58	0.001216599	-2.02203E-06	4.4329E-05	0.009974033	4.507244942	2.559847661
110.585	0.000815951	-5.22418E-08	0.000441768	0.09939786	4.50724511	2.559847661
110.59	0.000562609	1.16971E-06	0.00068829	0.154865356	4.50724519	2.559847661
110.595	-9.14192E-05	4.39252E-06	0.001338378	0.301135124	4.507245192	2.559847661
110.6	-0.000419084	6.00373E-06	0.001663329	0.374249061	4.507245237	2.559847661
110.605	-0.000532959	6.53591E-06	0.001770653	0.398396953	4.507245309	2.559847661
110.61	-0.001087057	9.25933E-06	0.002319819	0.521959273	4.507245607	2.559847661
110.615	-0.001550364	1.15452E-05	0.002780688	0.625654799	4.507246215	2.559847661
110.62	-0.001708977	1.23093E-05	0.002934721	0.660312191	4.507246953	2.559847661
110.625	-0.00197463	1.36002E-05	0.003194945	0.718862601	4.507247938	2.559847661
110.63	-0.002255693	1.49648E-05	0.003469985	0.78074672	4.507249224	2.559847661
110.635	-0.002759997	1.74306E-05	0.003966945	0.892562631	4.50725115	2.559847661
110.64	-0.003869432	2.29165E-05	0.005067839	1.140263762	4.507254934	2.559847661
110.645	-0.005100605	2.90327E-05	0.00628827	1.41486085	4.507261509	2.559847661
110.65	-0.005933595	3.31786E-05	0.007115357	1.600955429	4.507270407	2.559847661
110.655	-0.00645769	3.57839E-05	0.007635014	1.717878234	4.507280947	2.559847661
110.66	-0.006925777	3.81004E-05	0.008097012	1.821827638	4.50729307	2.559847661
110.665	-0.007595693	4.14162E-05	0.00875823	1.970601762	4.507307652	2.559847661
110.67	-0.008323983	4.50277E-05	0.009478309	2.132619625	4.507325164	2.559847661
110.675	-0.008930206	4.80203E-05	0.010074886	2.266849457	4.50734532	2.559847661
110.68	-0.010239127	5.44916E-05	0.011364696	2.557056637	4.507371817	2.559847661
110.685	-0.012683415	6.66404E-05	0.013785061	3.101638738	4.507412475	2.559847661
110.69	-0.015231233	7.93563E-05	0.016316979	3.671320341	4.507471109	2.559847661
110.695	-0.016971801	8.80829E-05	0.018053749	4.06209346	4.507543909	2.559847661
110.7	-0.017747712	9.20039E-05	0.018833891	4.237625518	4.507623518	2.559847661
110.705	-0.018202371	9.42929E-05	0.019289256	4.340082573	4.507707258	2.559847661
110.71	-0.019633158	0.000101427	0.020708189	4.659342508	4.507804679	2.559847661
110.715	-0.021675672	0.000111656	0.022741943	5.116937223	4.507923426	2.559847661
110.72	-0.022354945	0.000115131	0.023432674	5.272351632	4.508049732	2.559847661
110.725	-0.022159532	0.000114204	0.023245317	5.230196329	4.508173839	2.559847661
110.73	-0.023239898	0.000119607	0.024322147	5.472483069	4.508310343	2.559847661
110.735	-0.024685734	0.000126888	0.025768655	5.797947448	4.508464359	2.559847661
110.74	-0.024602642	0.000126569	0.025701681	5.78287813	4.508617341	2.559847661
110.745	-0.024313914	0.000125175	0.02542033	5.719574182	4.508766753	2.559847661
110.75	-0.025163262	0.000129456	0.026278752	5.912719149	4.508926786	2.559847661
110.755	-0.025575952	0.00013161	0.026706489	6.008959985	4.509092112	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
110.76	-0.0247292	0.000127478	0.02587221	5.82124732	4.509246671	2.559847661
110.765	-0.024108405	0.000124437	0.025258191	5.683092871	4.509393568	2.559847661
110.77	-0.023989955	0.000123915	0.025152824	5.659385509	4.509539025	2.559847661
110.775	-0.02299852	0.000119065	0.024174079	5.439167688	4.509672708	2.559847661
110.78	-0.021222646	0.000110275	0.022401214	5.04027317	4.509786543	2.559847661
110.785	-0.019921741	0.000103822	0.021100225	4.747550552	4.50988685	2.559847661
110.79	-0.018925633	9.88952E-05	0.020107239	4.524128789	4.509977376	2.559847661
110.795	-0.017560947	9.21255E-05	0.018743392	4.217263226	4.510055319	2.559847661
110.8	-0.016524723	8.69736E-05	0.017705834	3.983812581	4.510124334	2.559847661
110.805	-0.015763026	8.32003E-05	0.016946115	3.812875927	4.510187133	2.559847661
110.81	-0.014552362	7.71846E-05	0.015735253	3.540431894	4.510240656	2.559847661
110.815	-0.013780119	7.3332E-05	0.014960025	3.366005544	4.51028865	2.559847661
110.82	-0.013383463	7.13711E-05	0.0145655	3.277237552	4.51033392	2.559847661
110.825	-0.012217523	6.55772E-05	0.013400046	3.015010451	4.510371646	2.559847661
110.83	-0.011383852	6.1402E-05	0.012560447	2.826100513	4.510404399	2.559847661
110.835	-0.011389393	6.14206E-05	0.012564266	2.826959935	4.510437184	2.559847661
110.84	-0.010984596	5.94087E-05	0.012159675	2.735926982	4.510467681	2.559847661
110.845	-0.010777717	5.83632E-05	0.011949495	2.688636454	4.510497039	2.559847661
110.85	-0.011071193	5.98283E-05	0.012245389	2.755212468	4.510528018	2.559847661
110.855	-0.010777846	5.83795E-05	0.011952774	2.689374106	4.510557376	2.559847661
110.86	-0.010738353	5.81721E-05	0.011911523	2.680092693	4.510586521	2.559847661
110.865	-0.011229003	6.06271E-05	0.012407285	2.791639066	4.510618389	2.559847661
110.87	-0.010973571	5.93762E-05	0.012154665	2.734799706	4.510648824	2.559847661
110.875	-0.010945766	5.9228E-05	0.012124743	2.728067249	4.510679105	2.559847661
110.88	-0.011787009	6.34284E-05	0.012972862	2.918893846	4.510714219	2.559847661
110.885	-0.012041786	6.47354E-05	0.013236689	2.978254987	4.510750868	2.559847661
110.89	-0.012137762	6.52343E-05	0.013337398	3.00091459	4.510788103	2.559847661
110.895	-0.012686462	6.80062E-05	0.013896812	3.126782611	4.51082878	2.559847661
110.9	-0.012352523	6.64049E-05	0.01357342	3.054019509	4.510867345	2.559847661
110.905	-0.011514534	6.22623E-05	0.012737009	2.865827089	4.510900854	2.559847661
110.91	-0.011288961	6.11619E-05	0.01251488	2.815847995	4.510933064	2.559847661
110.915	-0.010862077	5.9076E-05	0.012093867	2.721120155	4.510962884	2.559847661
110.92	-0.010172007	5.56661E-05	0.011407301	2.56664266	4.510989035	2.559847661
110.925	-0.009814509	5.39109E-05	0.011054513	2.487265377	4.51101338	2.559847661
110.93	-0.009213729	5.09524E-05	0.010459925	2.353483166	4.511034836	2.559847661
110.935	-0.008617755	4.80052E-05	0.009867714	2.220235556	4.511053606	2.559847661
110.94	-0.008342612	4.66676E-05	0.009598963	2.159766727	4.511071196	2.559847661
110.945	-0.007407791	4.20555E-05	0.008672454	1.95130204	4.511085065	2.559847661
110.95	-0.006286182	3.64859E-05	0.007553891	1.699625426	4.511095053	2.559847661
110.955	-0.00572454	3.37067E-05	0.006995871	1.574070953	4.511103335	2.559847661
110.96	-0.004710762	2.86867E-05	0.005988116	1.347326147	4.511108944	2.559847661
110.965	-0.003685196	2.35814E-05	0.004963502	1.116787843	4.511112376	2.559847661
110.97	-0.00339871	2.21686E-05	0.004680008	1.053001911	4.511115296	2.559847661
110.975	-0.00238301	1.71481E-05	0.003672749	0.826368486	4.511116731	2.559847661
110.98	-0.00091087	9.8182E-06	0.002202615	0.495588363	4.511116941	2.559847661
110.985	-0.000358872	7.06268E-06	0.001650092	0.371270727	4.511116973	2.559847661
110.99	0.000405307	3.27557E-06	0.000890846	0.200440455	4.511117015	2.559847661
110.995	0.001492235	-2.14062E-06	-0.000194753	-0.043819439	4.511117578	2.559847661
111	0.001750826	-3.43172E-06	-0.000453493	-0.102035825	4.511118352	2.559847661
111.005	0.002291909	-6.09472E-06	-0.00098711	-0.222099746	4.51111968	2.559847661
111.01	0.003650013	-1.28361E-05	-0.002337652	-0.525971629	4.511123047	2.559847661
111.015	0.004958355	-1.93453E-05	-0.003641261	-0.819283794	4.511129261	2.559847661
111.02	0.006538248	-2.72113E-05	-0.005216039	-1.173608852	4.511140065	2.559847661
111.025	0.008102032	-3.50253E-05	-0.0067798	-1.525454938	4.511156656	2.559847661
111.03	0.008973781	-3.9396E-05	-0.007654229	-1.722201537	4.511177009	2.559847661
111.035	0.010089601	-4.49714E-05	-0.008769416	-1.973118709	4.511202738	2.559847661
111.04	0.011296391	-5.10289E-05	-0.009980675	-2.245651833	4.51123499	2.559847661
111.045	0.011458572	-5.18941E-05	-0.010153171	-2.28446358	4.511268174	2.559847661
111.05	0.011137126	-5.03211E-05	-0.009835491	-2.212985418	4.511299523	2.559847661
111.055	0.011068978	-4.99867E-05	-0.00976797	-2.197793203	4.51133049	2.559847661
111.06	0.011571282	-5.24818E-05	-0.010271149	-2.311008616	4.51136433	2.559847661
111.065	0.012816859	-5.87E-05	-0.011514117	-2.590676387	4.511405849	2.559847661
111.07	0.013580759	-6.25586E-05	-0.012285232	-2.764177206	4.511452463	2.559847661
111.075	0.013310985	-6.12577E-05	-0.012022493	-2.705060993	4.511497245	2.559847661
111.08	0.013213317	-6.07865E-05	-0.011927339	-2.683651174	4.511541371	2.559847661
111.085	0.013439958	-6.19352E-05	-0.012159334	-2.735850185	4.511587024	2.559847661
111.09	0.013592728	-6.27155E-05	-0.012316578	-2.771229959	4.511633721	2.559847661
111.095	0.014030654	-6.49185E-05	-0.012756765	-2.870272195	4.511683476	2.559847661
111.1	0.014271441	-6.61623E-05	-0.013005279	-2.926187877	4.511734953	2.559847661
111.105	0.013727903	-6.34962E-05	-0.012466868	-2.805045268	4.511782583	2.559847661
111.11	0.013097716	-6.0371E-05	-0.011835888	-2.663074816	4.511825941	2.559847661
111.115	0.012912715	-5.94535E-05	-0.011650685	-2.621404069	4.511868082	2.559847661
111.12	0.012954907	-5.96738E-05	-0.01169517	-2.631413245	4.5119105	2.559847661
111.125	0.012943934	-5.96374E-05	-0.011687831	-2.629762053	4.511952846	2.559847661
111.13	0.012608592	-5.79856E-05	-0.011354393	-2.554738386	4.511993025	2.559847661
111.135	0.012168802	-5.57944E-05	-0.01091217	-2.455238353	4.512030451	2.559847661
111.14	0.012325369	-5.65619E-05	-0.011067201	-2.490120156	4.512068846	2.559847661
111.145	0.012854497	-5.92077E-05	-0.011601478	-2.610332576	4.512110609	2.559847661
111.15	0.012759687	-5.87601E-05	-0.011511051	-2.589986494	4.512151758	2.559847661
111.155	0.012382566	-5.68787E-05	-0.011131117	-2.504501282	4.51219051	2.559847661
111.16	0.012843282	-5.916E-05	-0.011591825	-2.608160583	4.512232199	2.559847661
111.165	0.013531328	-6.26057E-05	-0.012287461	-2.764678836	4.512278476	2.559847661
111.17	0.013470362	-6.2325E-05	-0.012230748	-2.751918276	4.512324336	2.559847661
111.175	0.013515742	-6.25476E-05	-0.012275696	-2.762031569	4.512370505	2.559847661
111.18	0.01426785	-6.62975E-05	-0.013032292	-2.932265782	4.512421956	2.559847661
111.185	0.014916909	-6.95581E-05	-0.013683676	-3.078826995	4.512478195	2.559847661
111.19	0.015184212	-7.09189E-05	-0.013955489	-3.139984973	4.512536467	2.559847661
111.195	0.015427539	-7.21564E-05	-0.014202668	-3.195600259	4.512596621	2.559847661
111.2	0.015716867	-7.3624E-05	-0.0144958	-3.261555045	4.512659053	2.559847661
111.205	0.016008078	-7.51053E-05	-0.014791637	-3.328118346	4.51272382	2.559847661
111.21	0.016145052	-7.58236E-05	-0.014935071	-3.360390899	4.512789701	2.559847661
111.215	0.016153058	-7.58943E-05	-0.014949195	-3.363568856	4.512855646	2.559847661
111.22	0.016333249	-7.68194E-05	-0.01513394	-3.405136527	4.512923071	2.559847661
111.225	0.016557652	-7.79743E-05	-0.015364556	-3.45702501	4.512992362	2.559847661
111.23	0.016586924	-7.81613E-05	-0.015401877	-3.465422425	4.513061897	2.559847661
111.235	0.016552048	-7.80273E-05	-0.01537481	-3.459332245	4.513131141	2.559847661
111.24	0.016450461	-7.75639E-05	-0.015281207	-3.438271556	4.513199537	2.559847661
111.245	0.016181084	-7.62652E-05	-0.015018935	-3.379260375	4.513265712	2.559847661
111.25	0.015808911	-7.44518E-05	-0.014652781	-3.296875782	4.513328877	2.559847661
111.255	0.015370257	-7.23047E-05	-0.014219319	-3.199346772	4.513388586	2.559847661
111.26	0.014911811	-7.00558E-05	-0.013765372	-3.097208589	4.513444786	2.559847661
111.265	0.014464999	-6.78659E-05	-0.013323408	-2.99776684	4.513497669	2.559847661
111.27	0.013871034	-6.49473E-05	-0.012734478	-2.86525763	4.513546297	2.559847661
111.275	0.012955078	-6.04206E-05	-0.011821315	-2.659795904	4.513588716	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
111.28	0.011971934	-5.55436E-05	-0.010837798	-2.438504515	4.513624941	2.559847661
111.285	0.011323365	-5.2329E-05	-0.010189701	-2.292682829	4.513657347	2.559847661
111.29	0.010493701	-4.8224E-05	-0.00936228	-2.106513097	4.513685178	2.559847661
111.295	0.009144254	-4.15121E-05	-0.008009839	-1.802213831	4.513706312	2.559847661
111.3	0.008456749	-3.80667E-05	-0.007315807	-1.646056546	4.513724387	2.559847661
111.305	0.008657389	-3.90682E-05	-0.007518076	-1.69156709	4.51374333	2.559847661
111.31	0.008257244	-3.71135E-05	-0.007123823	-1.602860176	4.513760562	2.559847661
111.315	0.006974763	-3.07509E-05	-0.005842615	-1.314588487	4.513772857	2.559847661
111.32	0.005689105	-2.4344E-05	-0.004552951	-1.024414032	4.513781038	2.559847661
111.325	0.00480779	-1.9938E-05	-0.003666335	-0.824925462	4.51378688	2.559847661
111.33	0.004441444	-1.8101E-05	-0.003296741	-0.74176668	4.513791865	2.559847661
111.335	0.004089037	-1.63557E-05	-0.002945642	-0.662769455	4.513796091	2.559847661
111.34	0.003007658	-1.0985E-05	-0.00186541	-0.419717226	4.513798378	2.559847661
111.345	0.001670999	-4.31425E-06	-0.00052413	-0.117929171	4.513799083	2.559847661
111.35	0.000972926	-8.10013E-07	0.000180263	0.040559281	4.513799322	2.559847661
111.355	0.000486443	1.6187E-06	0.000668386	0.150386958	4.513799382	2.559847661
111.36	-0.000723146	7.64554E-06	0.001879385	0.422861636	4.513799514	2.559847661
111.365	-0.002072251	1.44041E-05	0.003236946	0.728312906	4.5138006	2.559847661
111.37	-0.002469956	1.64355E-05	0.003644899	0.820102267	4.513802142	2.559847661
111.375	-0.002648857	1.73512E-05	0.003828781	0.861475776	4.513803915	2.559847661
111.38	-0.003279869	2.05254E-05	0.004466107	1.004873995	4.513806634	2.559847661
111.385	-0.003320053	2.07729E-05	0.004515174	1.015914142	4.51380942	2.559847661
111.39	-0.002948174	1.89394E-05	0.004144922	0.932607472	4.513811617	2.559847661
111.395	-0.003318851	2.07953E-05	0.004519726	1.016938459	4.5138144	2.559847661
111.4	-0.003623958	2.23513E-05	0.004832664	1.087349458	4.51381772	2.559847661
111.405	-0.00326707	2.06014E-05	0.004479257	1.007832862	4.513820417	2.559847661
111.41	-0.003247902	2.0517E-05	0.004462231	1.004001869	4.513823084	2.559847661
111.415	-0.003335078	2.09793E-05	0.004555593	1.02500849	4.513825895	2.559847661
111.42	-0.002813481	1.84066E-05	0.004036088	0.908119769	4.513827895	2.559847661
111.425	-0.002426116	1.64823E-05	0.003647596	0.820709053	4.513829383	2.559847661
111.43	-0.002269549	1.57164E-05	0.003492992	0.785923268	4.513830685	2.559847661
111.435	-0.00159078	1.23489E-05	0.002813315	0.632995766	4.513831324	2.559847661
111.44	-0.001007578	9.43062E-06	0.002224456	0.500502512	4.513831581	2.559847661
111.445	-0.001035501	9.56127E-06	0.002250862	0.506443992	4.513831852	2.559847661
111.45	-0.000700094	7.90107E-06	0.001915864	0.431069417	4.513831976	2.559847661
111.455	0.000140755	3.70424E-06	0.001069305	0.240593731	4.513831981	2.559847661
111.46	0.000659721	1.0893E-06	0.000541955	0.121939818	4.513832091	2.559847661
111.465	0.000844931	1.35074E-07	0.000349541	0.078646643	4.513832271	2.559847661
111.47	0.000745572	5.96909E-07	0.000442822	0.099635024	4.513832412	2.559847661
111.475	0.000450392	2.04684E-06	0.000735635	0.165517959	4.513832463	2.559847661
111.48	0.000592546	1.32502E-06	0.000589852	0.132716769	4.513832552	2.559847661
111.485	0.000793364	2.89404E-07	0.000380709	0.085659626	4.513832711	2.559847661
111.49	0.000449845	1.9626E-06	0.000718625	0.161690571	4.513832762	2.559847661
111.495	0.000119638	3.58156E-06	0.001045529	0.235244059	4.513832766	2.559847661
111.5	-0.000219417	5.23878E-06	0.001380114	0.310525583	4.513832778	2.559847661
111.505	-0.00080296	8.12154E-06	0.001962023	0.441455106	4.513832941	2.559847661
111.51	-0.001047903	9.32539E-06	0.002204993	0.49612334	4.513833218	2.559847661
111.515	-0.001317374	1.06344E-05	0.002469156	0.555560168	4.513833657	2.559847661
111.52	-0.002140444	1.47043E-05	0.003290346	0.740327791	4.513834815	2.559847661
111.525	-0.002875584	1.8355E-05	0.004026754	0.906019682	4.513836905	2.559847661
111.53	-0.003426705	2.10881E-05	0.004577942	1.030036853	4.513839873	2.559847661
111.535	-0.004086232	2.43627E-05	0.005236416	1.17819354	4.513844093	2.559847661
111.54	-0.004654869	2.71901E-05	0.00580392	1.305881955	4.513849569	2.559847661
111.545	-0.005226173	3.00315E-05	0.006374128	1.434178714	4.513856472	2.559847661
111.55	-0.005780014	3.2792E-05	0.006928034	1.558807728	4.513864916	2.559847661
111.555	-0.006131547	3.45457E-05	0.007279877	1.637972224	4.513874418	2.559847661
111.56	-0.006446875	3.61163E-05	0.007594971	1.708868551	4.513884922	2.559847661
111.565	-0.006660426	3.7178E-05	0.007807948	1.756788247	4.513896134	2.559847661
111.57	-0.006940475	3.8558E-05	0.00808474	1.819066456	4.513908309	2.559847661
111.575	-0.007752593	4.25875E-05	0.008892912	2.000905254	4.513923499	2.559847661
111.58	-0.008722953	4.7426E-05	0.009863094	2.219196168	4.51394273	2.559847661
111.585	-0.009361284	5.06215E-05	0.010503704	2.363333511	4.513964879	2.559847661
111.59	-0.009732544	5.24853E-05	0.010877307	2.447394048	4.513988819	2.559847661
111.595	-0.009962075	5.36347E-05	0.011107691	2.499230516	4.514013902	2.559847661
111.6	-0.010482663	5.62235E-05	0.011626513	2.61596536	4.514041675	2.559847661
111.605	-0.011412106	6.08624E-05	0.01255607	2.8251157	4.514074591	2.559847661
111.61	-0.011964372	6.36429E-05	0.013113119	2.950451849	4.51411077	2.559847661
111.615	-0.012052062	6.40969E-05	0.013204067	2.970915177	4.514147481	2.559847661
111.62	-0.012561445	6.66378E-05	0.013713039	3.085433806	4.514187361	2.559847661
111.625	-0.013346402	7.05715E-05	0.014500877	3.262697255	4.514232381	2.559847661
111.63	-0.013564677	7.16915E-05	0.014725154	3.313159623	4.514278885	2.559847661
111.635	-0.013775993	7.2756E-05	0.014938311	3.361119908	4.51432685	2.559847661
111.64	-0.014606768	7.69154E-05	0.015771115	3.548500879	4.514380774	2.559847661
111.645	-0.015029539	7.90691E-05	0.016202253	3.645506869	4.514437865	2.559847661
111.65	-0.014974668	7.88286E-05	0.016153675	3.634576904	4.51449454	2.559847661
111.655	-0.015433496	8.11456E-05	0.016617896	3.739026569	4.514554741	2.559847661
111.66	-0.015484216	8.14569E-05	0.016679208	3.752821774	4.514615338	2.559847661
111.665	-0.014826526	7.82174E-05	0.01602505	3.605636232	4.514670898	2.559847661
111.67	-0.014920262	7.87064E-05	0.016123837	3.627863399	4.514727161	2.559847661
111.675	-0.014901898	7.86736E-05	0.016117191	3.62636806	4.514783287	2.559847661
111.68	-0.013828422	7.33715E-05	0.015046848	3.385540703	4.514831617	2.559847661
111.685	-0.013280349	7.06569E-05	0.014499016	3.262278706	4.514876192	2.559847661
111.69	-0.012968809	6.91474E-05	0.01419443	3.19374673	4.514918701	2.559847661
111.695	-0.011732621	6.30265E-05	0.012959703	2.915933173	4.514953492	2.559847661
111.7	-0.010789188	5.83299E-05	0.012012642	2.702844462	4.514982913	2.559847661
111.705	-0.010276496	5.57894E-05	0.011500468	2.587605387	4.515009604	2.559847661
111.71	-0.009364744	5.12549E-05	0.010586504	2.381963395	4.515031769	2.559847661
111.715	-0.00902896	4.95659E-05	0.010246145	2.305382617	4.515052373	2.559847661
111.72	-0.009298599	5.09139E-05	0.010518392	2.36663831	4.515074226	2.559847661
111.725	-0.009144182	5.0163E-05	0.010366725	2.332513166	4.515095359	2.559847661
111.73	-0.00903327	4.96165E-05	0.010256357	2.307680431	4.515115983	2.559847661
111.735	-0.009158275	5.02509E-05	0.010384488	2.336509694	4.515137181	2.559847661
111.74	-0.009208812	5.05145E-05	0.010437719	2.348486879	4.515158614	2.559847661
111.745	-0.009618568	5.25683E-05	0.010852465	2.441804702	4.515181997	2.559847661
111.75	-0.009922652	5.41165E-05	0.011165054	2.512137119	4.515206882	2.559847661
111.755	-0.009705201	5.30598E-05	0.010951632	2.464117165	4.515230687	2.559847661
111.76	-0.009912912	5.41068E-05	0.011163084	2.511693998	4.515255523	2.559847661
111.765	-0.010323765	5.61869E-05	0.011583	2.606175094	4.51528246	2.559847661
111.77	-0.010155254	5.53863E-05	0.011421311	2.569795035	4.515308525	2.559847661
111.775	-0.010005808	5.46678E-05	0.011276202	2.537145378	4.515333829	2.559847661
111.78	-0.00989713	5.41584E-05	0.011173339	2.514001367	4.515358586	2.559847661
111.785	-0.009488342	5.21487E-05	0.010767544	2.422697453	4.51538134	2.559847661
111.79	-0.009357133	5.15137E-05	0.010639352	2.393854228	4.515403469	2.559847661
111.795	-0.009232091	5.09241E-05	0.010520325	2.367073158	4.51542501	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
111.8	-0.008639181	4.80025E-05	0.009931111	2.234499939	4.515443874	2.559847661
111.805	-0.008077162	4.52256E-05	0.009371652	2.108621606	4.515460363	2.559847661
111.81	-0.007375952	4.17586E-05	0.008673271	1.951485887	4.515474113	2.559847661
111.815	-0.006476308	3.72904E-05	0.007773437	1.749023281	4.515484713	2.559847661
111.82	-0.005913822	3.44997E-05	0.007211541	1.622596817	4.515493553	2.559847661
111.825	-0.005047107	3.02084E-05	0.006347694	1.428231234	4.515499991	2.559847661
111.83	-0.003681827	2.34173E-05	0.004981052	1.120736669	4.515503417	2.559847661
111.835	-0.002649034	1.82693E-05	0.00394542	0.88771942	4.51550519	2.559847661
111.84	-0.001502004	1.25625E-05	0.002797718	0.629486591	4.515505761	2.559847661
111.845	3.43721E-05	4.9016E-06	0.001257594	0.282958641	4.515505761	2.559847661
111.85	0.001259743	-1.22488E-06	2.64E-05	0.005939991	4.515506162	2.559847661
111.855	0.002439181	-7.11848E-06	-0.001157615	-0.260463277	4.515507666	2.559847661
111.86	0.003726594	-1.3559E-05	-0.002451085	-0.551494074	4.515511176	2.559847661
111.865	0.004824288	-1.90596E-05	-0.003555439	-0.799973802	4.515517058	2.559847661
111.87	0.006043106	-2.51655E-05	-0.004780959	-1.07571569	4.515526288	2.559847661
111.875	0.007176688	-3.08611E-05	-0.005923772	-1.332848774	4.515539305	2.559847661
111.88	0.00805597	-3.52906E-05	-0.006812312	-1.532770191	4.515555708	2.559847661
111.885	0.009114186	-4.06184E-05	-0.00788079	-1.773177679	4.515576703	2.559847661
111.89	0.009744752	-4.38379E-05	-0.00852632	-1.918421997	4.515600703	2.559847661
111.895	0.009666865	-4.35176E-05	-0.008461626	-1.903865915	4.515624321	2.559847661
111.9	0.009829223	-4.43788E-05	-0.008634746	-1.94281791	4.515648739	2.559847661
111.905	0.010052847	-4.55602E-05	-0.0088716	-1.996110005	4.515674281	2.559847661
111.91	0.009743294	-4.40885E-05	-0.008574378	-1.929235029	4.515698275	2.559847661
111.915	0.009277402	-4.1828E-05	-0.008117915	-1.826530831	4.515720028	2.559847661
111.92	0.00870592	-3.90394E-05	-0.007554951	-1.699863958	4.515739184	2.559847661
111.925	0.00799894	-3.55684E-05	-0.006854387	-1.542237148	4.515755355	2.559847661
111.93	0.007376742	-3.25183E-05	-0.006238945	-1.40376256	4.515769108	2.559847661
111.935	0.006487676	-2.81441E-05	-0.005356511	-1.20521487	4.515779746	2.559847661
111.94	0.005263666	-2.20903E-05	-0.004135696	-0.930531683	4.515786749	2.559847661
111.945	0.004066157	-1.61579E-05	-0.002939826	-0.661460838	4.515790927	2.559847661
111.95	0.002746702	-9.61297E-06	-0.001620982	-0.364720905	4.515792834	2.559847661
111.955	0.001430138	-3.06831E-06	-0.000302718	-0.068111457	4.515793351	2.559847661
111.96	0.000345182	2.32408E-06	0.000783069	0.176190537	4.515793381	2.559847661
111.965	-0.001072454	9.37246E-06	0.002201786	0.4954019	4.515793672	2.559847661
111.97	-0.002631815	1.71536E-05	0.003767335	0.847650266	4.515795423	2.559847661
111.975	-0.003474948	2.13818E-05	0.004617757	1.038995316	4.515798474	2.559847661
111.98	-0.004058977	2.43052E-05	0.005205633	1.171267463	4.515802638	2.559847661
111.985	-0.00486096	2.83155E-05	0.006011917	1.352681302	4.51580861	2.559847661
111.99	-0.005498508	3.15145E-05	0.006654952	1.497364221	4.515816252	2.559847661
111.995	-0.00609974	3.45341E-05	0.007261839	1.633913673	4.515825655	2.559847661
112	-0.006521862	3.66752E-05	0.007692082	1.73071846	4.515836406	2.559847661
112.005	-0.006273263	3.5472E-05	0.007449093	1.676045982	4.515846352	2.559847661
112.01	-0.006008282	3.41627E-05	0.0071847	1.616557452	4.515855476	2.559847661
112.015	-0.006208157	3.51682E-05	0.007387771	1.662248487	4.515865217	2.559847661
112.02	-0.006323259	3.57633E-05	0.007507945	1.689287736	4.515875322	2.559847661
112.025	-0.006222732	3.52825E-05	0.007410832	1.667437184	4.515885109	2.559847661
112.03	-0.006113625	3.47552E-05	0.007304342	1.643476966	4.515894556	2.559847661
112.035	-0.006040965	3.44086E-05	0.007234353	1.62772941	4.515903779	2.559847661
112.04	-0.005971159	3.40808E-05	0.007168162	1.612836426	4.51591279	2.559847661
112.045	-0.005616306	3.23356E-05	0.006815774	1.533549061	4.515920763	2.559847661
112.05	-0.005125811	2.99021E-05	0.006324528	1.42301873	4.515927403	2.559847661
112.055	-0.004886921	2.87172E-05	0.006085361	1.369206279	4.515933439	2.559847661
112.06	-0.004598144	2.72888E-05	0.005797072	1.304341134	4.515938783	2.559847661
112.065	-0.004260186	2.56081E-05	0.005457894	1.228026121	4.51594337	2.559847661
112.07	-0.004181252	2.52184E-05	0.005379264	1.210334375	4.515947788	2.559847661
112.075	-0.003938575	2.40218E-05	0.005137816	1.156008682	4.515951709	2.559847661
112.08	-0.003532802	2.20027E-05	0.004730463	1.064354242	4.515954863	2.559847661
112.085	-0.003450625	2.15926E-05	0.004647729	1.045738935	4.515957873	2.559847661
112.09	-0.003255004	2.06294E-05	0.004453412	1.002017621	4.515960551	2.559847661
112.095	-0.002674199	1.77365E-05	0.003869921	0.87073232	4.515962358	2.559847661
112.1	-0.00244097	1.65549E-05	0.003631626	0.817115907	4.515963864	2.559847661
112.105	-0.002758831	1.81251E-05	0.003948736	0.888465599	4.515965788	2.559847661
112.11	-0.002985508	1.92559E-05	0.00417709	0.939845231	4.51596804	2.559847661
112.115	-0.002999639	1.93221E-05	0.004190449	0.942851097	4.515970314	2.559847661
112.12	-0.003370423	2.11559E-05	0.004560707	1.026159181	4.515973185	2.559847661
112.125	-0.00408543	2.47184E-05	0.005279829	1.187961414	4.515977404	2.559847661
112.13	-0.004538542	2.69903E-05	0.005738331	1.291124569	4.51598261	2.559847661
112.135	-0.004819102	2.83966E-05	0.006022122	1.354977416	4.51598848	2.559847661
112.14	-0.005279538	3.06977E-05	0.0064864	1.459440054	4.515995524	2.559847661
112.145	-0.005708956	3.285E-05	0.00692058	1.557130576	4.516003762	2.559847661
112.15	-0.006174968	3.51813E-05	0.007390816	1.662933655	4.516013399	2.559847661
112.155	-0.006902319	3.88196E-05	0.008122967	1.827667649	4.51602544	2.559847661
112.16	-0.007551551	4.20836E-05	0.008778697	1.975206727	4.516039853	2.559847661
112.165	-0.007948586	4.40957E-05	0.00918287	2.066145784	4.516055821	2.559847661
112.17	-0.008260617	4.5684E-05	0.009501891	2.13792557	4.516073067	2.559847661
112.175	-0.008496384	4.68956E-05	0.009745226	2.192675892	4.516091312	2.559847661
112.18	-0.008581816	4.73629E-05	0.009839075	2.213791888	4.516109926	2.559847661
112.185	-0.008345358	4.62265E-05	0.009609569	2.162153069	4.516127528	2.559847661
112.19	-0.007938718	4.42276E-05	0.009205911	2.071329953	4.516143457	2.559847661
112.195	-0.007953907	4.43193E-05	0.009224455	2.075502354	4.516159446	2.559847661
112.2	-0.008338682	4.6268E-05	0.009617986	2.164046747	4.51617702	2.559847661
112.205	-0.00841692	4.67114E-05	0.009707512	2.184190099	4.516194926	2.559847661
112.21	-0.007890249	4.41441E-05	0.009189062	2.067538989	4.51621066	2.559847661
112.215	-0.00705724	4.00364E-05	0.008359791	1.880952863	4.516223248	2.559847661
112.22	-0.006408263	3.68375E-05	0.007714184	1.73569148	4.516233627	2.559847661
112.225	-0.005672926	3.32207E-05	0.006984413	1.571493006	4.516241761	2.559847661
112.23	-0.0042536	2.61929E-05	0.005566915	1.252555863	4.516246334	2.559847661
112.235	-0.002751902	1.8727E-05	0.004061771	0.91389839	4.516248248	2.559847661
112.24	-0.001573115	1.28646E-05	0.00288038	0.648085482	4.516248873	2.559847661
112.245	-7.09569E-05	5.3867E-06	0.001374047	0.30916047	4.516248875	2.559847661
112.25	0.001183611	-8.89256E-07	0.000110345	0.024827672	4.516249229	2.559847661
112.255	0.001464333	-2.31053E-06	-0.000175772	-0.039548762	4.516249771	2.559847661
112.26	0.001958181	-4.76149E-06	-0.000669123	-0.150552782	4.51625074	2.559847661
112.265	0.003146208	-1.06806E-05	-0.001860296	-0.418566683	4.516253241	2.559847661
112.27	0.004062687	-1.52693E-05	-0.002783446	-0.626275297	4.516257413	2.559847661
112.275	0.00472271	-1.85764E-05	-0.003448627	-0.775941025	4.51626305	2.559847661
112.28	0.005486118	-2.24007E-05	-0.004217688	-0.948979876	4.516270657	2.559847661
112.285	0.006037519	-2.51768E-05	-0.004775845	-1.074565058	4.51627987	2.559847661
112.29	0.006457142	-2.72906E-05	-0.005200787	-1.170177002	4.516290408	2.559847661
112.295	0.007069137	-3.03641E-05	-0.005818584	-1.309181404	4.516303038	2.559847661
112.3	0.007512085	-3.26116E-05	-0.006270276	-1.410812176	4.516317301	2.559847661
112.305	0.007384412	-3.20134E-05	-0.00614946	-1.383628551	4.516331082	2.559847661
112.31	0.007330121	-3.17587E-05	-0.006098021	-1.37205476	4.516344662	2.559847661
112.315	0.007789224	-3.40707E-05	-0.006563505	-1.476788555	4.516359997	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
112.32	0.007744314	-3.3894E-05	-0.006527249	-1.468631062	4.516375155	2.559847661
112.325	0.007109779	-3.07576E-05	-0.005893919	-1.326131665	4.51638793	2.559847661
112.33	0.00704215	-3.04306E-05	-0.005827925	-1.311283032	4.516400464	2.559847661
112.335	0.006945302	-2.99795E-05	-0.005736835	-1.290787781	4.516412656	2.559847661
112.34	0.006239945	-2.64831E-05	-0.005031045	-1.131985164	4.516422497	2.559847661
112.345	0.006091261	-2.57398E-05	-0.00488106	-1.098238583	4.516431874	2.559847661
112.35	0.006161261	-2.61093E-05	-0.004955682	-1.115028464	4.516441469	2.559847661
112.355	0.005566282	-2.31621E-05	-0.004360838	-0.981188565	4.5164493	2.559847661
112.36	0.005352018	-2.20885E-05	-0.004144203	-0.932445751	4.516456539	2.559847661
112.365	0.005573277	-2.32044E-05	-0.004369586	-0.983156741	4.51646439	2.559847661
112.37	0.00518945	-2.13175E-05	-0.003988642	-0.897444439	4.516471196	2.559847661
112.375	0.004605161	-1.84153E-05	-0.003403163	-0.76571177	4.516476556	2.559847661
112.38	0.004131824	-1.60618E-05	-0.002928443	-0.658899621	4.516480871	2.559847661
112.385	0.003591567	-1.33642E-05	-0.002384429	-0.536496621	4.516484131	2.559847661
112.39	0.003552251	-1.31508E-05	-0.002341511	-0.526839956	4.51648732	2.559847661
112.395	0.003896064	-1.48648E-05	-0.002687656	-0.604722678	4.516491157	2.559847661
112.4	0.003855033	-1.46754E-05	-0.00264939	-0.596112649	4.516494913	2.559847661
112.405	0.003632236	-1.35712E-05	-0.002426394	-0.545938637	4.516498247	2.559847661
112.41	0.00359218	-1.33767E-05	-0.002387118	-0.537101481	4.516501508	2.559847661
112.415	0.003457339	-1.27177E-05	-0.002254057	-0.507162837	4.51650453	2.559847661
112.42	0.003089063	-1.0892E-05	-0.001885954	-0.424339691	4.516506941	2.559847661
112.425	0.002725075	-9.07767E-06	-0.001520168	-0.342037808	4.516508818	2.559847661
112.43	0.002528835	-8.09302E-06	-0.001321673	-0.297376438	4.516510434	2.559847661
112.435	0.002577069	-8.32187E-06	-0.001367929	-0.307783985	4.516512113	2.559847661
112.44	0.003002634	-1.04334E-05	-0.001794346	-0.403727741	4.516514392	2.559847661
112.445	0.003553058	-1.31832E-05	-0.002349541	-0.528646799	4.516517582	2.559847661
112.45	0.003848562	-1.46695E-05	-0.002649585	-0.596156662	4.516521326	2.559847661
112.455	0.004213549	-1.64955E-05	-0.003018132	-0.67907965	4.516525813	2.559847661
112.46	0.004818764	-1.95276E-05	-0.003630027	-0.816756131	4.516531682	2.559847661
112.465	0.005239465	-2.16516E-05	-0.004058598	-0.913184621	4.51653862	2.559847661
112.47	0.00558666	-2.34065E-05	-0.004412629	-0.9928416	4.516546508	2.559847661
112.475	0.00602794	-2.56355E-05	-0.004862244	-1.094004916	4.516555692	2.559847661
112.48	0.006347297	-2.72623E-05	-0.005190356	-1.167830097	4.516565874	2.559847661
112.485	0.006748429	-2.92967E-05	-0.005600628	-1.260141296	4.516577384	2.559847661
112.49	0.00710085	-3.11021E-05	-0.005964657	-1.342047713	4.516590128	2.559847661
112.495	0.007018565	-3.07437E-05	-0.005892261	-1.325758705	4.516602578	2.559847661
112.5	0.007015757	-3.07701E-05	-0.005897611	-1.326962448	4.516615018	2.559847661
112.505	0.00717325	-3.16063E-05	-0.006066319	-1.364921693	4.516628023	2.559847661
112.51	0.006904084	-3.03245E-05	-0.00580745	-1.306676226	4.516640071	2.559847661
112.515	0.00651961	-2.84582E-05	-0.005430582	-1.221880857	4.516650813	2.559847661
112.52	0.006213907	-2.69881E-05	-0.00513376	-1.155095917	4.516660572	2.559847661
112.525	0.00560013	-2.39863E-05	-0.004527804	-1.018755828	4.516668499	2.559847661
112.53	0.004930171	-2.06976E-05	-0.003864095	-0.869421382	4.516674642	2.559847661
112.535	0.004219114	-1.721E-05	-0.003160413	-0.71109297	4.516679141	2.559847661
112.54	0.003022185	-1.13007E-05	-0.001968471	-0.442906085	4.516681449	2.559847661
112.545	0.001719245	-4.84445E-06	-0.000666885	-0.150049056	4.516682197	2.559847661
112.55	0.000673679	3.35371E-07	0.0003769	0.084802528	4.516682311	2.559847661
112.555	-0.000430438	5.80375E-06	0.001478475	0.332656854	4.516682358	2.559847661
112.56	-0.001682232	1.20095E-05	0.002728155	0.613834776	4.516683073	2.559847661
112.565	-0.003164409	1.93662E-05	0.004209021	0.947029803	4.516685604	2.559847661
112.57	-0.004876398	2.7885E-05	0.005923056	1.332687488	4.516691614	2.559847661
112.575	-0.006237729	3.46762E-05	0.007288899	1.640002237	4.516701448	2.559847661
112.58	-0.007195393	3.94508E-05	0.00824886	1.855993574	4.516714533	2.559847661
112.585	-0.008355022	4.52227E-05	0.009408997	2.117024242	4.516732176	2.559847661
112.59	-0.009784814	5.23504E-05	0.010840566	2.439127425	4.516756374	2.559847661
112.595	-0.011105505	5.89509E-05	0.012165543	2.737247185	4.516787546	2.559847661
112.6	-0.012023861	6.35526E-05	0.01308903	2.945031703	4.516824085	2.559847661
112.605	-0.012800728	6.74378E-05	0.013868536	3.120420708	4.516865499	2.559847661
112.61	-0.014026516	7.35586E-05	0.015096296	3.396666638	4.516915224	2.559847661
112.615	-0.015245244	7.96689E-05	0.016321566	3.672352412	4.516973966	2.559847661
112.62	-0.015835696	8.26534E-05	0.016919696	3.806931514	4.517037345	2.559847661
112.625	-0.016474505	8.58654E-05	0.017562495	3.951561425	4.517105942	2.559847661
112.63	-0.017300465	9.00219E-05	0.01839417	4.138688191	4.517181588	2.559847661
112.635	-0.017634104	9.1734E-05	0.018736702	4.215757842	4.517260181	2.559847661
112.64	-0.017827206	9.27324E-05	0.018936432	4.260697174	4.517340505	2.559847661
112.645	-0.018276843	9.50094E-05	0.019391918	4.363181512	4.517424931	2.559847661
112.65	-0.018599469	9.66653E-05	0.019723128	4.437703705	4.517512365	2.559847661
112.655	-0.018563843	9.65405E-05	0.019697558	4.431950614	4.517599463	2.559847661
112.66	-0.018194983	9.47468E-05	0.019335318	4.350446609	4.517683135	2.559847661
112.665	-0.017933793	9.34739E-05	0.019078292	4.292615791	4.517764422	2.559847661
112.67	-0.017949688	9.35875E-05	0.019101243	4.297779598	4.517845853	2.559847661
112.675	-0.017580093	9.17882E-05	0.018737971	4.216043443	4.517923965	2.559847661
112.68	-0.017095172	8.93955E-05	0.018254969	4.107368109	4.517997827	2.559847661
112.685	-0.017058195	8.92348E-05	0.018222535	4.100070364	4.51807137	2.559847661
112.69	-0.016755819	8.77643E-05	0.017925741	4.033291794	4.518142329	2.559847661
112.695	-0.016322702	8.56272E-05	0.017494468	3.936255225	4.518209667	2.559847661
112.7	-0.016332298	8.57005E-05	0.017509277	3.939587295	4.518277084	2.559847661
112.705	-0.015878164	8.34803E-05	0.017061271	3.838786027	4.518340805	2.559847661
112.71	-0.01505156	7.93812E-05	0.016234358	3.652730482	4.518398063	2.559847661
112.715	-0.014802979	7.81527E-05	0.015986584	3.596981421	4.518453446	2.559847661
112.72	-0.014491553	7.66252E-05	0.015678526	3.52766833	4.518506523	2.559847661
112.725	-0.014030773	7.43398E-05	0.015217686	3.423979389	4.518556278	2.559847661
112.73	-0.014087899	7.46359E-05	0.015277503	3.437438108	4.518606439	2.559847661
112.735	-0.013912533	7.37919E-05	0.015107201	3.399120159	4.518655359	2.559847661
112.74	-0.013475308	7.16271E-05	0.014670752	3.300919143	4.518701253	2.559847661
112.745	-0.013648712	7.25021E-05	0.014847469	3.340680511	4.518748336	2.559847661
112.75	-0.013663457	7.26122E-05	0.014869695	3.345681413	4.51879552	2.559847661
112.755	-0.013078503	6.97241E-05	0.014287125	3.214603223	4.51883875	2.559847661
112.76	-0.012859841	6.86413E-05	0.014068874	3.165496634	4.518880548	2.559847661
112.765	-0.012970183	6.92071E-05	0.014183155	3.191209898	4.518923065	2.559847661
112.77	-0.012971192	6.92314E-05	0.014188053	3.192311921	4.518965589	2.559847661
112.775	-0.013129315	7.00365E-05	0.014350657	3.228897866	4.519009157	2.559847661
112.78	-0.013325392	7.10389E-05	0.014553062	3.274438995	4.519054035	2.559847661
112.785	-0.013431008	7.15902E-05	0.014664396	3.299489195	4.519099627	2.559847661
112.79	-0.013690637	7.29086E-05	0.014930574	3.359379257	4.519146999	2.559847661
112.795	-0.013984848	7.44072E-05	0.015233131	3.427454487	4.51919643	2.559847661
112.8	-0.014236703	7.56997E-05	0.015494036	3.486158069	4.519247656	2.559847661
112.805	-0.014452846	7.68224E-05	0.015720644	3.537144819	4.51930045	2.559847661
112.81	-0.014350589	7.63646E-05	0.015628182	3.516340896	4.519352499	2.559847661
112.815	-0.014109482	7.52078E-05	0.015394554	3.46377468	4.519402814	2.559847661
112.82	-0.014048646	7.49511E-05	0.015342718	3.452111634	4.519452696	2.559847661
112.825	-0.013759618	7.357E-05	0.01506384	3.389363891	4.519500547	2.559847661
112.83	-0.013053169	7.01065E-05	0.014364611	3.232037386	4.51954361	2.559847661
112.835	-0.012295283	6.63796E-05	0.013613035	3.062932987	4.519581818	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
112.84	-0.011369425	6.18177E-05	0.012693786	2.856101896	4.519614489	2.559847661
112.845	-0.010125342	5.56598E-05	0.011453346	2.577002743	4.5196404	2.559847661
112.85	-0.00912034	5.0679E-05	0.010450353	2.351329446	4.519661423	2.559847661
112.855	-0.008258118	4.64215E-05	0.009593236	2.158478157	4.51967866	2.559847661
112.86	-0.006762203	3.9009E-05	0.008101456	1.822827662	4.519690217	2.559847661
112.865	-0.00517386	3.11078E-05	0.006512	1.465200074	4.519696982	2.559847661
112.87	-0.004153875	2.60348E-05	0.00549186	1.235668494	4.519701343	2.559847661
112.875	-0.002884305	1.97335E-05	0.004225106	0.950648949	4.519703446	2.559847661
112.88	-0.001200156	1.13519E-05	0.002540837	0.571688306	4.51970381	2.559847661
112.885	0.000224556	4.24868E-06	0.001114021	0.250654753	4.519703823	2.559847661
112.89	0.00160178	-2.61583E-06	-0.000264332	-0.059474675	4.519704471	2.559847661
112.895	0.00312956	-1.0237E-05	-0.001794036	-0.403657992	4.519706947	2.559847661
112.9	0.004669735	-1.79292E-05	-0.003337394	-0.750913567	4.519712458	2.559847661
112.905	0.006180876	-2.54907E-05	-0.004853954	-1.092139681	4.519722113	2.559847661
112.91	0.007290211	-3.10626E-05	-0.005971081	-1.343493194	4.519735546	2.559847661
112.915	0.008154866	-3.54074E-05	-0.006841989	-1.539447437	4.519752354	2.559847661
112.92	0.009236489	-4.08348E-05	-0.007929619	-1.784164225	4.519773916	2.559847661
112.925	0.010130045	-4.53397E-05	-0.008832168	-1.987237755	4.519799851	2.559847661
112.93	0.010716762	-4.83148E-05	-0.009428101	-2.121322791	4.519828878	2.559847661
112.935	0.011274039	-5.1143E-05	-0.009994536	-2.24877061	4.519861003	2.559847661
112.94	0.011625255	-5.29463E-05	-0.010355658	-2.330022939	4.51989516	2.559847661
112.945	0.011983523	-5.47788E-05	-0.010722615	-2.412588366	4.519931455	2.559847661
112.95	0.012433056	-5.70757E-05	-0.01118249	-2.516060221	4.519970524	2.559847661
112.955	0.012436343	-5.71571E-05	-0.011198249	-2.519606052	4.520009613	2.559847661
112.96	0.012198266	-5.60233E-05	-0.010969275	-2.468086863	4.520047221	2.559847661
112.965	0.012113513	-5.56506E-05	-0.010894006	-2.451151301	4.520084307	2.559847661
112.97	0.011862335	-5.44543E-05	-0.01065244	-2.396799055	4.520119872	2.559847661
112.975	0.011353393	-5.19673E-05	-0.010150328	-2.283823897	4.52015245	2.559847661
112.98	0.010844169	-4.94692E-05	-0.009646085	-2.170369191	4.520182171	2.559847661
112.985	0.010478473	-4.7682E-05	-0.009285384	-2.089211384	4.520209922	2.559847661
112.99	0.010188783	-4.6277E-05	-0.009001865	-2.025419555	4.520236159	2.559847661
112.995	0.009735856	-4.40634E-05	-0.008555211	-1.924922419	4.520260116	2.559847661
113	0.009072845	-4.08004E-05	-0.007896954	-1.776814747	4.52028092	2.559847661
113.005	0.008225713	-3.66112E-05	-0.00705206	-1.586713426	4.520298022	2.559847661
113.01	0.007483422	-3.29274E-05	-0.00630928	-1.419587937	4.520312175	2.559847661
113.015	0.007277271	-3.19144E-05	-0.006105055	-1.373637397	4.52032556	2.559847661
113.02	0.006959895	-3.03673E-05	-0.005793182	-1.303465896	4.520337803	2.559847661
113.025	0.006118258	-2.61994E-05	-0.004953151	-1.114458898	4.520347264	2.559847661
113.03	0.005605968	-2.3656E-05	-0.004440643	-0.99914472	4.520355207	2.559847661
113.035	0.005240345	-2.18553E-05	-0.004077834	-0.917512654	4.520362147	2.559847661
113.04	0.004526085	-1.83119E-05	-0.003364018	-0.756904044	4.520367325	2.559847661
113.045	0.004155436	-1.64666E-05	-0.002992344	-0.673277371	4.520371689	2.559847661
113.05	0.004017484	-1.57928E-05	-0.002856641	-0.642744203	4.520375768	2.559847661
113.055	0.003658152	-1.40191E-05	-0.002499435	-0.562372814	4.520379151	2.559847661
113.06	0.0033428	-1.24612E-05	-0.00218574	-0.49179147	4.520381975	2.559847661
113.065	0.002951562	-1.05258E-05	-0.001796046	-0.404110305	4.520384177	2.559847661
113.07	0.002691722	-9.23736E-06	-0.001536652	-0.345746639	4.520386008	2.559847661
113.075	0.002627047	-8.9321E-06	-0.001475196	-0.331919141	4.520387752	2.559847661
113.08	0.002086249	-6.25749E-06	-0.000936797	-0.210779355	4.520388852	2.559847661
113.085	0.001735888	-4.5088E-06	-0.000584829	-0.131586416	4.520389614	2.559847661
113.09	0.001965946	-5.66536E-06	-0.000818411	-0.184142426	4.520390591	2.559847661
113.095	0.001631882	-4.02774E-06	-0.000488009	-0.109802016	4.520391264	2.559847661
113.1	0.0011869	-1.81251E-06	-4.22006E-05	-0.00949513	4.52039162	2.559847661
113.105	0.001453124	-3.14237E-06	-0.000310781	-0.069925748	4.520392153	2.559847661
113.11	0.001548301	-3.64336E-06	-0.000411949	-0.092688456	4.520392759	2.559847661
113.115	0.001274061	-2.29992E-06	-0.00014063	-0.031641747	4.52039317	2.559847661
113.12	0.00110288	-1.46338E-06	2.80548E-05	0.006312329	4.520393477	2.559847661
113.125	0.001054299	-1.23845E-06	7.33174E-05	0.016496411	4.520393758	2.559847661
113.13	0.001111373	-1.54897E-06	1.06013E-05	0.002385293	4.52039407	2.559847661
113.135	0.000819244	-1.30758E-07	0.000296208	0.066646862	4.52039424	2.559847661
113.14	0.000232066	2.77048E-06	0.000879933	0.197984845	4.520394253	2.559847661
113.145	-3.04219E-05	4.05952E-06	0.001139256	0.2563326	4.520394254	2.559847661
113.15	-0.000396507	5.85204E-06	0.001499836	0.337463065	4.520394293	2.559847661
113.155	-0.001045768	9.06128E-06	0.002145308	0.482694287	4.52039457	2.559847661
113.16	-0.001598349	1.17915E-05	0.002694346	0.606227887	4.520395215	2.559847661
113.165	-0.002416553	1.58421E-05	0.003508749	0.789468606	4.520396691	2.559847661
113.17	-0.003359286	2.05275E-05	0.004450583	1.001381151	4.520399543	2.559847661
113.175	-0.004075809	2.40892E-05	0.005166372	1.162433787	4.520403742	2.559847661
113.18	-0.004940369	2.83867E-05	0.006029832	1.356712306	4.520409911	2.559847661
113.185	-0.005822128	3.27783E-05	0.006912017	1.555203737	4.520418478	2.559847661
113.19	-0.006696828	3.71331E-05	0.007786589	1.751982543	4.520429813	2.559847661
113.195	-0.007837554	4.28205E-05	0.008928506	2.008913833	4.520445338	2.559847661
113.2	-0.008767486	4.74719E-05	0.009862172	2.21898862	4.520464766	2.559847661
113.205	-0.009518901	5.12274E-05	0.010615834	2.388562628	4.520487667	2.559847661
113.21	-0.010565871	5.64537E-05	0.011664413	2.624492911	4.520515882	2.559847661
113.215	-0.01173902	6.23178E-05	0.01284063	2.88914178	4.520550711	2.559847661
113.22	-0.013020595	6.87309E-05	0.014126562	3.178476455	4.52059356	2.559847661
113.225	-0.014222337	7.47638E-05	0.015335871	3.450570984	4.520644683	2.559847661
113.23	-0.015035213	7.88644E-05	0.016157646	3.635470374	4.520701817	2.559847661
113.235	-0.015875549	8.30989E-05	0.017006076	3.826367205	4.520765516	2.559847661
113.24	-0.016673923	8.71377E-05	0.017815137	4.008405902	4.520835783	2.559847661
113.245	-0.017038004	8.90167E-05	0.018191483	4.093083778	4.520909152	2.559847661
113.25	-0.017277428	9.02677E-05	0.018442026	4.149455911	4.520984598	2.559847661
113.255	-0.017438331	9.11264E-05	0.018613999	4.188149707	4.521061455	2.559847661
113.26	-0.017580109	9.18818E-05	0.018765287	4.222189592	4.521139567	2.559847661
113.265	-0.018019737	9.41238E-05	0.019214233	4.323202514	4.521221635	2.559847661
113.27	-0.018303418	9.5605E-05	0.019510803	4.389930725	4.521306307	2.559847661
113.275	-0.018185489	9.50829E-05	0.019405341	4.366201761	4.521389892	2.559847661
113.28	-0.018106839	9.47497E-05	0.01933806	4.351063567	4.521472755	2.559847661
113.285	-0.01802267	9.43948E-05	0.019266379	4.334935375	4.521554849	2.559847661
113.29	-0.017711165	9.29089E-05	0.01896632	4.267422083	4.521634131	2.559847661
113.295	-0.017285308	9.08494E-05	0.018550509	4.173864495	4.521709645	2.559847661
113.3	-0.016868355	8.88337E-05	0.018143586	4.082306898	4.52178156	2.559847661
113.305	-0.016348686	8.63121E-05	0.01763464	3.967794031	4.521849113	2.559847661
113.31	-0.015465516	8.19806E-05	0.016760612	3.771137807	4.521909564	2.559847661
113.315	-0.014375386	7.66066E-05	0.015676594	3.527233571	4.521961794	2.559847661
113.32	-0.013348591	7.15416E-05	0.014655235	3.297427838	4.522006828	2.559847661
113.325	-0.012295065	6.63438E-05	0.013607472	3.061681193	4.522045035	2.559847661
113.33	-0.011075192	6.03189E-05	0.012393385	2.788511545	4.522076036	2.559847661
113.335	-0.009473089	5.23858E-05	0.01079546	2.428978461	4.522098717	2.559847661
113.34	-0.007732675	4.37444E-05	0.009055708	2.037534231	4.522113829	2.559847661
113.345	-0.006236653	3.6313E-05	0.007560234	1.701052538	4.52212366	2.559847661
113.35	-0.00450436	2.77048E-05	0.005828742	1.311466937	4.522128788	2.559847661
113.355	-0.002676486	1.85962E-05	0.003997493	0.899435898	4.522130598	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
113.36	-0.001425058	1.23482E-05	0.002741878	0.616922532	4.522131112	2.559847661
113.365	-0.000198989	6.23565E-06	0.001513884	0.340623924	4.522131122	2.559847661
113.37	0.001126967	-3.89423E-07	0.000183377	0.041259718	4.522131443	2.559847661
113.375	0.001916328	-4.34967E-06	-0.000611736	-0.137640587	4.522132371	2.559847661
113.38	0.002594302	-7.74328E-06	-0.001292955	-0.290914824	4.522134072	2.559847661
113.385	0.003366368	-1.16115E-05	-0.002069303	-0.465593114	4.522136936	2.559847661
113.39	0.003811212	-1.3854E-05	-0.002519281	-0.566838319	4.522140607	2.559847661
113.395	0.004148888	-1.55556E-05	-0.002860701	-0.643657762	4.522144958	2.559847661
113.4	0.004425834	-1.69549E-05	-0.00314145	-0.706826199	4.522149908	2.559847661
113.405	0.004588964	-1.77817E-05	-0.003307329	-0.744149045	4.522155231	2.559847661
113.41	0.004910504	-1.93965E-05	-0.003631251	-0.817031437	4.522161325	2.559847661
113.415	0.005065213	-2.01888E-05	-0.003790192	-0.852793182	4.522167809	2.559847661
113.42	0.004910961	-1.94341E-05	-0.003637769	-0.818498064	4.522173905	2.559847661
113.425	0.004900882	-1.93879E-05	-0.003628431	-0.816397072	4.522179975	2.559847661
113.43	0.004924734	-1.95138E-05	-0.003653872	-0.82212118	4.522186105	2.559847661
113.435	0.004817597	-1.89821E-05	-0.003546483	-0.797958774	4.522191971	2.559847661
113.44	0.004897252	-1.93725E-05	-0.003625328	-0.815698802	4.522198033	2.559847661
113.445	0.005216707	-2.09621E-05	-0.003945297	-0.887691898	4.522204911	2.559847661
113.45	0.005467433	-2.22187E-05	-0.004197344	-0.944402373	4.522212466	2.559847661
113.455	0.00547853	-2.22802E-05	-0.004209573	-0.947153907	4.522220052	2.559847661
113.46	0.005528082	-2.25239E-05	-0.004258566	-0.958177375	4.522227775	2.559847661
113.465	0.005806471	-2.39094E-05	-0.004536435	-1.020697814	4.522236297	2.559847661
113.47	0.005999674	-2.48774E-05	-0.004730557	-1.06437537	4.522245394	2.559847661
113.475	0.00604948	-2.51273E-05	-0.004780684	-1.075653967	4.522254644	2.559847661
113.48	0.006150994	-2.56301E-05	-0.004881506	-1.098338754	4.522264206	2.559847661
113.485	0.006340954	-2.65696E-05	-0.005069909	-1.140729539	4.522274368	2.559847661
113.49	0.006729633	-2.84988E-05	-0.005456734	-1.227765073	4.522285814	2.559847661
113.495	0.007164267	-3.06632E-05	-0.005890687	-1.325404681	4.522298787	2.559847661
113.5	0.007582245	-3.27411E-05	-0.006307247	-1.419130621	4.522313317	2.559847661
113.505	0.008344788	-3.65361E-05	-0.007067928	-1.5902839	4.522330917	2.559847661
113.51	0.009162215	-4.0621E-05	-0.007886576	-1.774479667	4.522352133	2.559847661
113.515	0.009756219	-4.35947E-05	-0.008482399	-1.908539817	4.52237619	2.559847661
113.52	0.010564939	-4.76371E-05	-0.009292245	-2.090755135	4.522404401	2.559847661
113.525	0.01137618	-5.17071E-05	-0.010107443	-2.274174602	4.52243711	2.559847661
113.53	0.011935048	-5.45211E-05	-0.010670966	-2.400967365	4.522473111	2.559847661
113.535	0.012639692	-5.80599E-05	-0.011379545	-2.560397611	4.52251349	2.559847661
113.54	0.013315715	-6.14663E-05	-0.012061452	-2.71382677	4.522558303	2.559847661
113.545	0.013902894	-6.44287E-05	-0.012654374	-2.847234225	4.522607155	2.559847661
113.55	0.014721406	-6.85493E-05	-0.013478987	-3.032771972	4.522661929	2.559847661
113.555	0.015339676	-7.16887E-05	-0.014107131	-3.17410445	4.522721401	2.559847661
113.56	0.015668515	-7.33838E-05	-0.014446246	-3.250405297	4.522783449	2.559847661
113.565	0.016121437	-7.56979E-05	-0.014909154	-3.354559567	4.522849137	2.559847661
113.57	0.016373393	-7.70229E-05	-0.015174185	-3.414191571	4.522916894	2.559847661
113.575	0.016282414	-7.66363E-05	-0.015096104	-3.396623392	4.5229839	2.559847661
113.58	0.016180705	-7.61893E-05	-0.015005833	-3.376312437	4.523050071	2.559847661
113.585	0.016109505	-7.5893E-05	-0.014946	-3.362849941	4.523115662	2.559847661
113.59	0.016155324	-7.61804E-05	-0.015004039	-3.37590873	4.523181626	2.559847661
113.595	0.016215034	-7.65467E-05	-0.015078016	-3.392553691	4.523248078	2.559847661
113.6	0.016006779	-7.5583E-05	-0.014883394	-3.348763742	4.523312835	2.559847661
113.605	0.015712231	-7.41855E-05	-0.014601187	-3.285267009	4.52337523	2.559847661
113.61	0.015426708	-7.28347E-05	-0.01432845	-3.223901291	4.523435378	2.559847661
113.615	0.015065245	-7.11076E-05	-0.01397979	-3.145452686	4.523492741	2.559847661
113.62	0.014720339	-6.94664E-05	-0.013648504	-3.070913389	4.523547507	2.559847661
113.625	0.014199086	-6.69561E-05	-0.013141865	-2.956919726	4.523598463	2.559847661
113.63	0.01330627	-6.25961E-05	-0.012262124	-2.758977918	4.523643213	2.559847661
113.635	0.012243804	-5.73832E-05	-0.011210654	-2.522397234	4.523681101	2.559847661
113.64	0.011235181	-5.24343E-05	-0.010212762	-2.297871436	4.523713004	2.559847661
113.645	0.010250658	-4.76137E-05	-0.009241035	-2.079232962	4.523739562	2.559847661
113.65	0.008814596	-4.05544E-05	-0.007818562	-1.7591765	4.523759199	2.559847661
113.655	0.006844113	-3.08218E-05	-0.005858407	-1.318141667	4.523771038	2.559847661
113.66	0.004825183	-2.08374E-05	-0.00384869	-0.865955196	4.523776922	2.559847661
113.665	0.002354286	-8.60155E-06	-0.001387344	-0.312152325	4.523778323	2.559847661
113.67	-0.000734476	6.74356E-06	0.001697132	0.381854613	4.523778459	2.559847661
113.675	-0.003422652	2.01358E-05	0.004387008	0.987076866	4.52378142	2.559847661
113.68	-0.00531024	2.95564E-05	0.006278025	1.412555616	4.523788547	2.559847661
113.685	-0.006469782	3.53493E-05	0.007440393	1.674088397	4.523799126	2.559847661
113.69	-0.007262094	3.92883E-05	0.008230575	1.851879465	4.523812455	2.559847661
113.695	-0.008712997	4.64925E-05	0.009675373	2.176958898	4.523831642	2.559847661
113.7	-0.010531257	5.55549E-05	0.011492071	2.585716021	4.523859673	2.559847661
113.705	-0.011719856	6.1499E-05	0.012683212	2.853722787	4.523894389	2.559847661
113.71	-0.012510803	6.54549E-05	0.013475747	3.032043018	4.523933948	2.559847661
113.715	-0.013147402	6.86342E-05	0.014112574	3.175329062	4.523977635	2.559847661
113.72	-0.013909127	7.24241E-05	0.014871591	3.34610805	4.524026531	2.559847661
113.725	-0.015061057	7.81667E-05	0.016021396	3.604814165	4.524083862	2.559847661
113.73	-0.015789615	8.18164E-05	0.016751999	3.769199689	4.524146873	2.559847661
113.735	-0.016185413	8.37895E-05	0.017146923	3.858057769	4.524213083	2.559847661
113.74	-0.017095737	8.8318E-05	0.018053165	4.061962074	4.52428695	2.559847661
113.745	-0.018063018	9.3144E-05	0.019018724	4.279212998	4.524369413	2.559847661
113.75	-0.018950435	9.75704E-05	0.019904138	4.478431147	4.524460177	2.559847661
113.755	-0.019977725	0.0001027	0.020930019	4.709254172	4.524561049	2.559847661
113.76	-0.020745109	0.00010654	0.021697705	4.88198365	4.524669818	2.559847661
113.765	-0.021699668	0.000111304	0.022649876	5.096222061	4.524788828	2.559847661
113.77	-0.022881991	0.00011722	0.023832261	5.362258614	4.524921159	2.559847661
113.775	-0.023471531	0.000120192	0.024426077	5.495867237	4.525060398	2.559847661
113.78	-0.024097224	0.000123326	0.025052015	5.636703379	4.525207158	2.559847661
113.785	-0.025130118	0.000128498	0.026085167	5.869162605	4.52536677	2.559847661
113.79	-0.025774889	0.00013175	0.026734458	6.015252989	4.525534677	2.559847661
113.795	-0.026364065	0.000134715	0.027323124	6.14770287	4.525710349	2.559847661
113.8	-0.027207293	0.000138952	0.028164505	6.337013636	4.525897437	2.559847661
113.805	-0.027767197	0.000141789	0.028727714	6.463735636	4.526092305	2.559847661
113.81	-0.028185968	0.000143919	0.029150541	6.558871676	4.526293095	2.559847661
113.815	-0.028597388	0.000146016	0.029566676	6.652502086	4.526499789	2.559847661
113.82	-0.028798044	0.000147063	0.029774531	6.699269394	4.526709394	2.559847661
113.825	-0.028937092	0.000147798	0.029920459	6.732103173	4.526921028	2.559847661
113.83	-0.029060881	0.000148454	0.030050684	6.761404007	4.527134477	2.559847661
113.835	-0.029252284	0.000149442	0.030246638	6.805493486	4.527350747	2.559847661
113.84	-0.02967119	0.000151563	0.030667474	6.900181577	4.527573255	2.559847661
113.845	-0.030229587	0.000154384	0.031227253	7.026131974	4.527804217	2.559847661
113.85	-0.030876323	0.000157655	0.031876186	7.172141811	4.528045167	2.559847661
113.855	-0.031340284	0.000160029	0.032347195	7.278118913	4.528293412	2.559847661
113.86	-0.031456551	0.000160671	0.03247459	7.306782752	4.528543503	2.559847661
113.865	-0.031555956	0.000161225	0.032584357	7.331480226	4.528795178	2.559847661
113.87	-0.031587063	0.000161442	0.03262738	7.3411606	4.529047348	2.559847661
113.875	-0.031466134	0.000160898	0.032517574	7.316454073	4.529297592	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
113.88	-0.031392841	0.00016059	0.032455243	7.302429777	4.529546671	2.559847661
113.885	-0.031176127	0.000159568	0.032248908	7.256004335	4.529792323	2.559847661
113.89	-0.03097611	0.000158619	0.03205729	7.212890345	4.530034833	2.559847661
113.895	-0.031052861	0.00015905	0.032144263	7.232459154	4.530278546	2.559847661
113.9	-0.031031566	0.000158997	0.032133675	7.230076808	4.530521925	2.559847661
113.905	-0.031157524	0.00015967	0.032269517	7.260641296	4.530767284	2.559847661
113.91	-0.031699597	0.000162426	0.032822642	7.385094387	4.531021254	2.559847661
113.915	-0.032048345	0.000164238	0.033182074	7.465966643	4.531280844	2.559847661
113.92	-0.032245473	0.000165296	0.033391769	7.513147942	4.531543637	2.559847661
113.925	-0.032495209	0.000166626	0.033655536	7.572495677	4.531810516	2.559847661
113.93	-0.032338093	0.000165942	0.033517386	7.541411799	4.53207482	2.559847661
113.935	-0.031905886	0.000163881	0.033101152	7.44775931	4.532332107	2.559847661
113.94	-0.031519567	0.000162048	0.032731031	7.364482025	4.532583201	2.559847661
113.945	-0.031061664	0.000159866	0.032290705	7.265408524	4.532827053	2.559847661
113.95	-0.030349598	0.000156432	0.031597456	7.109427652	4.533059852	2.559847661
113.955	-0.028797242	0.000148818	0.030061526	6.763843251	4.533269446	2.559847661
113.96	-0.02649676	0.000137446	0.027768509	6.247914471	4.53344689	2.559847661
113.965	-0.024816561	0.000129124	0.026091741	5.870641776	4.533602543	2.559847661
113.97	-0.02391046	0.000124673	0.025195219	5.668924333	4.533747038	2.559847661
113.975	-0.022591766	0.000118194	0.023890539	5.375371176	4.533876034	2.559847661
113.98	-0.020476565	0.000107736	0.021785885	4.901824091	4.533982006	2.559847661
113.985	-0.018349037	9.71864E-05	0.01966395	4.424388672	4.5340671	2.559847661
113.99	-0.016795314	8.94939E-05	0.01811747	4.076430747	4.534138394	2.559847661
113.995	-0.014797421	7.96075E-05	0.016130877	3.629447263	4.534193735	2.559847661
114	-0.012054545	6.59776E-05	0.013393758	3.013595607	4.534230462	2.559847661
114.005	-0.010221958	5.68495E-05	0.011561758	2.601395548	4.53425687	2.559847661
114.01	-0.008723789	4.94189E-05	0.010071087	2.265994665	4.534276105	2.559847661
114.015	-0.006090459	3.63236E-05	0.007445365	1.675207032	4.53428548	2.559847661
114.02	-0.003989783	2.58273E-05	0.005341988	1.201947253	4.534289503	2.559847661
114.025	-0.003039762	2.10749E-05	0.004390029	0.987756543	4.534291839	2.559847661
114.03	-0.001727614	1.45381E-05	0.00308097	0.693218352	4.534292593	2.559847661
114.035	-0.000457618	8.19399E-06	0.001810891	0.407450458	4.534292646	2.559847661
114.04	0.00041889	3.81863E-06	0.000935185	0.210416725	4.53429269	2.559847661
114.045	0.00160766	-2.10608E-06	-0.00025032	-0.056321899	4.534293343	2.559847661
114.05	0.002715432	-7.6367E-06	-0.001356664	-0.30524931	4.534295207	2.559847661
114.055	0.003812701	-1.31056E-05	-0.002450372	-0.551333611	4.534298881	2.559847661
114.06	0.00532259	-2.06364E-05	-0.003955967	-0.890092566	4.534306041	2.559847661
114.065	0.006614447	-2.70983E-05	-0.005247453	-1.180676822	4.534317099	2.559847661
114.07	0.007709151	-3.25728E-05	-0.006341273	-1.426786387	4.53433212	2.559847661
114.075	0.009027455	-3.91621E-05	-0.007657464	-1.722929397	4.534352717	2.559847661
114.08	0.01025823	-4.53259E-05	-0.008888279	-1.999862855	4.534379313	2.559847661
114.085	0.011361217	-5.08535E-05	-0.009991777	-2.248149872	4.534411936	2.559847661
114.09	0.012556138	-5.68373E-05	-0.011186035	-2.516857934	4.534451782	2.559847661
114.095	0.013970316	-6.39186E-05	-0.012598894	-2.834751147	4.53450111	2.559847661
114.1	0.015417536	-7.11842E-05	-0.014048033	-3.16080747	4.534561186	2.559847661
114.105	0.016373822	-7.60154E-05	-0.01501138	-3.377560573	4.534628947	2.559847661
114.11	0.017103575	-7.97086E-05	-0.015747654	-3.543222126	4.534702882	2.559847661
114.115	0.017935421	-8.39129E-05	-0.016585684	-3.731778965	4.534784183	2.559847661
114.12	0.018535938	-8.69673E-05	-0.017194396	-3.868739129	4.53487102	2.559847661
114.125	0.019263719	-9.06491E-05	-0.017928036	-4.033808169	4.53496481	2.559847661
114.13	0.020054217	-9.46618E-05	-0.018727488	-4.213684735	4.535066456	2.559847661
114.135	0.02011089	-9.50222E-05	-0.018798586	-4.229681794	4.535168676	2.559847661
114.14	0.020219166	-9.56121E-05	-0.018916788	-4.25627723	4.535272001	2.559847661
114.145	0.020917419	-9.9152E-05	-0.019621879	-4.414922765	4.535382585	2.559847661
114.15	0.021089194	-0.00010009	-0.019808543	-4.456922235	4.535494992	2.559847661
114.155	0.020830639	-9.88677E-05	-0.019561594	-4.401358734	4.535604661	2.559847661
114.16	0.020874658	-9.91462E-05	-0.019617842	-4.414014405	4.535714793	2.559847661
114.165	0.020732043	-9.85048E-05	-0.019488298	-4.384867138	4.535823425	2.559847661
114.17	0.020290795	-9.63655E-05	-0.019056338	-4.287676161	4.535927483	2.559847661
114.175	0.020005637	-9.49944E-05	-0.01877953	-4.225394156	4.536028636	2.559847661
114.18	0.019791192	-9.39777E-05	-0.018574273	-4.179211518	4.536127633	2.559847661
114.185	0.019506525	-9.26107E-05	-0.018298351	-4.117129046	4.536223802	2.559847661
114.19	0.019202819	-9.11482E-05	-0.018003169	-4.050712919	4.536317	2.559847661
114.195	0.018887897	-8.96299E-05	-0.01769676	-3.981770986	4.536407166	2.559847661
114.2	0.018503704	-8.77683E-05	-0.017321109	-3.897249613	4.536493701	2.559847661
114.205	0.017948977	-8.50584E-05	-0.016774396	-3.774239051	4.536575126	2.559847661
114.21	0.017202993	-8.13906E-05	-0.016034556	-3.607774998	4.536649923	2.559847661
114.215	0.016407035	-7.74631E-05	-0.015242546	-3.429572799	4.536717958	2.559847661
114.22	0.015826933	-7.46046E-05	-0.01466624	-3.29990397	4.536781268	2.559847661
114.225	0.015322521	-7.21288E-05	-0.014167166	-3.187612242	4.536840606	2.559847661
114.23	0.014626291	-6.86951E-05	-0.013475143	-3.031907102	4.536894675	2.559847661
114.235	0.014095249	-6.60763E-05	-0.012947449	-2.913175949	4.536944889	2.559847661
114.24	0.013651315	-6.38989E-05	-0.012508755	-2.814469961	4.536991989	2.559847661
114.245	0.012977985	-6.05766E-05	-0.011839489	-2.663885046	4.537034558	2.559847661
114.25	0.012523146	-5.83368E-05	-0.011388384	-2.562386329	4.537074195	2.559847661
114.255	0.011974054	-5.56394E-05	-0.010845193	-2.440168335	4.537110432	2.559847661
114.26	0.011045773	-5.10415E-05	-0.009919461	-2.231878667	4.537141269	2.559847661
114.265	0.010599695	-4.88338E-05	-0.009475064	-2.131889336	4.537169666	2.559847661
114.27	0.01015519	-4.66536E-05	-0.009036249	-2.033156015	4.53719573	2.559847661
114.275	0.009217804	-4.20081E-05	-0.008101422	-1.822819879	4.537217205	2.559847661
114.28	0.008783424	-3.98554E-05	-0.00766832	-1.725372032	4.537236704	2.559847661
114.285	0.008331323	-3.76354E-05	-0.007221718	-1.624886612	4.537254247	2.559847661
114.29	0.007397294	-3.30046E-05	-0.006290334	-1.415325203	4.537268077	2.559847661
114.295	0.006929001	-3.06853E-05	-0.005823933	-1.310384813	4.537280211	2.559847661
114.3	0.006243145	-2.73012E-05	-0.005143538	-1.157296107	4.537290062	2.559847661
114.305	0.005086716	-2.15549E-05	-0.003988468	-0.897405237	4.537296602	2.559847661
114.31	0.004487071	-1.85713E-05	-0.003388864	-0.762494352	4.53730169	2.559847661
114.315	0.003771179	-1.50224E-05	-0.002675803	-0.602055582	4.537305285	2.559847661
114.32	0.002927106	-1.08183E-05	-0.001831248	-0.412030789	4.53730745	2.559847661
114.325	0.002679364	-9.58919E-06	-0.00158437	-0.356483278	4.537309265	2.559847661
114.33	0.002039155	-6.4249E-06	-0.00094887	-0.213495742	4.537310316	2.559847661
114.335	0.001132032	-1.91331E-06	-4.29686E-05	-0.00966793	4.537310639	2.559847661
114.34	0.000650051	4.78047E-07	0.000437115	0.098350824	4.537310746	2.559847661
114.345	-0.000249175	4.93542E-06	0.00133181	0.299657274	4.537310762	2.559847661
114.35	-0.001358533	1.04574E-05	0.002439914	0.548980692	4.537311228	2.559847661
114.355	-0.002205358	1.46748E-05	0.003286003	0.73935071	4.537312458	2.559847661
114.36	-0.0032032	1.96468E-05	0.004283257	0.96373279	4.537315051	2.559847661
114.365	-0.003926365	2.32595E-05	0.005007712	1.126735243	4.537318947	2.559847661
114.37	-0.004581952	2.65217E-05	0.005661779	1.273900359	4.537324253	2.559847661
114.375	-0.005697534	3.20825E-05	0.006776442	1.524699535	4.537332458	2.559847661
114.38	-0.00644298	3.58169E-05	0.007524834	1.693087657	4.53734295	2.559847661
114.385	-0.006897402	3.80877E-05	0.007979856	1.79546771	4.537354974	2.559847661
114.39	-0.007671422	4.1947E-05	0.008753048	1.969435719	4.537369848	2.559847661
114.395	-0.008406523	4.5618E-05	0.009488363	2.134881666	4.537387709	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
114.4	-0.009257084	4.98614E-05	0.010338195	2.326093847	4.537409367	2.559847661
114.405	-0.010229513	5.47244E-05	0.011311887	2.545174494	4.537435815	2.559847661
114.41	-0.010906072	5.81191E-05	0.01199145	2.698076266	4.537465876	2.559847661
114.415	-0.011583252	6.15147E-05	0.012671066	2.850989889	4.537499787	2.559847661
114.42	-0.012148252	6.43595E-05	0.013240375	2.979084334	4.537537086	2.559847661
114.425	-0.012465429	6.59638E-05	0.013561401	3.051315254	4.537576359	2.559847661
114.43	-0.012985497	6.85748E-05	0.014083799	3.168854679	4.537618977	2.559847661
114.435	-0.013466855	7.10022E-05	0.014569415	3.278118391	4.537664813	2.559847661
114.44	-0.013809889	7.27393E-05	0.014916895	3.35630136	4.537713014	2.559847661
114.445	-0.014172951	7.45813E-05	0.015285329	3.439198997	4.537763783	2.559847661
114.45	-0.014179184	7.46474E-05	0.015298143	3.442082081	4.537814596	2.559847661
114.455	-0.01422079	7.48748E-05	0.015344025	3.452405528	4.537865709	2.559847661
114.46	-0.014570645	7.66455E-05	0.015698172	3.532088735	4.537919366	2.559847661
114.465	-0.014533323	7.6496E-05	0.015667464	3.52517951	4.53797275	2.559847661
114.47	-0.014409831	7.59004E-05	0.01554719	3.498117733	4.53802523	2.559847661
114.475	-0.014690927	7.73217E-05	0.015833396	3.562514121	4.538079777	2.559847661
114.48	-0.014848473	7.81411E-05	0.015997252	3.599381771	4.538135501	2.559847661
114.485	-0.014716053	7.75135E-05	0.015870506	3.570863892	4.538190235	2.559847661
114.49	-0.014544307	7.66823E-05	0.015702642	3.533094398	4.538243699	2.559847661
114.495	-0.01452222	7.65922E-05	0.015684445	3.529000155	4.538297001	2.559847661
114.5	-0.014583273	7.69224E-05	0.015751129	3.544004108	4.538350752	2.559847661
114.505	-0.014399891	7.60348E-05	0.015571886	3.503674356	4.538403159	2.559847661
114.51	-0.014393398	7.60157E-05	0.015568044	3.502809866	4.53845552	2.559847661
114.515	-0.014753353	7.78337E-05	0.015935184	3.585416414	4.538510532	2.559847661
114.52	-0.014698859	7.76004E-05	0.015888061	3.574813638	4.538565138	2.559847661
114.525	-0.014457472	7.64201E-05	0.015649692	3.521180767	4.538617966	2.559847661
114.53	-0.014617612	7.72377E-05	0.015814813	3.558333032	4.53867197	2.559847661
114.535	-0.014735033	7.78552E-05	0.01593953	3.586394265	4.538726845	2.559847661
114.54	-0.014643724	7.74324E-05	0.015854128	3.567178768	4.538781043	2.559847661
114.545	-0.014518125	7.68347E-05	0.015733417	3.540018852	4.538834315	2.559847661
114.55	-0.014482418	7.66802E-05	0.015702224	3.533000401	4.538887325	2.559847661
114.555	-0.014674156	7.76639E-05	0.01590089	3.57770034	4.538941748	2.559847661
114.56	-0.01468552	7.77591E-05	0.015920119	3.582026847	4.538996255	2.559847661
114.565	-0.014561562	7.71735E-05	0.015801844	3.555414847	4.539049846	2.559847661
114.57	-0.014705466	7.79253E-05	0.015953679	3.589577835	4.539104501	2.559847661
114.575	-0.014628228	7.75872E-05	0.015885381	3.574210825	4.539158584	2.559847661
114.58	-0.014376869	7.6374E-05	0.015640385	3.519086703	4.539210824	2.559847661
114.585	-0.014345278	7.62595E-05	0.015617259	3.513883196	4.539262835	2.559847661
114.59	-0.014037661	7.47801E-05	0.015318532	3.44666973	4.539312639	2.559847661
114.595	-0.013585522	7.25746E-05	0.014873267	3.346485041	4.539359287	2.559847661
114.6	-0.013147539	7.04489E-05	0.014444162	3.249936421	4.539402975	2.559847661
114.605	-0.012081127	6.51973E-05	0.013384389	3.011487502	4.539439864	2.559847661
114.61	-0.010662006	5.81657E-05	0.011966	2.692350069	4.539468595	2.559847661
114.615	-0.009446924	5.21296E-05	0.010748962	2.418516522	4.539491151	2.559847661
114.62	-0.008795093	4.88884E-05	0.010095635	2.271517797	4.539510701	2.559847661
114.625	-0.008674653	4.83165E-05	0.009980371	2.245583452	4.53952972	2.559847661
114.63	-0.007778413	4.39046E-05	0.009091323	2.045547674	4.539545012	2.559847661
114.635	-0.006265802	3.63894E-05	0.007577438	1.704923469	4.539554934	2.559847661
114.64	-0.005627279	3.32088E-05	0.006936952	1.560814111	4.539562938	2.559847661
114.645	-0.005145784	3.08382E-05	0.00645964	1.453419055	4.53956963	2.559847661
114.65	-0.004022311	2.52665E-05	0.005338077	1.201067224	4.539573719	2.559847661
114.655	-0.003111435	2.07339E-05	0.004425921	0.995832158	4.539576166	2.559847661
114.66	-0.002527918	1.78372E-05	0.003843117	0.864701371	4.539577781	2.559847661
114.665	-0.001848922	1.44723E-05	0.003166234	0.712402625	4.539578645	2.559847661
114.67	-0.001016893	1.03446E-05	0.002336065	0.525614589	4.539578906	2.559847661
114.675	-0.000123987	5.90649E-06	0.001443674	0.324826646	4.53957891	2.559847661
114.68	0.000609934	2.25856E-06	0.000710335	0.159825414	4.539579004	2.559847661
114.685	0.001468836	-2.00694E-06	-0.000146972	-0.033068701	4.539579549	2.559847661
114.69	0.002456403	-6.92527E-06	-0.001135243	-0.255429732	4.539581074	2.559847661
114.695	0.003064552	-9.95761E-06	-0.001744422	-0.392494863	4.539583448	2.559847661
114.7	0.003724803	-1.32375E-05	-0.00240323	-0.540726673	4.539586955	2.559847661
114.705	0.004606503	-1.76283E-05	-0.003284973	-0.739118823	4.539592318	2.559847661
114.71	0.005232943	-2.075E-05	-0.003911748	-0.880143327	4.539599239	2.559847661
114.715	0.006040512	-2.47662E-05	-0.004717982	-1.061545994	4.539608461	2.559847661
114.72	0.007013179	-2.96199E-05	-0.005692105	-1.28072358	4.539620892	2.559847661
114.725	0.007560679	-3.236E-05	-0.006241929	-1.404434114	4.539635339	2.559847661
114.73	0.008162148	-3.5357E-05	-0.006843205	-1.539721228	4.539652177	2.559847661
114.735	0.008994721	-3.95134E-05	-0.007676962	-1.727316373	4.539672625	2.559847661
114.74	0.00958918	-4.24913E-05	-0.008274186	-1.861691811	4.539695865	2.559847661
114.745	0.01007862	-4.4942E-05	-0.008765615	-1.972263466	4.539721538	2.559847661
114.75	0.010575383	-4.74294E-05	-0.009264363	-2.084481627	4.539749805	2.559847661
114.755	0.011052936	-4.98199E-05	-0.009743604	-2.192311008	4.539780681	2.559847661
114.76	0.011602363	-5.25701E-05	-0.010294885	-2.316349157	4.539814704	2.559847661
114.765	0.012083891	-5.4986E-05	-0.01077909	-2.425295141	4.539851609	2.559847661
114.77	0.012536247	-5.72541E-05	-0.011233636	-2.527568182	4.53989133	2.559847661
114.775	0.013085768	-6.00078E-05	-0.01178542	-2.651719436	4.539934608	2.559847661
114.78	0.013623212	-6.27067E-05	-0.01232615	-2.77338386	4.539981515	2.559847661
114.785	0.01408101	-6.50128E-05	-0.012788118	-2.877326612	4.540031627	2.559847661
114.79	0.014395208	-6.66048E-05	-0.013106999	-2.949074682	4.540084001	2.559847661
114.795	0.014652694	-6.79108E-05	-0.013368586	-3.007931876	4.540138265	2.559847661
114.8	0.014924417	-6.92887E-05	-0.013644554	-3.070024652	4.54019456	2.559847661
114.805	0.015066697	-7.0021E-05	-0.013791215	-3.103023423	4.540251933	2.559847661
114.81	0.015273568	-7.10685E-05	-0.014000992	-3.150223241	4.540310893	2.559847661
114.815	0.015602947	-7.273E-05	-0.014333699	-3.225082355	4.540372424	2.559847661
114.82	0.015813082	-7.37992E-05	-0.01454779	-3.273252667	4.540435622	2.559847661
114.825	0.016085008	-7.51732E-05	-0.014822891	-3.335150414	4.540501013	2.559847661
114.83	0.016344397	-7.64896E-05	-0.015086456	-3.394452536	4.540568531	2.559847661
114.835	0.016469539	-7.71325E-05	-0.015215153	-3.423409485	4.540637086	2.559847661
114.84	0.016862098	-7.91042E-05	-0.015609861	-3.512218768	4.540708948	2.559847661
114.845	0.01725985	-8.11141E-05	-0.016012182	-3.602740912	4.54078424	2.559847661
114.85	0.01740663	-8.18709E-05	-0.016163663	-3.636824138	4.540860818	2.559847661
114.855	0.017763475	-8.36697E-05	-0.016523669	-3.717825629	4.540940568	2.559847661
114.86	0.018143785	-8.55956E-05	-0.016909089	-3.804545106	4.54102377	2.559847661
114.865	0.018385932	-8.68331E-05	-0.017156736	-3.860265619	4.541109207	2.559847661
114.87	0.018719955	-8.85317E-05	-0.01749661	-3.936737352	4.541197777	2.559847661
114.875	0.018828231	-8.91126E-05	-0.017612843	-3.962889697	4.541287374	2.559847661
114.88	0.018859671	-8.93037E-05	-0.017651065	-3.971489631	4.541377271	2.559847661
114.885	0.019030929	-9.01961E-05	-0.017829608	-4.011661879	4.541468808	2.559847661
114.89	0.018910943	-8.9643E-05	-0.017717914	-3.98653066	4.541559194	2.559847661
114.895	0.018809898	-8.91755E-05	-0.017623483	-3.965283677	4.541648617	2.559847661
114.9	0.018820435	-8.92723E-05	-0.017643048	-3.969685858	4.54173814	2.559847661
114.905	0.018434688	-8.73981E-05	-0.017264577	-3.884529933	4.541824031	2.559847661
114.91	0.01811117	-8.58232E-05	-0.016946587	-3.812982019	4.541906934	2.559847661
114.915	0.017854606	-8.45913E-05	-0.016697896	-3.757026709	4.541987504	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
114.92	0.017194361	-8.13479E-05	-0.016043214	-3.609723205	4.542062226	2.559847661
114.925	0.016650598	-7.86761E-05	-0.015504032	-3.488407252	4.542132297	2.559847661
114.93	0.015968594	-7.53277E-05	-0.014828464	-3.336404388	4.542196745	2.559847661
114.935	0.014713794	-6.9114E-05	-0.013575201	-3.05442027	4.542251462	2.559847661
114.94	0.013788551	-6.45203E-05	-0.012648997	-2.846024401	4.542299514	2.559847661
114.945	0.013069251	-6.09645E-05	-0.011932255	-2.684757295	4.542342684	2.559847661
114.95	0.011844134	-5.48854E-05	-0.010707239	-2.409128714	4.542378139	2.559847661
114.955	0.010776653	-4.95675E-05	-0.009636008	-2.168101869	4.542407492	2.559847661
114.96	0.01010754	-4.62319E-05	-0.008964238	-2.016953459	4.542433312	2.559847661
114.965	0.009558716	-4.34914E-05	-0.008412432	-1.892797199	4.542456405	2.559847661
114.97	0.009531489	-4.3346E-05	-0.008383376	-1.886259533	4.542479366	2.559847661
114.975	0.00982711	-4.48289E-05	-0.008682842	-1.95363943	4.542503774	2.559847661
114.98	0.009991332	-4.56716E-05	-0.008853013	-1.991927983	4.542529004	2.559847661
114.985	0.010129645	-4.63988E-05	-0.008999856	-2.024967686	4.542554938	2.559847661
114.99	0.009641902	-4.40281E-05	-0.008521088	-1.917244798	4.542578434	2.559847661
114.995	0.008234365	-3.70552E-05	-0.00711684	-1.601289013	4.542595572	2.559847661
115	0.007249993	-3.21483E-05	-0.006129392	-1.379113226	4.542608856	2.559847661
115.005	0.007304517	-3.24242E-05	-0.00618532	-1.391696908	4.542622341	2.559847661
115.01	0.007290191	-3.23931E-05	-0.006179037	-1.390283271	4.542635774	2.559847661
115.015	0.006514173	-2.85747E-05	-0.00541043	-1.217346711	4.542646499	2.559847661
115.02	0.005347024	-2.27887E-05	-0.004246666	-0.955499845	4.542653725	2.559847661
115.025	0.004433551	-1.8246E-05	-0.00333324	-0.749978957	4.542658693	2.559847661
115.03	0.004094948	-1.65683E-05	-0.00299594	-0.674086593	4.542662931	2.559847661
115.035	0.003734901	-1.48053E-05	-0.002641534	-0.594345226	4.542666457	2.559847661
115.04	0.002792129	-1.014E-05	-0.001703861	-0.383368724	4.542668427	2.559847661
115.045	0.001869686	-5.55525E-06	-0.000782611	-0.17608748	4.54266931	2.559847661
115.05	0.00134424	-2.9475E-06	-0.000258712	-0.058210225	4.542669767	2.559847661
115.055	0.000785034	-1.78925E-07	0.000297418	0.066919129	4.542669923	2.559847661
115.06	0.00023438	2.54999E-06	0.000845503	0.190238091	4.542669937	2.559847661
115.065	-0.000267031	5.02834E-06	0.001343194	0.302218553	4.542669955	2.559847661
115.07	-0.001029847	8.80899E-06	0.002102282	0.473013516	4.542670223	2.559847661
115.075	-0.001680974	1.2046E-05	0.0027521	0.619222607	4.542670937	2.559847661
115.08	-0.001991791	1.3582E-05	0.003060399	0.688589882	4.54267194	2.559847661
115.085	-0.002520807	1.61927E-05	0.003584367	0.806482534	4.542673546	2.559847661
115.09	-0.003309267	2.01025E-05	0.004368939	0.983011226	4.542676314	2.559847661
115.095	-0.003987661	2.34706E-05	0.005044672	1.135051102	4.542680332	2.559847661
115.1	-0.004608287	2.65482E-05	0.005662028	1.273956315	4.5426857	2.559847661
115.105	-0.005328908	3.01223E-05	0.006378849	1.435240919	4.542692877	2.559847661
115.11	-0.006194389	3.44212E-05	0.007240888	1.6291997	4.542702575	2.559847661
115.115	-0.007038746	3.86224E-05	0.008083125	1.818703034	4.542715097	2.559847661
115.12	-0.007739798	4.21096E-05	0.008782107	1.975974126	4.542730237	2.559847661
115.125	-0.00856485	4.62117E-05	0.009604174	2.160939262	4.542748777	2.559847661
115.13	-0.009456804	5.06541E-05	0.010494268	2.361210232	4.54277138	2.559847661
115.135	-0.010200426	5.4357E-05	0.01123602	2.528104559	4.542797677	2.559847661
115.14	-0.011196757	5.93141E-05	0.01222883	2.751486724	4.542829363	2.559847661
115.145	-0.012366493	6.51503E-05	0.013397375	3.014409394	4.542868015	2.559847661
115.15	-0.013155953	6.90986E-05	0.014187729	3.192239129	4.542911759	2.559847661
115.155	-0.014002156	7.33173E-05	0.015032037	3.38220826	4.542961311	2.559847661
115.16	-0.015245793	7.95242E-05	0.016273825	3.661610649	4.543020057	2.559847661
115.165	-0.016263975	8.4625E-05	0.01729368	3.891078079	4.543086911	2.559847661
115.17	-0.01700003	8.83161E-05	0.018031508	4.0570894	4.543159954	2.559847661
115.175	-0.017914837	9.28946E-05	0.018946558	4.262975598	4.543241069	2.559847661
115.18	-0.018868252	9.76763E-05	0.019901986	4.477946792	4.543331047	2.559847661
115.185	-0.019578817	0.000101253	0.020616618	4.638739006	4.543427931	2.559847661
115.19	-0.020165263	0.000104208	0.021206839	4.771538741	4.543530705	2.559847661
115.195	-0.020851779	0.000107661	0.021896309	4.926669481	4.543640596	2.559847661
115.2	-0.021570393	0.000111281	0.022619155	5.08930986	4.543758192	2.559847661
115.205	-0.022059143	0.000113761	0.023114401	5.200740149	4.543881177	2.559847661
115.21	-0.022398151	0.000115492	0.023459888	5.278474713	4.544007971	2.559847661
115.215	-0.022811398	0.000117592	0.023879037	5.372783402	4.544139488	2.559847661
115.22	-0.02317001	0.000119425	0.024245032	5.455132153	4.544275172	2.559847661
115.225	-0.023336783	0.000120306	0.024420728	5.494663849	4.544412816	2.559847661
115.23	-0.023377052	0.000120554	0.024470339	5.505826316	4.544550936	2.559847661
115.235	-0.023333921	0.000120385	0.024436176	5.498139498	4.544688546	2.559847661
115.24	-0.023246136	0.000119992	0.024356715	5.480260788	4.544825123	2.559847661
115.245	-0.023115887	0.000119387	0.024234612	5.452787737	4.544960174	2.559847661
115.25	-0.022888699	0.000118299	0.024014878	5.403347537	4.545092583	2.559847661
115.255	-0.022587979	0.000116842	0.023720689	5.33715507	4.545221536	2.559847661
115.26	-0.022256815	0.000115232	0.023395678	5.264027645	4.545346735	2.559847661
115.265	-0.021853874	0.000113265	0.022998516	5.174666096	4.545467442	2.559847661
115.27	-0.021326562	0.000110676	0.022476065	5.057114625	4.545582394	2.559847661
115.275	-0.020700118	0.00010759	0.021853415	4.917018394	4.545690693	2.559847661
115.28	-0.019949717	0.000103883	0.021105531	4.748744449	4.545791281	2.559847661
115.285	-0.019117032	9.97554E-05	0.020273032	4.561432287	4.545883648	2.559847661
115.29	-0.018536435	9.68752E-05	0.019692278	4.430762464	4.54597049	2.559847661
115.295	-0.018022827	9.4337E-05	0.019180562	4.315626502	4.546052586	2.559847661
115.3	-0.017116279	8.98344E-05	0.018273036	4.111433119	4.546126631	2.559847661
115.305	-0.01654604	8.6983E-05	0.017698451	3.982151461	4.546195824	2.559847661
115.31	-0.016637211	8.74376E-05	0.017790248	4.002805749	4.546265782	2.559847661
115.315	-0.016400276	8.62745E-05	0.017555695	3.950031348	4.546333762	2.559847661
115.32	-0.016083043	8.46967E-05	0.017237788	3.878502199	4.546399137	2.559847661
115.325	-0.016237411	8.54744E-05	0.017394871	3.913846016	4.546465773	2.559847661
115.33	-0.016065343	8.46429E-05	0.017226963	3.876066706	4.546531004	2.559847661
115.335	-0.015662122	8.26478E-05	0.016825035	3.785632963	4.546593002	2.559847661
115.34	-0.015520972	8.19578E-05	0.016686041	3.754359216	4.546653888	2.559847661
115.345	-0.015180168	8.02787E-05	0.016347839	3.678263773	4.546712129	2.559847661
115.35	-0.014883123	7.88066E-05	0.016051352	3.611554231	4.546768113	2.559847661
115.355	-0.01486099	7.87098E-05	0.016031847	3.607165534	4.54682393	2.559847661
115.36	-0.014641907	7.76384E-05	0.015816087	3.558619494	4.546878114	2.559847661
115.365	-0.014491189	7.69021E-05	0.015667813	3.525257857	4.546931188	2.559847661
115.37	-0.014436893	7.66563E-05	0.015618317	3.514121267	4.546983866	2.559847661
115.375	-0.014041282	7.47148E-05	0.015227373	3.42615889	4.547033696	2.559847661
115.38	-0.013579676	7.24367E-05	0.014768713	3.322960361	4.547080303	2.559847661
115.385	-0.013105663	7.00966E-05	0.014297635	3.216967824	4.547123713	2.559847661
115.39	-0.012560648	6.73962E-05	0.013754111	3.094674878	4.547163588	2.559847661
115.395	-0.012288154	6.60499E-05	0.01348316	3.033711001	4.547201752	2.559847661
115.4	-0.012075111	6.50097E-05	0.013273818	2.986609072	4.547238604	2.559847661
115.405	-0.011651388	6.29226E-05	0.012853847	2.892115655	4.547272915	2.559847661
115.41	-0.011121968	6.03048E-05	0.012327158	2.773610477	4.547304178	2.559847661
115.415	-0.010635924	5.78948E-05	0.011842342	2.664526878	4.547332769	2.559847661
115.42	-0.010517447	5.73152E-05	0.011725762	2.63829646	4.547360726	2.559847661
115.425	-0.010429765	5.69075E-05	0.011643739	2.619841199	4.547388219	2.559847661
115.43	-0.009881779	5.42095E-05	0.011101104	2.497748338	4.5474129	2.559847661
115.435	-0.009337239	5.15182E-05	0.010559874	2.375971639	4.547434935	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
115.44	-0.008861351	4.91721E-05	0.010088146	2.26983291	4.547454781	2.559847661
115.445	-0.008296226	4.63787E-05	0.009526554	2.143474608	4.547472176	2.559847661
115.45	-0.007925329	4.45555E-05	0.009160058	2.061013156	4.547488051	2.559847661
115.455	-0.007238566	4.11711E-05	0.008479836	1.907963133	4.547501294	2.559847661
115.46	-0.006189885	3.59676E-05	0.007434228	1.672701404	4.547510978	2.559847661
115.465	-0.005615092	3.31146E-05	0.006861052	1.543736698	4.547518946	2.559847661
115.47	-0.005075853	3.04559E-05	0.006327009	1.423577077	4.547525458	2.559847661
115.475	-0.004129568	2.57676E-05	0.005385447	1.211725505	4.547529768	2.559847661
115.48	-0.003234301	2.13259E-05	0.004493627	1.011066041	4.547532412	2.559847661
115.485	-0.002219688	1.62908E-05	0.003482913	0.78365552	4.547533657	2.559847661
115.49	-0.00112438	1.08427E-05	0.002389585	0.537656639	4.547533977	2.559847661
115.495	-0.000217833	6.33179E-06	0.00148456	0.334026112	4.547533989	2.559847661
115.5	0.00082196	1.15571E-06	0.000446346	0.100427918	4.547534159	2.559847661
115.505	0.001733407	-3.39468E-06	-0.000466143	-0.104882278	4.547534919	2.559847661
115.51	0.002280183	-6.12543E-06	-0.001013642	-0.228069345	4.547536233	2.559847661
115.515	0.002943577	-9.42954E-06	-0.001675992	-0.377098247	4.547538423	2.559847661
115.52	0.003661915	-1.30128E-05	-0.002394186	-0.538691862	4.547541812	2.559847661
115.525	0.004294645	-1.61698E-05	-0.003026819	-0.681034335	4.547546474	2.559847661
115.53	0.004987469	-1.96284E-05	-0.003719789	-0.836952501	4.54755276	2.559847661
115.535	0.00551248	-2.22553E-05	-0.004246042	-0.955359393	4.547560441	2.559847661
115.54	0.005949172	-2.44353E-05	-0.004682725	-1.053613014	4.547569386	2.559847661
115.545	0.006599844	-2.76803E-05	-0.005332629	-1.199841524	4.547580395	2.559847661
115.55	0.007277509	-3.10683E-05	-0.006011079	-1.352492853	4.54759378	2.559847661
115.555	0.007781594	-3.35962E-05	-0.00651721	-1.466372201	4.547609085	2.559847661
115.56	0.008151228	-3.54528E-05	-0.006888912	-1.550005199	4.547625877	2.559847661
115.565	0.008522603	-3.73152E-05	-0.007261719	-1.633886725	4.547644235	2.559847661
115.57	0.008905608	-3.92369E-05	-0.007646378	-1.720435127	4.54766428	2.559847661
115.575	0.009210194	-4.07671E-05	-0.007952632	-1.789342151	4.54768572	2.559847661
115.58	0.009596797	-4.27035E-05	-0.008340165	-1.876537106	4.547708997	2.559847661
115.585	0.00995718	-4.4515E-05	-0.008702662	-1.958098972	4.547734055	2.559847661
115.59	0.010124365	-4.53595E-05	-0.008871643	-1.996119572	4.547759961	2.559847661
115.595	0.010541339	-4.74409E-05	-0.009288105	-2.089823536	4.547788046	2.559847661
115.6	0.011079517	-5.01391E-05	-0.009827891	-2.211275522	4.547819071	2.559847661
115.605	0.011247601	-5.09959E-05	-0.009999306	-2.249843766	4.547851045	2.559847661
115.61	0.011472523	-5.21245E-05	-0.01022506	-2.30063849	4.547884311	2.559847661
115.615	0.011873971	-5.41379E-05	-0.010627779	-2.391250338	4.547919945	2.559847661
115.62	0.012081758	-5.51893E-05	-0.010838049	-2.438561027	4.547956837	2.559847661
115.625	0.012318395	-5.6378E-05	-0.011075783	-2.492051145	4.547995189	2.559847661
115.63	0.012627898	-5.79317E-05	-0.011386499	-2.561962192	4.548035492	2.559847661
115.635	0.012917082	-5.93826E-05	-0.011676636	-2.627243036	4.548077662	2.559847661
115.64	0.013379717	-6.16985E-05	-0.012139697	-2.731431731	4.548122907	2.559847661
115.645	0.013792127	-6.37727E-05	-0.012554391	-2.824738068	4.548170984	2.559847661
115.65	0.014079662	-6.52232E-05	-0.012844347	-2.889978177	4.548221087	2.559847661
115.655	0.014513543	-6.74035E-05	-0.013280176	-2.98803969	4.548274325	2.559847661
115.66	0.014869156	-6.92038E-05	-0.013640007	-3.069001594	4.548330204	2.559847661
115.665	0.014974161	-6.97564E-05	-0.013750468	-3.093855237	4.548386875	2.559847661
115.67	0.015008745	-6.99542E-05	-0.013789996	-3.102749103	4.548443808	2.559847661
115.675	0.015020384	-7.00361E-05	-0.013806354	-3.106429667	4.54850083	2.559847661
115.68	0.014983053	-6.98731E-05	-0.013773433	-3.099022416	4.548557568	2.559847661
115.685	0.014865232	-6.93057E-05	-0.013658852	-3.073241678	4.548613417	2.559847661
115.69	0.014818767	-6.90871E-05	-0.013614704	-3.063308328	4.548668918	2.559847661
115.695	0.014929987	-6.96557E-05	-0.01372953	-3.089144179	4.548725255	2.559847661
115.7	0.014967764	-6.98612E-05	-0.013771029	-3.098481454	4.548781878	2.559847661
115.705	0.015069147	-7.03805E-05	-0.013875196	-3.121919072	4.54883927	2.559847661
115.71	0.015225791	-7.11844E-05	-0.014035844	-3.15806498	4.548897862	2.559847661
115.715	0.014988215	-7.00274E-05	-0.013802173	-3.105488961	4.548954639	2.559847661
115.72	0.014694892	-6.85787E-05	-0.013509625	-3.039665667	4.549009216	2.559847661
115.725	0.014597853	-6.81097E-05	-0.013414938	-3.018360959	4.549063075	2.559847661
115.73	0.014233777	-6.63125E-05	-0.013052074	-2.936716588	4.54911428	2.559847661
115.735	0.013876535	-6.45353E-05	-0.012693318	-2.855996462	4.549162947	2.559847661
115.74	0.013758526	-6.39507E-05	-0.012575312	-2.829445311	4.549210791	2.559847661
115.745	0.01353846	-6.28579E-05	-0.012354739	-2.779816312	4.549257116	2.559847661
115.75	0.013498584	-6.26552E-05	-0.012313855	-2.770617296	4.549303168	2.559847661
115.755	0.013641887	-6.33741E-05	-0.012459047	-2.803285658	4.549350203	2.559847661
115.76	0.013591584	-6.31314E-05	-0.01241003	-2.792256695	4.549396892	2.559847661
115.765	0.013668533	-6.35186E-05	-0.012488223	-2.809850271	4.549444112	2.559847661
115.77	0.013802596	-6.42012E-05	-0.01262608	-2.840868066	4.549492262	2.559847661
115.775	0.013646226	-6.34387E-05	-0.012472077	-2.806217378	4.549539327	2.559847661
115.78	0.013521933	-6.28301E-05	-0.012349161	-2.778561232	4.549585539	2.559847661
115.785	0.013448869	-6.24818E-05	-0.012278835	-2.762737798	4.549631253	2.559847661
115.79	0.013254107	-6.15288E-05	-0.012086507	-2.71946408	4.549675652	2.559847661
115.795	0.013018431	-6.03741E-05	-0.011853474	-2.667031655	4.549718487	2.559847661
115.8	0.012518716	-5.79071E-05	-0.011355701	-2.555032822	4.549758096	2.559847661
115.805	0.011775026	-5.42149E-05	-0.010610847	-2.38744047	4.549793139	2.559847661
115.81	0.011085403	-5.07813E-05	-0.009918342	-2.23162688	4.549824197	2.559847661
115.815	0.01051077	-4.79141E-05	-0.009340201	-2.101545243	4.549852119	2.559847661
115.82	0.01013148	-4.60201E-05	-0.008958352	-2.015629093	4.549878062	2.559847661
115.825	0.009597571	-4.33638E-05	-0.008422888	-1.895149908	4.549901343	2.559847661
115.83	0.008703475	-3.88984E-05	-0.007522932	-1.692659692	4.549920488	2.559847661
115.835	0.00826995	-3.67036E-05	-0.007080687	-1.593154597	4.549937774	2.559847661
115.84	0.008473222	-3.76899E-05	-0.007279883	-1.637973701	4.549955919	2.559847661
115.845	0.008611368	-3.83656E-05	-0.007416334	-1.668675199	4.549974662	2.559847661
115.85	0.008713036	-3.88558E-05	-0.007515335	-1.690950329	4.549993849	2.559847661
115.855	0.009080589	-4.06715E-05	-0.007881952	-1.773439221	4.550014689	2.559847661
115.86	0.009600379	-4.32558E-05	-0.008403669	-1.890825531	4.550037984	2.559847661
115.865	0.010025241	-4.53777E-05	-0.008831944	-1.987187357	4.550063386	2.559847661
115.87	0.010291409	-4.67108E-05	-0.009100987	-2.047722186	4.550090154	2.559847661
115.875	0.010634835	-4.84294E-05	-0.00944779	-2.125752809	4.550118739	2.559847661
115.88	0.010920343	-4.98693E-05	-0.009738332	-2.191124628	4.55014888	2.559847661
115.885	0.010928476	-4.99279E-05	-0.009750124	-2.193777934	4.550179065	2.559847661
115.89	0.010995691	-5.02761E-05	-0.009820392	-2.209588215	4.550209623	2.559847661
115.895	0.011052328	-5.05787E-05	-0.00988144	-2.223324018	4.550240496	2.559847661
115.9	0.010862775	-4.96539E-05	-0.009694664	-2.181299323	4.550270319	2.559847661
115.905	0.010718574	-4.89502E-05	-0.009552555	-2.149324835	4.550299356	2.559847661
115.91	0.010551081	-4.81347E-05	-0.009387881	-2.112273164	4.550327493	2.559847661
115.915	0.010219675	-4.65002E-05	-0.009057862	-2.038019055	4.550353889	2.559847661
115.92	0.009907727	-4.49601E-05	-0.008746924	-1.968057825	4.550378699	2.559847661
115.925	0.00952007	-4.30445E-05	-0.008360259	-1.881058198	4.550401606	2.559847661
115.93	0.009001795	-4.04757E-05	-0.007841806	-1.764406272	4.550422086	2.559847661
115.935	0.008328133	-3.71284E-05	-0.007166382	-1.612435894	4.550439615	2.559847661
115.94	0.007608145	-3.3536E-05	-0.006442527	-1.449568534	4.550454245	2.559847661
115.945	0.007299842	-3.19856E-05	-0.006130224	-1.379300309	4.550467713	2.559847661
115.95	0.007152718	-3.12476E-05	-0.00598157	-1.345853357	4.550480644	2.559847661
115.955	0.006928872	-3.01248E-05	-0.005755426	-1.29497095	4.550492777	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
115.96	0.007053353	-3.0739E-05	-0.00587947	-1.322880725	4.550505351	2.559847661
115.965	0.00701406	-3.05568E-05	-0.005842673	-1.314601332	4.550517785	2.559847661
115.97	0.006461693	-2.78112E-05	-0.005289483	-1.190133686	4.550528338	2.559847661
115.975	0.006154126	-2.62705E-05	-0.004979239	-1.120328789	4.55053791	2.559847661
115.98	0.006016935	-2.55865E-05	-0.004841508	-1.089339411	4.55054706	2.559847661
115.985	0.005741629	-2.42149E-05	-0.004565366	-1.027207359	4.550555392	2.559847661
115.99	0.005527976	-2.31507E-05	-0.004351108	-0.978999203	4.550563116	2.559847661
115.995	0.005150064	-2.12711E-05	-0.00397272	-0.893862016	4.550569819	2.559847661
116	0.004704383	-1.90445E-05	-0.003524536	-0.793020553	4.550575413	2.559847661
116.005	0.004401365	-1.75257E-05	-0.003218854	-0.724242245	4.550580309	2.559847661
116.01	0.004137326	-1.61982E-05	-0.00295169	-0.664130192	4.550584635	2.559847661
116.015	0.004157327	-1.62863E-05	-0.002969584	-0.668156399	4.550589003	2.559847661
116.02	0.004016701	-1.55903E-05	-0.002829366	-0.636607362	4.550593081	2.559847661
116.025	0.003377471	-1.23996E-05	-0.002187332	-0.492149675	4.550595964	2.559847661
116.03	0.003137974	-1.11817E-05	-0.001942312	-0.43702013	4.550598453	2.559847661
116.035	0.003113434	-1.10479E-05	-0.001915396	-0.430964098	4.550600903	2.559847661
116.04	0.002750596	-9.22525E-06	-0.001548721	-0.348462268	4.550602815	2.559847661
116.045	0.002706251	-8.97714E-06	-0.001498972	-0.337268605	4.550604666	2.559847661
116.05	0.002794163	-9.39846E-06	-0.001584064	-0.35641431	4.550606639	2.559847661
116.055	0.00269986	-8.90717E-06	-0.001484838	-0.334088607	4.550608482	2.559847661
116.06	0.002946376	-1.01097E-05	-0.001727693	-0.38873094	4.550610676	2.559847661
116.065	0.003185452	-1.1288E-05	-0.001965649	-0.442271007	4.55061324	2.559847661
116.07	0.003214506	-1.14165E-05	-0.001991589	-0.44810761	4.550615852	2.559847661
116.075	0.003399665	-1.23205E-05	-0.002174129	-0.489179132	4.550618773	2.559847661
116.08	0.003511548	-1.28637E-05	-0.002283796	-0.513854073	4.550621889	2.559847661
116.085	0.00364922	-1.35312E-05	-0.002418552	-0.544174205	4.550625255	2.559847661
116.09	0.003831142	-1.44248E-05	-0.002598966	-0.584767316	4.550628965	2.559847661
116.095	0.003781495	-1.41618E-05	-0.00254585	-0.572816214	4.550632579	2.559847661
116.1	0.003986002	-1.51565E-05	-0.002746674	-0.618001679	4.550636595	2.559847661
116.105	0.004269456	-1.65576E-05	-0.003029487	-0.681634534	4.550641202	2.559847661
116.11	0.004179438	-1.60954E-05	-0.002936124	-0.660627823	4.550645616	2.559847661
116.115	0.004357602	-1.69578E-05	-0.003110243	-0.699804747	4.550650416	2.559847661
116.12	0.004664701	-1.84752E-05	-0.003416505	-0.768713609	4.550655915	2.559847661
116.125	0.004658829	-1.84333E-05	-0.003408027	-0.766805983	4.550661401	2.559847661
116.13	0.004831639	-1.9275E-05	-0.003577898	-0.805027109	4.550667301	2.559847661
116.135	0.005007617	-2.0142E-05	-0.003752851	-0.844391506	4.550673639	2.559847661
116.14	0.004956611	-1.98754E-05	-0.003699015	-0.832278468	4.550679848	2.559847661
116.145	0.005009249	-2.01214E-05	-0.003748698	-0.843456943	4.55068619	2.559847661
116.15	0.004991446	-2.00182E-05	-0.003727836	-0.838763172	4.550692487	2.559847661
116.155	0.0049989	-2.00336E-05	-0.003730963	-0.839466772	4.550698803	2.559847661
116.16	0.00516357	-2.08345E-05	-0.00389259	-0.875832744	4.550705541	2.559847661
116.165	0.005220283	-2.10973E-05	-0.003945608	-0.887761856	4.550712429	2.559847661
116.17	0.0054636	-2.22846E-05	-0.004185161	-0.941661289	4.550719973	2.559847661
116.175	0.005759739	-2.37447E-05	-0.004479733	-1.007939861	4.550728358	2.559847661
116.18	0.005813173	-2.39911E-05	-0.004529439	-1.019123767	4.550736899	2.559847661
116.185	0.006189172	-2.58376E-05	-0.004901922	-1.102932497	4.55074658	2.559847661
116.19	0.006567849	-2.77112E-05	-0.005279809	-1.187957071	4.550757483	2.559847661
116.195	0.006645247	-2.80724E-05	-0.005352655	-1.204347485	4.550768644	2.559847661
116.2	0.007375747	-3.16743E-05	-0.006078991	-1.367773026	4.550782393	2.559847661
116.205	0.008480305	-3.71647E-05	-0.00718582	-1.616809528	4.550800569	2.559847661
116.21	0.009178004	-4.06385E-05	-0.007885925	-1.774333223	4.550821859	2.559847661
116.215	0.009958623	-4.45195E-05	-0.008667912	-1.950280199	4.550846924	2.559847661
116.22	0.010879336	-4.91075E-05	-0.009592133	-2.158229827	4.550876839	2.559847661
116.225	0.011731109	-5.33573E-05	-0.010447992	-2.350798162	4.550911621	2.559847661
116.23	0.012633507	-5.78685E-05	-0.011356241	-2.555154184	4.55095196	2.559847661
116.235	0.013187826	-6.06542E-05	-0.011916982	-2.681321003	4.550995916	2.559847661
116.24	0.013614487	-6.27911E-05	-0.012347072	-2.778091227	4.551042763	2.559847661
116.245	0.014436672	-6.69006E-05	-0.01317402	-2.96415449	4.551095438	2.559847661
116.25	0.015115319	-7.03103E-05	-0.013860023	-3.11850526	4.551153183	2.559847661
116.255	0.015601964	-7.27591E-05	-0.01435053	-3.228869203	4.551214705	2.559847661
116.26	0.016313155	-7.63299E-05	-0.015064044	-3.389409949	4.551281965	2.559847661
116.265	0.016844317	-7.90166E-05	-0.01560081	-3.5101823	4.551353675	2.559847661
116.27	0.017198241	-8.08174E-05	-0.015960548	-3.591123303	4.551428431	2.559847661
116.275	0.01767445	-8.32333E-05	-0.016443106	-3.699698836	4.551507384	2.559847661
116.28	0.017788588	-8.38575E-05	-0.01656763	-3.727716783	4.55158736	2.559847661
116.285	0.017499173	-8.24608E-05	-0.016285557	-3.66425033	4.551664754	2.559847661
116.29	0.017373562	-8.18696E-05	-0.016166174	-3.637389247	4.551741042	2.559847661
116.295	0.017268295	-8.13852E-05	-0.016068348	-3.615378231	4.551816408	2.559847661
116.3	0.016921645	-7.96934E-05	-0.015726761	-3.538521337	4.551888778	2.559847661
116.305	0.016743162	-7.88278E-05	-0.01555201	-3.499202301	4.55195963	2.559847661
116.31	0.016812301	-7.92015E-05	-0.015627487	-3.516184581	4.552031068	2.559847661
116.315	0.016707428	-7.87142E-05	-0.01552908	-3.494042979	4.552101618	2.559847661
116.32	0.016605563	-7.82349E-05	-0.015432309	-3.472269433	4.55217131	2.559847661
116.325	0.016729293	-7.8885E-05	-0.015563612	-3.501812764	4.552242044	2.559847661
116.33	0.016620537	-7.83879E-05	-0.015463216	-3.479223656	4.552311862	2.559847661
116.335	0.016306566	-7.68623E-05	-0.01515525	-3.409931358	4.552379067	2.559847661
116.34	0.016118937	-7.59672E-05	-0.014974563	-3.369276574	4.552444734	2.559847661
116.345	0.015681653	-7.38371E-05	-0.014544677	-3.272552354	4.552506887	2.559847661
116.35	0.014908094	-7.00255E-05	-0.013775578	-3.099505143	4.552563059	2.559847661
116.355	0.014018353	-6.56283E-05	-0.012888579	-2.899930283	4.552612726	2.559847661
116.36	0.012914956	-6.01541E-05	-0.011784672	-2.651551263	4.552654882	2.559847661
116.365	0.012188247	-5.65361E-05	-0.011055315	-2.487445844	4.552692428	2.559847661
116.37	0.01196685	-5.54518E-05	-0.010836759	-2.438270815	4.552728622	2.559847661
116.375	0.011053386	-5.09361E-05	-0.009926697	-2.233506908	4.552759501	2.559847661
116.38	0.009828426	-4.48373E-05	-0.00869802	-1.957054481	4.552783915	2.559847661
116.385	0.009319741	-4.23016E-05	-0.008187302	-1.842142942	4.552805868	2.559847661
116.39	0.008472388	-3.80992E-05	-0.007341041	-1.65173431	4.55282401	2.559847661
116.395	0.007181566	-3.1661E-05	-0.00604498	-1.360120456	4.552837045	2.559847661
116.4	0.006674048	-2.9111E-05	-0.005531765	-1.244647201	4.552848303	2.559847661
116.405	0.006177992	-2.66425E-05	-0.005035019	-1.132879284	4.552857949	2.559847661
116.41	0.005149502	-2.151E-05	-0.004002432	-0.900547175	4.552864651	2.559847661
116.415	0.004582935	-1.86628E-05	-0.003429751	-0.771693882	4.55286996	2.559847661
116.42	0.004119677	-1.63456E-05	-0.002963717	-0.66683625	4.552874249	2.559847661
116.425	0.003280404	-1.21478E-05	-0.002119636	-0.476918042	4.552876969	2.559847661
116.43	0.002760465	-9.52773E-06	-0.001592907	-0.358404048	4.552878895	2.559847661
116.435	0.002364656	-7.53415E-06	-0.001192169	-0.268238	4.552880308	2.559847661
116.44	0.00184583	-4.92097E-06	-0.000666947	-0.150063017	4.552881169	2.559847661
116.445	0.001707573	-4.19935E-06	-0.000521923	-0.117432693	4.552881906	2.559847661
116.45	0.001596631	-3.62728E-06	-0.000406958	-0.091565514	4.55288255	2.559847661
116.455	0.001251537	-1.88417E-06	-5.66759E-05	-0.012752072	4.552882946	2.559847661
116.46	0.001196262	-1.57814E-06	4.72401E-06	0.001062903	4.552883308	2.559847661
116.465	0.001253464	-1.84253E-06	-4.86754E-05	-0.010951974	4.552883705	2.559847661
116.47	0.001171081	-1.41185E-06	3.82324E-05	0.008602293	4.552884052	2.559847661
116.475	0.001251774	-1.79169E-06	-3.84839E-05	-0.008658886	4.552884448	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
116.48	0.001355614	-2.29422E-06	-0.000139977	-0.031494859	4.552884912	2.559847661
116.485	0.001350925	-2.25639E-06	-0.000132336	-0.029775545	4.552885373	2.559847661
116.49	0.001403915	-2.50594E-06	-0.000182735	-0.041115367	4.552885872	2.559847661
116.495	0.001378827	-2.36759E-06	-0.000154792	-0.034828135	4.552886352	2.559847661
116.5	0.001412959	-2.51722E-06	-0.000185013	-0.041627968	4.552886857	2.559847661
116.505	0.001748544	-4.17143E-06	-0.000519058	-0.11678801	4.552887629	2.559847661
116.51	0.002049627	-5.66285E-06	-0.000820186	-0.184541857	4.552888691	2.559847661
116.515	0.002310396	-6.95065E-06	-0.001080175	-0.243039264	4.55289004	2.559847661
116.52	0.002842921	-9.5953E-06	-0.001614007	-0.363151471	4.552892083	2.559847661
116.525	0.003365961	-1.22058E-05	-0.002140841	-0.481689257	4.552894946	2.559847661
116.53	0.003704472	-1.39007E-05	-0.002482843	-0.558639706	4.552898415	2.559847661
116.535	0.004074226	-1.57532E-05	-0.00285659	-0.642732691	4.55290261	2.559847661
116.54	0.004351654	-1.71533E-05	-0.003139036	-0.706283019	4.552907396	2.559847661
116.545	0.004398104	-1.7403E-05	-0.003189407	-0.717616592	4.552912285	2.559847661
116.55	0.004441416	-1.76309E-05	-0.003235382	-0.727960928	4.552917271	2.559847661
116.555	0.004652673	-1.8696E-05	-0.003450221	-0.776299687	4.552922742	2.559847661
116.56	0.004857026	-1.97356E-05	-0.003659923	-0.823482585	4.552928704	2.559847661
116.565	0.004813224	-1.95413E-05	-0.003620657	-0.814647866	4.55293456	2.559847661
116.57	0.004761595	-1.93002E-05	-0.003571954	-0.803689684	4.55294029	2.559847661
116.575	0.00490869	-2.00534E-05	-0.003724002	-0.837900547	4.55294638	2.559847661
116.58	0.004820447	-1.96433E-05	-0.003641169	-0.819262927	4.552952253	2.559847661
116.585	0.004519437	-1.81643E-05	-0.003342474	-0.752056706	4.552957415	2.559847661
116.59	0.004475905	-1.79649E-05	-0.003302209	-0.742997061	4.552962478	2.559847661
116.595	0.004343513	-1.73342E-05	-0.003174853	-0.714341973	4.552967247	2.559847661
116.6	0.003889432	-1.50963E-05	-0.00272303	-0.61268171	4.55297107	2.559847661
116.605	0.003558153	-1.34618E-05	-0.002393079	-0.538442767	4.55297427	2.559847661
116.61	0.003257091	-1.19825E-05	-0.00209448	-0.471258087	4.552976951	2.559847661
116.615	0.002785436	-9.65104E-06	-0.001623953	-0.365389366	4.552978912	2.559847661
116.62	0.002384605	-7.66736E-06	-0.001223675	-0.275326922	4.552980349	2.559847661
116.625	0.002001477	-5.77452E-06	-0.00084178	-0.189400529	4.552981362	2.559847661
116.63	0.001492431	-3.25475E-06	-0.000333476	-0.075032134	4.552981925	2.559847661
116.635	0.000874583	-1.89225E-07	0.000283895	0.063876468	4.552982118	2.559847661
116.64	0.000253618	2.89992E-06	0.000904528	0.203518881	4.552982134	2.559847661
116.645	-0.00016743	4.99398E-06	0.001325184	0.298166309	4.552982141	2.559847661
116.65	-0.000756355	7.9165E-06	0.001912182	0.430241017	4.552982286	2.559847661
116.655	-0.001664831	1.2446E-05	0.002821767	0.634897569	4.552982986	2.559847661
116.66	-0.00209571	1.46131E-05	0.003256888	0.732799744	4.552984096	2.559847661
116.665	-0.002198144	1.51291E-05	0.003360475	0.756106885	4.552985318	2.559847661
116.67	-0.002627662	1.72711E-05	0.003790484	0.852859008	4.552987063	2.559847661
116.675	-0.002868905	1.84835E-05	0.00403386	0.907618456	4.552989143	2.559847661
116.68	-0.003083597	1.95464E-05	0.004247195	0.9556188	4.552991546	2.559847661
116.685	-0.004021638	2.42142E-05	0.005183999	1.166399812	4.552995634	2.559847661
116.69	-0.004965643	2.89429E-05	0.006132777	1.3798748	4.553001866	2.559847661
116.695	-0.005303909	3.06618E-05	0.00647761	1.457462141	4.553008976	2.559847661
116.7	-0.005428431	3.13071E-05	0.006607043	1.486584617	4.553016423	2.559847661
116.705	-0.005562765	3.19937E-05	0.006744787	1.517577007	4.553024244	2.559847661
116.71	-0.005984954	3.41121E-05	0.007169673	1.613176462	4.553033297	2.559847661
116.715	-0.006504129	3.67321E-05	0.007695123	1.73140259	4.553043989	2.559847661
116.72	-0.006410139	3.63059E-05	0.007608764	1.711971853	4.553054374	2.559847661
116.725	-0.006117715	3.48717E-05	0.007319127	1.646803568	4.553063834	2.559847661
116.73	-0.006204941	3.53263E-05	0.007410937	1.667460721	4.553073565	2.559847661
116.735	-0.006132246	3.49666E-05	0.00734434	1.652476463	4.553083069	2.559847661
116.74	-0.005738264	3.30582E-05	0.006952948	1.564413332	4.553091391	2.559847661
116.745	-0.00554807	3.21234E-05	0.006764205	1.521946201	4.553099171	2.559847661
116.75	-0.005591852	3.23604E-05	0.006812074	1.532716547	4.553107073	2.559847661
116.755	-0.005445592	3.16604E-05	0.006670742	1.500916986	4.553114568	2.559847661
116.76	-0.005010102	2.95134E-05	0.006237343	1.403402239	4.553120912	2.559847661
116.765	-0.00469603	2.79603E-05	0.005923879	1.332872853	4.553126486	2.559847661
116.77	-0.004542565	2.72122E-05	0.005772893	1.298900877	4.553131701	2.559847661
116.775	-0.004170351	2.53757E-05	0.005402307	1.215519068	4.553136097	2.559847661
116.78	-0.003856868	2.38206E-05	0.005088528	1.144918843	4.553139857	2.559847661
116.785	-0.003807977	2.35879E-05	0.00504158	1.134355405	4.553143522	2.559847661
116.79	-0.003538263	2.22608E-05	0.004773836	1.07411306	4.553146686	2.559847661
116.795	-0.003258478	2.08706E-05	0.004493396	1.011014074	4.553149369	2.559847661
116.8	-0.00343262	2.17441E-05	0.004669812	1.050707711	4.553152347	2.559847661
116.805	-0.003513054	2.21689E-05	0.004755595	1.070008765	4.553155466	2.559847661
116.81	-0.003189214	2.05789E-05	0.004434542	0.997772062	4.553158037	2.559847661
116.815	-0.00288817	1.90951E-05	0.004135247	0.930430604	4.553160145	2.559847661
116.82	-0.002569199	1.75247E-05	0.003818537	0.859170899	4.553161814	2.559847661
116.825	-0.002055477	1.49799E-05	0.00330535	0.743703676	4.553162881	2.559847661
116.83	-0.001642977	1.29311E-05	0.002892251	0.650756472	4.553163564	2.559847661
116.835	-0.001327672	1.13691E-05	0.002577351	0.579904009	4.553164009	2.559847661
116.84	-0.00084934	8.99356E-06	0.002098486	0.472159387	4.553164192	2.559847661
116.845	-0.000461253	7.05657E-06	0.001708082	0.38431855	4.553164245	2.559847661
116.85	-0.000391643	6.70665E-06	0.001637559	0.368450749	4.553164284	2.559847661
116.855	-0.000337922	6.44517E-06	0.001584862	0.356593919	4.553164313	2.559847661
116.86	-0.000157561	5.55325E-06	0.001405116	0.3161511	4.553164319	2.559847661
116.865	-8.36446E-06	4.81415E-06	0.001256175	0.282639276	4.553164319	2.559847661
116.87	8.89059E-05	4.33575E-06	0.001159772	0.260948783	4.553164321	2.559847661
116.875	0.000220989	3.68681E-06	0.001029009	0.231526944	4.553164334	2.559847661
116.88	0.000469866	2.45541E-06	0.000780894	0.175701078	4.553164389	2.559847661
116.885	0.000686892	1.37743E-06	0.000563706	0.126833891	4.553164509	2.559847661
116.89	0.000732325	1.15764E-06	0.000519425	0.116870637	4.553164644	2.559847661
116.895	0.000983916	-8.10626E-08	0.000269876	0.060722012	4.553164889	2.559847661
116.9	0.001459977	-2.44688E-06	-0.000206692	-0.046505588	4.553165428	2.559847661
116.905	0.001692441	-3.60517E-06	-0.000439989	-0.098997577	4.553166151	2.559847661
116.91	0.001965606	-4.95814E-06	-0.000712481	-0.160308133	4.553167128	2.559847661
116.915	0.002441244	-7.3266E-06	-0.001189442	-0.267624494	4.553168634	2.559847661
116.92	0.002640941	-8.32541E-06	-0.001390562	-0.312876558	4.553170397	2.559847661
116.925	0.002889238	-9.5552E-06	-0.001638177	-0.368589878	4.553172507	2.559847661
116.93	0.003425636	-1.22263E-05	-0.002175932	-0.489584656	4.553175473	2.559847661
116.935	0.003733383	-1.37652E-05	-0.002485717	-0.559286234	4.553178995	2.559847661
116.94	0.004095684	-1.55673E-05	-0.002848438	-0.640898525	4.553183235	2.559847661
116.945	0.004697532	-1.85721E-05	-0.003453158	-0.776960595	4.553188812	2.559847661
116.95	0.004956654	-1.98773E-05	-0.003715799	-0.836054753	4.553195022	2.559847661
116.955	0.005185682	-2.10207E-05	-0.003945875	-0.887821933	4.553201818	2.559847661
116.96	0.005670232	-2.34423E-05	-0.004433093	-0.997445863	4.553209944	2.559847661
116.965	0.005892991	-2.4566E-05	-0.004659141	-1.048306617	4.553218721	2.559847661
116.97	0.006146686	-2.58323E-05	-0.004913886	-1.105624435	4.55322827	2.559847661
116.975	0.0067222	-2.87083E-05	-0.005492359	-1.235780742	4.553239691	2.559847661
116.98	0.007079741	-3.051E-05	-0.005854699	-1.31730721	4.553252359	2.559847661
116.985	0.007303246	-3.16383E-05	-0.006081593	-1.368358417	4.55326584	2.559847661
116.99	0.007637469	-3.33202E-05	-0.006419776	-1.444449586	4.553280582	2.559847661
116.995	0.007798519	-3.41432E-05	-0.006585265	-1.48168461	4.553295953	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
117	0.007929615	-3.48105E-05	-0.006719438	-1.511873444	4.553311845	2.559847661
117.005	0.008195818	-3.61523E-05	-0.006989199	-1.572569878	4.553328822	2.559847661
117.01	0.008395485	-3.71666E-05	-0.007193103	-1.618448264	4.553346637	2.559847661
117.015	0.00860384	-3.82241E-05	-0.00740568	-1.666277927	4.553365346	2.559847661
117.02	0.008782142	-3.91373E-05	-0.007589242	-1.707579467	4.553384839	2.559847661
117.025	0.008765513	-3.908E-05	-0.007577622	-1.704964858	4.553404258	2.559847661
117.03	0.008767409	-3.91118E-05	-0.007584037	-1.706408437	4.553423686	2.559847661
117.035	0.00874413	-3.90238E-05	-0.007566257	-1.702407817	4.55344301	2.559847661
117.04	0.008438114	-3.75276E-05	-0.007264094	-1.634421229	4.553461006	2.559847661
117.045	0.00806035	-3.56655E-05	-0.006888092	-1.549820631	4.553477426	2.559847661
117.05	0.007736123	-3.40682E-05	-0.006565619	-1.477264248	4.553492552	2.559847661
117.055	0.007312424	-3.19734E-05	-0.006142752	-1.382119116	4.553506067	2.559847661
117.06	0.006927507	-3.00655E-05	-0.005757666	-1.295474922	4.553518196	2.559847661
117.065	0.006644536	-2.86667E-05	-0.00547537	-1.231958297	4.553529354	2.559847661
117.07	0.006210067	-2.65146E-05	-0.005041124	-1.134252838	4.553539101	2.559847661
117.075	0.005677175	-2.38631E-05	-0.004506175	-1.013889404	4.553547247	2.559847661
117.08	0.005356769	-2.2262E-05	-0.004183215	-0.941223466	4.5535545	2.559847661
117.085	0.005258223	-2.17691E-05	-0.004083787	-0.918852126	4.553561488	2.559847661
117.09	0.005148525	-2.12275E-05	-0.003974556	-0.894275126	4.553568187	2.559847661
117.095	0.00488608	-1.99266E-05	-0.003712169	-0.835238105	4.553574221	2.559847661
117.1	0.004556268	-1.82845E-05	-0.003381026	-0.76073095	4.553579468	2.559847661
117.105	0.004344686	-1.72268E-05	-0.003167739	-0.712741189	4.553584239	2.559847661
117.11	0.004265342	-1.68298E-05	-0.003087687	-0.694729493	4.553588837	2.559847661
117.115	0.004187327	-1.64436E-05	-0.003009815	-0.677208317	4.553593268	2.559847661
117.12	0.004025811	-1.56427E-05	-0.002848336	-0.640875639	4.553597364	2.559847661
117.125	0.003806299	-1.45502E-05	-0.002628067	-0.59131513	4.553601026	2.559847661
117.13	0.003664458	-1.38419E-05	-0.002485284	-0.559188925	4.55360442	2.559847661
117.135	0.003582028	-1.34331E-05	-0.002402868	-0.540645336	4.553607663	2.559847661
117.14	0.003356923	-1.23153E-05	-0.002177536	-0.489945495	4.553610511	2.559847661
117.145	0.003086824	-1.09669E-05	-0.00190573	-0.428789235	4.553612919	2.559847661
117.15	0.002991215	-1.04853E-05	-0.001808664	-0.406949434	4.553615181	2.559847661
117.155	0.002939288	-1.02256E-05	-0.001756313	-0.395170376	4.553617364	2.559847661
117.16	0.002826752	-9.66387E-06	-0.001643106	-0.369698875	4.553619384	2.559847661
117.165	0.002776121	-9.40855E-06	-0.001591647	-0.358120526	4.553621332	2.559847661
117.17	0.002817645	-9.61393E-06	-0.001633129	-0.367454082	4.553623338	2.559847661
117.175	0.002874045	-9.89742E-06	-0.001690385	-0.380336541	4.553625426	2.559847661
117.18	0.0028672	-9.86809E-06	-0.00168446	-0.379003499	4.553627504	2.559847661
117.185	0.002855561	-9.81333E-06	-0.001673399	-0.376514872	4.553629564	2.559847661
117.19	0.002907242	-1.00766E-05	-0.001726569	-0.388477963	4.553631701	2.559847661
117.195	0.00284693	-9.7854E-06	-0.001667758	-0.375245635	4.553633749	2.559847661
117.2	0.002764239	-9.37692E-06	-0.001585272	-0.356686303	4.55363568	2.559847661
117.205	0.002906951	-1.00938E-05	-0.001730067	-0.389265083	4.553637816	2.559847661
117.21	0.002886198	-1.00081E-05	-0.001712746	-0.385367838	4.553639921	2.559847661
117.215	0.002564223	-8.41371E-06	-0.001391151	-0.31300902	4.553641583	2.559847661
117.22	0.002532697	-8.25587E-06	-0.001359437	-0.305873397	4.553643204	2.559847661
117.225	0.00269146	-9.05797E-06	-0.001521433	-0.342322411	4.553645035	2.559847661
117.23	0.002548505	-8.36217E-06	-0.001380902	-0.310702969	4.553646677	2.559847661
117.235	0.0023832	-7.5466E-06	-0.001216408	-0.273691798	4.553648112	2.559847661
117.24	0.002369323	-7.48864E-06	-0.001204728	-0.271063911	4.553649531	2.559847661
117.245	0.002192914	-6.62677E-06	-0.001031051	-0.231986482	4.553650746	2.559847661
117.25	0.001870927	-5.03557E-06	-0.00071043	-0.159846744	4.553651631	2.559847661
117.255	0.001565746	-3.52486E-06	-0.000406054	-0.091362195	4.553652251	2.559847661
117.26	0.001242446	-1.9231E-06	-8.33642E-05	-0.018756946	4.553652641	2.559847661
117.265	0.000902912	-2.38505E-07	0.000255979	0.057595257	4.553652847	2.559847661
117.27	0.000561189	1.45836E-06	0.00059776	0.134496102	4.553652927	2.559847661
117.275	0.000204385	3.23264E-06	0.000955096	0.214896574	4.553652937	2.559847661
117.28	-9.04699E-05	4.70148E-06	0.00125089	0.281450201	4.553652939	2.559847661
117.285	-0.000268731	5.58827E-06	0.001429458	0.321628076	4.553652957	2.559847661
117.29	-0.000476418	6.61626E-06	0.001636449	0.368201036	4.553653015	2.559847661
117.295	-0.000834105	8.39165E-06	0.0019939	0.448627491	4.553653191	2.559847661
117.3	-0.001176525	1.00954E-05	0.002336891	0.525800408	4.553653541	2.559847661
117.305	-0.001465295	1.15291E-05	0.002625493	0.590735986	4.553654083	2.559847661
117.31	-0.001920949	1.37919E-05	0.003080953	0.693214329	4.553655016	2.559847661
117.315	-0.002472102	1.65373E-05	0.003633463	0.8175291	4.55365656	2.559847661
117.32	-0.002942075	1.88827E-05	0.004105402	0.923715404	4.553658748	2.559847661
117.325	-0.003388524	2.11122E-05	0.004553963	1.024641782	4.55366165	2.559847661
117.33	-0.003763293	2.29873E-05	0.004931181	1.109515828	4.553665229	2.559847661
117.335	-0.004075943	2.45505E-05	0.005245624	1.180265387	4.553669428	2.559847661
117.34	-0.004515786	2.67466E-05	0.005687319	1.279646721	4.553674582	2.559847661
117.345	-0.004989304	2.91175E-05	0.006164116	1.386926011	4.553680874	2.559847661
117.35	-0.005323574	3.07993E-05	0.006502291	1.463015385	4.553688037	2.559847661
117.355	-0.005559668	3.19922E-05	0.00674215	1.516983759	4.553695849	2.559847661
117.36	-0.005716408	3.27904E-05	0.006902633	1.553092535	4.553704108	2.559847661
117.365	-0.005801006	3.32289E-05	0.006990802	1.572930463	4.553712613	2.559847661
117.37	-0.005820892	3.33449E-05	0.007014125	1.578178064	4.553721176	2.559847661
117.375	-0.005756657	3.30412E-05	0.006952778	1.564375053	4.553729552	2.559847661
117.38	-0.005627661	3.24142E-05	0.006826136	1.535880688	4.553737557	2.559847661
117.385	-0.005370346	3.11465E-05	0.006570148	1.478283206	4.553744846	2.559847661
117.39	-0.005024715	2.94323E-05	0.006224016	1.400403608	4.553751227	2.559847661
117.395	-0.004761427	2.81237E-05	0.005959828	1.340961385	4.553756957	2.559847661
117.4	-0.004469868	2.66743E-05	0.005667236	1.275128113	4.553762007	2.559847661
117.405	-0.004130352	2.49787E-05	0.005324998	1.198124574	4.553766318	2.559847661
117.41	-0.004024258	2.44407E-05	0.005216415	1.173693368	4.553770411	2.559847661
117.415	-0.004026583	2.44495E-05	0.005218184	1.174091358	4.553774509	2.559847661
117.42	-0.003862904	2.36323E-05	0.005053261	1.136983744	4.553778281	2.559847661
117.425	-0.003740145	2.30119E-05	0.004928065	1.108814533	4.553781816	2.559847661
117.43	-0.003787463	2.324E-05	0.004974128	1.119178723	4.553785442	2.559847661
117.435	-0.003782674	2.32128E-05	0.004968646	1.11794535	4.553789058	2.559847661
117.44	-0.00370625	2.28255E-05	0.004890454	1.100352049	4.55379253	2.559847661
117.445	-0.003736384	2.29658E-05	0.004918794	1.106728664	4.553796058	2.559847661
117.45	-0.003836094	2.34554E-05	0.005017662	1.128974037	4.553799777	2.559847661
117.455	-0.003905703	2.37952E-05	0.005086292	1.144415796	4.553803633	2.559847661
117.46	-0.004061046	2.45601E-05	0.005240772	1.179173662	4.553807801	2.559847661
117.465	-0.004305869	2.57757E-05	0.005486222	1.234399884	4.553812487	2.559847661
117.47	-0.004436049	2.64246E-05	0.005617243	1.263879713	4.553817461	2.559847661
117.475	-0.004491628	2.6699E-05	0.00567265	1.276346259	4.553822559	2.559847661
117.48	-0.004585162	2.71616E-05	0.00576605	1.297361332	4.553827873	2.559847661
117.485	-0.00462628	2.73633E-05	0.005806762	1.306521374	4.553833282	2.559847661
117.49	-0.004675935	2.7603E-05	0.005855171	1.317413575	4.553838808	2.559847661
117.495	-0.004844433	2.84329E-05	0.006022693	1.355105826	4.55384474	2.559847661
117.5	-0.005086403	2.96286E-05	0.006264065	1.409414554	4.553851279	2.559847661
117.505	-0.005483445	3.15966E-05	0.006661295	1.498791438	4.553858878	2.559847661
117.51	-0.006051726	3.44247E-05	0.007231197	1.627019385	4.553868134	2.559847661
117.515	-0.006576542	3.70462E-05	0.007758126	1.745578293	4.553879066	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
117.52	-0.006952325	3.89314E-05	0.008136155	1.830634919	4.553891282	2.559847661
117.525	-0.007137968	3.9873E-05	0.008324964	1.873116791	4.553904159	2.559847661
117.53	-0.00707947	3.95958E-05	0.00826898	1.860520464	4.553916826	2.559847661
117.535	-0.006947316	3.89408E-05	0.008136693	1.830755902	4.553929025	2.559847661
117.54	-0.007100621	3.96995E-05	0.008289912	1.86523017	4.553941768	2.559847661
117.545	-0.007612604	4.2254E-05	0.008802335	1.980525377	4.553956415	2.559847661
117.55	-0.007926915	4.38419E-05	0.009120674	2.052151743	4.553972296	2.559847661
117.555	-0.007757421	4.30152E-05	0.008953708	2.014584344	4.553987505	2.559847661
117.56	-0.00778453	4.31515E-05	0.008981255	2.020782271	4.554002821	2.559847661
117.565	-0.008188215	4.51742E-05	0.009387751	2.11224405	4.554019766	2.559847661
117.57	-0.008243222	4.5474E-05	0.009447536	2.125695554	4.55403694	2.559847661
117.575	-0.008028952	4.44213E-05	0.00923494	2.077861462	4.554053233	2.559847661
117.58	-0.008076855	4.46693E-05	0.009285035	2.089132791	4.554069721	2.559847661
117.585	-0.008136445	4.49849E-05	0.009348763	2.103471705	4.554086453	2.559847661
117.59	-0.007990069	4.42746E-05	0.009205316	2.071196066	4.554102588	2.559847661
117.595	-0.007838999	4.35368E-05	0.009056318	2.037671471	4.554118119	2.559847661
117.6	-0.007707591	4.28972E-05	0.008927173	2.008613923	4.554133133	2.559847661
117.605	-0.007529917	4.2027E-05	0.008751469	1.969080508	4.554147464	2.559847661
117.61	-0.007342859	4.11073E-05	0.008565779	1.92730029	4.554161091	2.559847661
117.615	-0.007273151	4.07709E-05	0.008497872	1.912021199	4.554174461	2.559847661
117.62	-0.007229268	4.05703E-05	0.008457373	1.902908826	4.55418767	2.559847661
117.625	-0.006915432	3.90262E-05	0.008145668	1.832775268	4.554199756	2.559847661
117.63	-0.006629678	3.76104E-05	0.007859886	1.76847439	4.554210865	2.559847661
117.635	-0.006638265	3.76651E-05	0.007870942	1.770961893	4.554222003	2.559847661
117.64	-0.006387709	3.64394E-05	0.007623548	1.715298265	4.554232315	2.559847661
117.645	-0.005938253	3.42103E-05	0.007173722	1.614087452	4.554241227	2.559847661
117.65	-0.005843314	3.37433E-05	0.007079486	1.592884323	4.554249857	2.559847661
117.655	-0.005697558	3.30352E-05	0.006936607	1.560736631	4.554258062	2.559847661
117.66	-0.005311618	3.11251E-05	0.00655124	1.474029104	4.554265192	2.559847661
117.665	-0.005106282	3.01103E-05	0.006346513	1.427965438	4.554271782	2.559847661
117.67	-0.004849124	2.88432E-05	0.006090926	1.370458322	4.554277725	2.559847661
117.675	-0.004491922	2.70705E-05	0.005733379	1.290010286	4.554282825	2.559847661
117.68	-0.004390026	2.65692E-05	0.005632267	1.267260173	4.554287696	2.559847661
117.685	-0.0041524	2.54022E-05	0.005396913	1.214305482	4.554292054	2.559847661
117.69	-0.003647489	2.28939E-05	0.00489112	1.100501977	4.554295416	2.559847661
117.695	-0.003484457	2.20787E-05	0.004726753	1.063519507	4.554298485	2.559847661
117.7	-0.003531055	2.23212E-05	0.004775741	1.074541765	4.554301636	2.559847661
117.705	-0.003212616	2.07521E-05	0.004459306	1.003343956	4.554304245	2.559847661
117.71	-0.002762623	1.85147E-05	0.004008269	0.901860416	4.554306174	2.559847661
117.715	-0.002644282	1.79245E-05	0.0038893	0.875092594	4.554307941	2.559847661
117.72	-0.002616228	1.77951E-05	0.00386322	0.869224508	4.554309671	2.559847661
117.725	-0.002338656	1.64252E-05	0.003587096	0.807096635	4.554311053	2.559847661
117.73	-0.002091643	1.52004E-05	0.003340254	0.751557261	4.554312159	2.559847661
117.735	-0.001969912	1.46047E-05	0.003220213	0.724548008	4.55431314	2.559847661
117.74	-0.001620757	1.28804E-05	0.002872742	0.646366974	4.554313803	2.559847661
117.745	-0.001183122	1.07073E-05	0.002434867	0.547845083	4.554314157	2.559847661
117.75	-0.000859076	9.09901E-06	0.002110856	0.474942536	4.554314344	2.559847661
117.755	-0.000444147	7.03911E-06	0.001695898	0.381577077	4.554314394	2.559847661
117.76	-2.74265E-05	4.96537E-06	0.001278204	0.287596011	4.554314394	2.559847661
117.765	0.000369265	2.99266E-06	0.000880907	0.198204009	4.554314428	2.559847661
117.77	0.000892412	3.85736E-07	0.000355953	0.080089323	4.55431463	2.559847661
117.775	0.00124099	-1.35995E-06	4.46917E-06	0.001005564	4.554315019	2.559847661
117.78	0.00140659	-2.18822E-06	-0.000162284	-0.036513998	4.554315519	2.559847661
117.785	0.001690798	-3.60255E-06	-0.000447011	-0.100577376	4.554316241	2.559847661
117.79	0.002048309	-5.38246E-06	-0.000805303	-0.181193165	4.554317302	2.559847661
117.795	0.002597064	-8.11606E-06	-0.001355497	-0.304986837	4.554319006	2.559847661
117.8	0.00317579	-1.10131E-05	-0.001938496	-0.436161605	4.554321555	2.559847661
117.805	0.003315223	-1.17257E-05	-0.002081883	-0.468423749	4.554324333	2.559847661
117.81	0.003435188	-1.23275E-05	-0.002202972	-0.495668753	4.554327316	2.559847661
117.815	0.003801152	-1.41577E-05	-0.002571203	-0.578520766	4.554330968	2.559847661
117.82	0.003994059	-1.51303E-05	-0.002766863	-0.622544274	4.554334999	2.559847661
117.825	0.004232045	-1.63205E-05	-0.003006308	-0.676419279	4.554339526	2.559847661
117.83	0.004605579	-1.81913E-05	-0.003382622	-0.761089967	4.554344887	2.559847661
117.835	0.00483549	-1.93477E-05	-0.003615206	-0.813421287	4.554350797	2.559847661
117.84	0.005235595	-2.13491E-05	-0.004017717	-0.903986243	4.554357725	2.559847661
117.845	0.005638393	-2.33771E-05	-0.004425537	-0.995745742	4.55436576	2.559847661
117.85	0.005650255	-2.34568E-05	-0.004441471	-0.999330994	4.554373829	2.559847661
117.855	0.005766905	-2.40473E-05	-0.004560311	-1.026069961	4.554382234	2.559847661
117.86	0.006023915	-2.53439E-05	-0.004821015	-1.084728445	4.554391405	2.559847661
117.865	0.006083251	-2.56568E-05	-0.004883919	-1.098881799	4.554400758	2.559847661
117.87	0.006222318	-2.63618E-05	-0.005025666	-1.13077487	4.554410544	2.559847661
117.875	0.00638498	-2.71897E-05	-0.005192121	-1.168227317	4.554420847	2.559847661
117.88	0.006444631	-2.7503E-05	-0.005255115	-1.182400814	4.554431345	2.559847661
117.885	0.006619642	-2.83918E-05	-0.005433781	-1.22260067	4.55444242	2.559847661
117.89	0.006643378	-2.85351E-05	-0.005462448	-1.229050764	4.554453574	2.559847661
117.895	0.00644722	-2.75775E-05	-0.005269067	-1.185540102	4.55446408	2.559847661
117.9	0.006352705	-2.71223E-05	-0.00517713	-1.164854232	4.55447428	2.559847661
117.905	0.006176779	-2.62657E-05	-0.00500415	-1.125933728	4.554483922	2.559847661
117.91	0.005853516	-2.467E-05	-0.004681969	-1.053443025	4.554492582	2.559847661
117.915	0.005614515	-2.34891E-05	-0.004443559	-0.999800697	4.554500549	2.559847661
117.92	0.005410597	-2.24842E-05	-0.004240697	-0.954156811	4.554507948	2.559847661
117.925	0.005157517	-2.12354E-05	-0.003988617	-0.897438824	4.554514671	2.559847661
117.93	0.004775175	-1.93412E-05	-0.003606305	-0.811418694	4.554520434	2.559847661
117.935	0.004376489	-1.73566E-05	-0.003205802	-0.721305525	4.554525275	2.559847661
117.94	0.004218192	-1.65668E-05	-0.003046441	-0.68544925	4.554529772	2.559847661
117.945	0.004070126	-1.58346E-05	-0.0028987	-0.652207499	4.554533959	2.559847661
117.95	0.003837432	-1.46784E-05	-0.002665437	-0.599723309	4.554537681	2.559847661
117.955	0.003706069	-1.40274E-05	-0.002534092	-0.570170727	4.554541152	2.559847661
117.96	0.003435062	-1.26842E-05	-0.002263134	-0.509205181	4.554544135	2.559847661
117.965	0.003131559	-1.11704E-05	-0.001957785	-0.44050157	4.554546613	2.559847661
117.97	0.003070495	-1.08651E-05	-0.001896214	-0.426648181	4.554548996	2.559847661
117.975	0.002858578	-9.81547E-06	-0.001684508	-0.379014217	4.554551061	2.559847661
117.98	0.002551172	-8.28085E-06	-0.001375017	-0.309378869	4.554552706	2.559847661
117.985	0.002518354	-8.11168E-06	-0.00134092	-0.301706938	4.554554309	2.559847661
117.99	0.002484664	-7.9458E-06	-0.001307452	-0.294176703	4.554555869	2.559847661
117.995	0.002377764	-7.41414E-06	-0.00120024	-0.270054012	4.554557298	2.559847661
118	0.00230287	-7.04197E-06	-0.001125194	-0.253168564	4.554558639	2.559847661
118.005	0.002184766	-6.45299E-06	-0.00100643	-0.22644671	4.554559845	2.559847661
118.01	0.002228975	-6.6703E-06	-0.001050334	-0.236325039	4.554561101	2.559847661
118.015	0.002314395	-7.10042E-06	-0.001137202	-0.255870547	4.554562455	2.559847661
118.02	0.002231393	-6.69017E-06	-0.001054343	-0.237227172	4.554563713	2.559847661
118.025	0.002327979	-7.17029E-06	-0.001151313	-0.259045378	4.554565083	2.559847661
118.03	0.002484564	-7.95792E-06	-0.001310377	-0.294834752	4.554566643	2.559847661
118.035	0.002473567	-7.91008E-06	-0.001300713	-0.292660512	4.554568189	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
118.04	0.002629218	-8.69025E-06	-0.001458261	-0.328108717	4.554569936	2.559847661
118.045	0.002767839	-9.39522E-06	-0.001600609	-0.360137108	4.554571873	2.559847661
118.05	0.002707709	-9.10767E-06	-0.001542533	-0.347069991	4.554573726	2.559847661
118.055	0.002827211	-9.71212E-06	-0.001664597	-0.374534266	4.554575746	2.559847661
118.06	0.002943146	-1.03092E-05	-0.001785149	-0.401658585	4.554577935	2.559847661
118.065	0.002815739	-9.69451E-06	-0.001661003	-0.37372574	4.554579939	2.559847661
118.07	0.002694713	-9.10752E-06	-0.001542457	-0.347052797	4.554581774	2.559847661
118.075	0.002574463	-8.52618E-06	-0.001425058	-0.320638092	4.554583449	2.559847661
118.08	0.002425827	-7.80407E-06	-0.00127924	-0.287829087	4.554584937	2.559847661
118.085	0.002193366	-6.66777E-06	-0.001049805	-0.236206196	4.554586153	2.559847661
118.09	0.001739464	-4.42426E-06	-0.000597387	-0.134412015	4.554586917	2.559847661
118.095	0.001437542	-2.92817E-06	-0.000295772	-0.066548661	4.55458744	2.559847661
118.1	0.001336093	-2.43868E-06	-0.000197097	-0.044346754	4.554587891	2.559847661
118.105	0.00093787	-4.77314E-07	0.000198264	0.044609419	4.554588113	2.559847661
118.11	0.000410869	2.13518E-06	0.000724799	0.163079735	4.554588156	2.559847661
118.115	2.73833E-05	4.03503E-06	0.001107652	0.249221774	4.554588156	2.559847661
118.12	-0.000429782	6.30013E-06	0.001564049	0.351910928	4.554588203	2.559847661
118.125	-0.000921411	8.74203E-06	0.002056	0.46260006	4.554588417	2.559847661
118.13	-0.001296464	1.06055E-05	0.002431379	0.547060224	4.554588842	2.559847661
118.135	-0.001601128	1.21159E-05	0.002735593	0.615508514	4.55458949	2.559847661
118.14	-0.001961836	1.39012E-05	0.003095136	0.696405557	4.554590463	2.559847661
118.145	-0.002480328	1.64738E-05	0.0036132	0.812970087	4.554592018	2.559847661
118.15	-0.002962669	1.88717E-05	0.00409599	0.921597767	4.554594236	2.559847661
118.155	-0.003439234	2.12373E-05	0.004572205	1.028746203	4.554597225	2.559847661
118.16	-0.00415513	2.47993E-05	0.005289177	1.190064908	4.554601589	2.559847661
118.165	-0.004709427	2.75698E-05	0.005846723	1.315512745	4.554607195	2.559847661
118.17	-0.004983477	2.89395E-05	0.006122328	1.37752388	4.554613471	2.559847661
118.175	-0.00543358	3.1183E-05	0.006573712	1.4790852	4.554620933	2.559847661
118.18	-0.005763476	3.28379E-05	0.006906636	1.553993085	4.554629329	2.559847661
118.185	-0.005787186	3.29602E-05	0.006931241	1.559529291	4.554637793	2.559847661
118.19	-0.006032523	3.41763E-05	0.007175878	1.614572455	4.554646991	2.559847661
118.195	-0.006449782	3.62549E-05	0.007593964	1.708641902	4.554657505	2.559847661
118.2	-0.006829058	3.81478E-05	0.007974665	1.794299514	4.554669292	2.559847661
118.205	-0.007216244	4.00852E-05	0.008364275	1.881961975	4.554682453	2.559847661
118.21	-0.007363694	4.08322E-05	0.008514489	1.915759959	4.554696158	2.559847661
118.215	-0.007430607	4.1169E-05	0.008582212	1.930997678	4.554710113	2.559847661
118.22	-0.007710698	4.25683E-05	0.008863568	1.994302867	4.554725139	2.559847661
118.225	-0.007866731	4.33573E-05	0.009022198	2.029994471	4.55474078	2.559847661
118.23	-0.007867817	4.33698E-05	0.009024697	2.030556885	4.554756426	2.559847661
118.235	-0.007946311	4.37653E-05	0.009104218	2.04844899	4.554772385	2.559847661
118.24	-0.007992095	4.3999E-05	0.009151199	2.059019685	4.554788528	2.559847661
118.245	-0.008045511	4.42682E-05	0.009205331	2.07119958	4.554804888	2.559847661
118.25	-0.008123571	4.46611E-05	0.00928431	2.088969665	4.554821567	2.559847661
118.255	-0.008177795	4.49334E-05	0.009339059	2.101288347	4.554838469	2.559847661
118.26	-0.008356312	4.5825E-05	0.009518203	2.141595769	4.554856118	2.559847661
118.265	-0.008478276	4.64406E-05	0.009641608	2.169361909	4.554874285	2.559847661
118.27	-0.008476433	4.6435E-05	0.009640466	2.169104907	4.554892445	2.559847661
118.275	-0.008671301	4.74065E-05	0.009835208	2.212921873	4.554911449	2.559847661
118.28	-0.008856773	4.83394E-05	0.010022185	2.254991685	4.554931274	2.559847661
118.285	-0.008858087	4.83519E-05	0.010024678	2.255552489	4.554951106	2.559847661
118.29	-0.009017216	4.91452E-05	0.010183682	2.291328555	4.554971656	2.559847661
118.295	-0.009273902	5.04305E-05	0.010441264	2.349284299	4.554993393	2.559847661
118.3	-0.009417627	5.11555E-05	0.01058656	2.381975906	4.555015809	2.559847661
118.305	-0.009541495	5.17794E-05	0.010711582	2.410105924	4.555038819	2.559847661
118.31	-0.009715215	5.26499E-05	0.010886026	2.449355767	4.555062674	2.559847661
118.315	-0.010011544	5.41327E-05	0.011183137	2.516205758	4.555088006	2.559847661
118.32	-0.010283274	5.54998E-05	0.011457034	2.577832708	4.555114733	2.559847661
118.325	-0.010408471	5.61351E-05	0.011584316	2.606471025	4.555142114	2.559847661
118.33	-0.010695449	5.75733E-05	0.011872444	2.671299879	4.555171025	2.559847661
118.335	-0.011005774	5.91374E-05	0.012185781	2.741800821	4.555201639	2.559847661
118.34	-0.011054429	5.93969E-05	0.012237767	2.753497555	4.555232524	2.559847661
118.345	-0.011258465	6.04229E-05	0.012443277	2.799737306	4.55526456	2.559847661
118.35	-0.01159432	6.21148E-05	0.012782164	2.875986922	4.555298536	2.559847661
118.355	-0.011669255	6.25098E-05	0.012861262	2.893783935	4.555332952	2.559847661
118.36	-0.011801669	6.31838E-05	0.012996262	2.924159031	4.555368153	2.559847661
118.365	-0.012079591	6.45888E-05	0.013277629	2.987466568	4.555405032	2.559847661
118.37	-0.012195659	6.51929E-05	0.01339861	3.014687168	4.555442624	2.559847661
118.375	-0.01225537	6.55157E-05	0.013463247	3.029230542	4.555480584	2.559847661
118.38	-0.012218056	6.53589E-05	0.013431469	3.022080634	4.555518313	2.559847661
118.385	-0.011980793	6.42029E-05	0.013198019	2.969554332	4.555554592	2.559847661
118.39	-0.011790123	6.32733E-05	0.0130103	2.927317539	4.555589724	2.559847661
118.395	-0.011645042	6.2572E-05	0.012868693	2.895455835	4.555623998	2.559847661
118.4	-0.01147207	6.17326E-05	0.012699206	2.857321268	4.555657261	2.559847661
118.405	-0.011287777	6.08405E-05	0.012519099	2.816797304	4.555689463	2.559847661
118.41	-0.010866957	5.87726E-05	0.012101648	2.722870844	4.55571931	2.559847661
118.415	-0.010302617	5.59812E-05	0.011538255	2.59610741	4.555746137	2.559847661
118.42	-0.009875359	5.38686E-05	0.011111928	2.500183817	4.555770785	2.559847661
118.425	-0.009418777	5.1613E-05	0.010656825	2.397785688	4.555793206	2.559847661
118.43	-0.008847075	4.8782E-05	0.010085726	2.269288441	4.555812989	2.559847661
118.435	-0.008237014	4.57562E-05	0.009475458	2.131977996	4.555830137	2.559847661
118.44	-0.007625402	4.2717E-05	0.008862607	1.994086503	4.555844833	2.559847661
118.445	-0.007185876	4.05341E-05	0.008422496	1.89506171	4.555857883	2.559847661
118.45	-0.006643512	3.78474E-05	0.007880901	1.773202708	4.555869038	2.559847661
118.455	-0.005741219	3.33591E-05	0.006976332	1.569674646	4.555877369	2.559847661
118.46	-0.005077169	3.00407E-05	0.006307695	1.419231298	4.555883884	2.559847661
118.465	-0.004700092	2.81572E-05	0.005928253	1.333857025	4.555889468	2.559847661
118.47	-0.004148608	2.54044E-05	0.005373751	1.209093911	4.555893817	2.559847661
118.475	-0.003870525	2.40027E-05	0.005091441	1.145574329	4.555897604	2.559847661
118.48	-0.003904558	2.41686E-05	0.005124953	1.153114424	4.555901457	2.559847661
118.485	-0.003598787	2.26514E-05	0.004819303	1.084343154	4.55590473	2.559847661
118.49	-0.003178772	2.0555E-05	0.004397148	0.989358273	4.555907284	2.559847661
118.495	-0.002887211	1.90964E-05	0.004103464	0.923279501	4.555909391	2.559847661
118.5	-0.002571726	1.75151E-05	0.003785097	0.851646849	4.555911063	2.559847661
118.505	-0.002541843	1.73515E-05	0.003752275	0.844261817	4.555912696	2.559847661
118.51	-0.002688434	1.80787E-05	0.003899154	0.877309626	4.555914522	2.559847661
118.515	-0.002601715	1.76486E-05	0.00381229	0.85776515	4.555916233	2.559847661
118.52	-0.002561665	1.74454E-05	0.003771239	0.848528751	4.555917892	2.559847661
118.525	-0.002638365	1.78301E-05	0.003848947	0.866013044	4.555919651	2.559847661
118.53	-0.002505347	1.71752E-05	0.003716686	0.836254303	4.555921237	2.559847661
118.535	-0.00226131	1.59602E-05	0.003472084	0.781218793	4.55592253	2.559847661
118.54	-0.002182256	1.55614E-05	0.003391815	0.763158281	4.555923733	2.559847661
118.545	-0.002302281	1.61596E-05	0.003512623	0.790340102	4.555925073	2.559847661
118.55	-0.002326785	1.62911E-05	0.003539189	0.796317489	4.555926441	2.559847661
118.555	-0.002147024	1.54021E-05	0.003359728	0.755938878	4.555927606	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
118.56	-0.002124795	1.52937E-05	0.003337995	0.751048894	4.555928747	2.559847661
118.565	-0.002122588	1.52949E-05	0.003338235	0.751102915	4.555929886	2.559847661
118.57	-0.001821204	1.38054E-05	0.003038336	0.683625709	4.555930724	2.559847661
118.575	-0.001591285	1.26635E-05	0.002808515	0.631915953	4.555931364	2.559847661
118.58	-0.001456561	1.2001E-05	0.002675171	0.601913579	4.555931901	2.559847661
118.585	-0.00113592	1.04129E-05	0.002355566	0.530002349	4.555932227	2.559847661
118.59	-0.00085022	8.99434E-06	0.002070112	0.465775097	4.555932409	2.559847661
118.595	-0.000544237	7.4773E-06	0.001764861	0.397093811	4.555932484	2.559847661
118.6	-0.00013518	5.44177E-06	0.001355323	0.304947588	4.555932489	2.559847661
118.605	0.000104742	4.24621E-06	0.001114804	0.250830807	4.555932492	2.559847661
118.61	0.000395809	2.80139E-06	0.000824162	0.185436452	4.555932531	2.559847661
118.615	0.000785076	8.6133E-07	0.000433932	0.097634761	4.555932687	2.559847661
118.62	0.000956273	7.04086E-09	0.000262111	0.058975061	4.555932918	2.559847661
118.625	0.001255646	-1.47734E-06	-3.64192E-05	-0.00819433	4.555933317	2.559847661
118.63	0.0017512	-3.94698E-06	-0.000533045	-0.119935027	4.555934092	2.559847661
118.635	0.00201422	-5.26309E-06	-0.000797677	-0.17947735	4.555935117	2.559847661
118.64	0.002299325	-6.68204E-06	-0.001082966	-0.243667418	4.555936453	2.559847661
118.645	0.002753847	-8.94918E-06	-0.001538742	-0.346216984	4.55593837	2.559847661
118.65	0.003090527	-1.06338E-05	-0.001877375	-0.422409484	4.555940784	2.559847661
118.655	0.003428377	-1.23228E-05	-0.002216855	-0.498792397	4.555943755	2.559847661
118.66	0.003765452	-1.40121E-05	-0.002556366	-0.57518233	4.555947338	2.559847661
118.665	0.003971465	-1.50475E-05	-0.002764448	-0.622000792	4.555951325	2.559847661
118.67	0.004267201	-1.65271E-05	-0.003061783	-0.688901244	4.555955927	2.559847661
118.675	0.004590552	-1.815E-05	-0.00338786	-0.762268443	4.555961253	2.559847661
118.68	0.004769602	-1.90544E-05	-0.003569572	-0.803153715	4.555967002	2.559847661
118.685	0.004988889	-2.01561E-05	-0.003790926	-0.85295839	4.555973293	2.559847661
118.69	0.005261836	-2.15283E-05	-0.004066595	-0.914983788	4.555980291	2.559847661
118.695	0.005466064	-2.25608E-05	-0.004273993	-0.961648336	4.555987842	2.559847661
118.7	0.005620726	-2.33472E-05	-0.00443196	-0.997191036	4.555995827	2.559847661
118.705	0.00570163	-2.37669E-05	-0.004516278	-1.016162518	4.556004043	2.559847661
118.71	0.005706951	-2.38089E-05	-0.0045247	-1.018057552	4.556012274	2.559847661
118.715	0.005678322	-2.368E-05	-0.004498661	-1.012198697	4.556020424	2.559847661
118.72	0.0056522	-2.35618E-05	-0.004474787	-1.006827077	4.556028498	2.559847661
118.725	0.005632582	-2.34768E-05	-0.004457616	-1.002963693	4.556036517	2.559847661
118.73	0.005521154	-2.29345E-05	-0.004348092	-0.978320784	4.556044221	2.559847661
118.735	0.005407128	-2.23746E-05	-0.004235016	-0.952878586	4.55605161	2.559847661
118.74	0.00538712	-2.22847E-05	-0.004216874	-0.948796582	4.556058945	2.559847661
118.745	0.005214019	-2.14357E-05	-0.004045423	-0.910220184	4.556065816	2.559847661
118.75	0.004946178	-2.01071E-05	-0.003777159	-0.849860705	4.556071999	2.559847661
118.755	0.004833801	-1.9551E-05	-0.003664886	-0.824599286	4.556077905	2.559847661
118.76	0.004625584	-1.85215E-05	-0.003457042	-0.777834496	4.556083313	2.559847661
118.765	0.004322347	-1.70105E-05	-0.003152032	-0.709207113	4.556088034	2.559847661
118.77	0.004247589	-1.66345E-05	-0.003076127	-0.692128559	4.556092594	2.559847661
118.775	0.004166832	-1.62358E-05	-0.002995654	-0.674022194	4.556096983	2.559847661
118.78	0.003936122	-1.50876E-05	-0.002763912	-0.621880113	4.556100898	2.559847661
118.785	0.003772041	-1.42686E-05	-0.002598622	-0.584689926	4.556104494	2.559847661
118.79	0.003530492	-1.30654E-05	-0.002355812	-0.530057703	4.556107645	2.559847661
118.795	0.003235624	-1.15889E-05	-0.002057862	-0.463018942	4.556110291	2.559847661
118.8	0.003164685	-1.12246E-05	-0.001984374	-0.446484137	4.556112822	2.559847661
118.805	0.00311353	-1.09643E-05	-0.001931839	-0.434663682	4.556115272	2.559847661
118.81	0.003008782	-1.04337E-05	-0.001824784	-0.410576452	4.55611756	2.559847661
118.815	0.00306293	-1.06943E-05	-0.001877429	-0.422421633	4.556119931	2.559847661
118.82	0.003059	-1.06714E-05	-0.001872801	-0.421380332	4.556122296	2.559847661
118.825	0.002952917	-1.01348E-05	-0.001764483	-0.397008723	4.5561245	2.559847661
118.83	0.00302363	-1.04766E-05	-0.001833522	-0.412542484	4.556126811	2.559847661
118.835	0.003074745	-1.07268E-05	-0.001884061	-0.423913756	4.5561292	2.559847661
118.84	0.003002964	-1.03606E-05	-0.001810086	-0.407269312	4.556131479	2.559847661
118.845	0.00311999	-1.09302E-05	-0.001925122	-0.433152536	4.556133939	2.559847661
118.85	0.003347061	-1.20538E-05	-0.002152032	-0.484207094	4.556136771	2.559847661
118.855	0.003508474	-1.28522E-05	-0.002313265	-0.520484519	4.556139882	2.559847661
118.86	0.003721767	-1.39092E-05	-0.002526674	-0.568501728	4.556143383	2.559847661
118.865	0.003917357	-1.48815E-05	-0.002722984	-0.612671355	4.556147261	2.559847661
118.87	0.004054772	-1.55628E-05	-0.002860525	-0.643618075	4.556151417	2.559847661
118.875	0.00427403	-1.66513E-05	-0.003080253	-0.69305703	4.556156034	2.559847661
118.88	0.004485191	-1.77027E-05	-0.003292483	-0.740808719	4.556161118	2.559847661
118.885	0.004671844	-1.86308E-05	-0.003479809	-0.782957108	4.556166634	2.559847661
118.89	0.004961499	-2.00736E-05	-0.003770995	-0.848473887	4.556172856	2.559847661
118.895	0.005182976	-2.11827E-05	-0.003994814	-0.898833045	4.556179645	2.559847661
118.9	0.00526093	-2.15748E-05	-0.004073928	-0.916633903	4.556186641	2.559847661
118.905	0.005421952	-2.23768E-05	-0.004235754	-0.953044569	4.556194071	2.559847661
118.91	0.005660322	-2.35672E-05	-0.004475937	-1.007085831	4.556202168	2.559847661
118.915	0.005861121	-2.45725E-05	-0.004678094	-1.05257122	4.556210851	2.559847661
118.92	0.006105729	-2.57971E-05	-0.004924053	-1.107911854	4.556220273	2.559847661
118.925	0.006340893	-2.69812E-05	-0.005161859	-1.161418241	4.556230435	2.559847661
118.93	0.006343258	-2.70097E-05	-0.005167386	-1.162661795	4.556240604	2.559847661
118.935	0.006176759	-2.61901E-05	-0.005001854	-1.125417047	4.556250247	2.559847661
118.94	0.006156516	-2.60929E-05	-0.00498224	-1.121004109	4.556259826	2.559847661
118.945	0.006243977	-2.65391E-05	-0.005072356	-1.141280172	4.55626968	2.559847661
118.95	0.006085481	-2.57652E-05	-0.004916055	-1.106112277	4.55627904	2.559847661
118.955	0.005767494	-2.41878E-05	-0.004597531	-1.034444516	4.556287447	2.559847661
118.96	0.005635896	-2.35336E-05	-0.004465429	-1.00472155	4.556295475	2.559847661
118.965	0.005540242	-2.30641E-05	-0.00437064	-0.983394075	4.556303233	2.559847661
118.97	0.00527453	-2.1746E-05	-0.004104537	-0.923520881	4.556310264	2.559847661
118.975	0.005087489	-2.08129E-05	-0.003916164	-0.881136939	4.556316806	2.559847661
118.98	0.005048595	-2.06206E-05	-0.003877366	-0.872407332	4.556323248	2.559847661
118.985	0.004903131	-1.99018E-05	-0.003732267	-0.839760086	4.556329324	2.559847661
118.99	0.004677278	-1.87784E-05	-0.003505524	-0.788742893	4.556334853	2.559847661
118.995	0.004535384	-1.80707E-05	-0.003362687	-0.756604596	4.556340052	2.559847661
119	0.004412888	-1.74612E-05	-0.003239673	-0.728926377	4.556344973	2.559847661
119.005	0.004266238	-1.67305E-05	-0.003092226	-0.695750872	4.556349574	2.559847661
119.01	0.004144896	-1.61249E-05	-0.002970025	-0.668255666	4.556353916	2.559847661
119.015	0.004024225	-1.55226E-05	-0.002848474	-0.64090665	4.556358009	2.559847661
119.02	0.003922544	-1.5013E-05	-0.002745661	-0.617773653	4.556361897	2.559847661
119.025	0.003877219	-1.47841E-05	-0.002699461	-0.607378757	4.556365697	2.559847661
119.03	0.003835888	-1.45758E-05	-0.002657437	-0.59792323	4.556369416	2.559847661
119.035	0.003812175	-1.44539E-05	-0.002632844	-0.592389959	4.556373089	2.559847661
119.04	0.003852815	-1.46523E-05	-0.002672917	-0.601406385	4.55637684	2.559847661
119.045	0.003936741	-1.50677E-05	-0.002756809	-0.620281914	4.556380757	2.559847661
119.05	0.004055729	-1.56596E-05	-0.002876343	-0.647177135	4.556384915	2.559847661
119.055	0.004151624	-1.61387E-05	-0.002973106	-0.668948874	4.556389271	2.559847661
119.06	0.004219298	-1.64762E-05	-0.003041255	-0.684282477	4.55639377	2.559847661
119.065	0.004379017	-1.7272E-05	-0.00320194	-0.720436395	4.556398617	2.559847661
119.07	0.004551431	-1.81357E-05	-0.003376339	-0.759676386	4.556403853	2.559847661
119.075	0.004640133	-1.85827E-05	-0.00346659	-0.779982669	4.556409294	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
119.08	0.004785737	-1.93117E-05	-0.003613762	-0.81309644	4.556415083	2.559847661
119.085	0.004966208	-2.02183E-05	-0.003796795	-0.854278829	4.556421316	2.559847661
119.09	0.005093694	-2.0863E-05	-0.003926935	-0.883560387	4.556427874	2.559847661
119.095	0.005203489	-2.14216E-05	-0.004039695	-0.908931341	4.556434717	2.559847661
119.1	0.005184351	-2.13404E-05	-0.00402329	-0.90524026	4.55644151	2.559847661
119.105	0.005100195	-2.09307E-05	-0.003940526	-0.886618323	4.556448084	2.559847661
119.11	0.005123245	-2.10549E-05	-0.003965629	-0.892266514	4.556454718	2.559847661
119.115	0.005055659	-2.07322E-05	-0.00390045	-0.877601328	4.556461178	2.559847661
119.12	0.004923614	-2.00839E-05	-0.003769529	-0.848144073	4.556467305	2.559847661
119.125	0.004921144	-2.00822E-05	-0.003769186	-0.848066761	4.556473426	2.559847661
119.13	0.004782485	-1.94084E-05	-0.003633114	-0.817450643	4.556479207	2.559847661
119.135	0.004508642	-1.80557E-05	-0.003359976	-0.755994643	4.556484344	2.559847661
119.14	0.004356026	-1.73054E-05	-0.003208478	-0.721907622	4.55648914	2.559847661
119.145	0.004105539	-1.60727E-05	-0.002959622	-0.665914981	4.5564934	2.559847661
119.15	0.003702174	-1.4074E-05	-0.002556183	-0.575141069	4.556496864	2.559847661
119.155	0.003347378	-1.23126E-05	-0.002200838	-0.495188438	4.556499696	2.559847661
119.16	0.00299235	-1.05488E-05	-0.001845024	-0.415130391	4.556501959	2.559847661
119.165	0.002701871	-9.10285E-06	-0.001553378	-0.349509952	4.556503804	2.559847661
119.17	0.002498771	-8.09378E-06	-0.001349862	-0.30371895	4.556505383	2.559847661
119.175	0.002260039	-6.90775E-06	-0.001110673	-0.249901509	4.556506673	2.559847661
119.18	0.00208961	-6.06134E-06	-0.000939986	-0.211496962	4.556507777	2.559847661
119.185	0.0018839	-5.04412E-06	-0.000734869	-0.165345497	4.556508674	2.559847661
119.19	0.00151321	-3.20189E-06	-0.000363424	-0.081770467	4.556509253	2.559847661
119.195	0.001244453	-1.8615E-06	-9.31939E-05	-0.020968618	4.556509644	2.559847661
119.2	0.001034665	-8.1838E-07	0.000117091	0.026345531	4.556509915	2.559847661
119.205	0.000731446	6.91942E-07	0.000421535	0.09484533	4.55651005	2.559847661
119.21	0.000521452	1.74168E-06	0.000633119	0.142451767	4.556510119	2.559847661
119.215	0.000353336	2.57986E-06	0.000802052	0.180461602	4.55651015	2.559847661
119.22	0.0001359	3.66402E-06	0.001020547	0.22962315	4.556510155	2.559847661
119.225	-9.98227E-05	4.84015E-06	0.001257563	0.282951602	4.556510157	2.559847661
119.23	-0.000403639	6.36012E-06	0.001563844	0.351864904	4.556510199	2.559847661
119.235	-0.000472778	6.71863E-06	0.00163604	0.368109111	4.556510255	2.559847661
119.24	-0.000290889	5.81666E-06	0.001453875	0.327121809	4.556510277	2.559847661
119.245	-0.000406829	6.39002E-06	0.001569677	0.35317723	4.556510318	2.559847661
119.25	-0.000597793	7.34928E-06	0.001763149	0.39670849	4.556510409	2.559847661
119.255	-0.00043542	6.54817E-06	0.00160135	0.360303775	4.556510457	2.559847661
119.26	-0.000352339	6.12898E-06	0.001516695	0.341256267	4.556510488	2.559847661
119.265	-0.00053773	7.04997E-06	0.001702703	0.383108129	4.556510561	2.559847661
119.27	-0.000630745	7.51902E-06	0.001797348	0.404403313	4.556510662	2.559847661
119.275	-0.00052827	7.01126E-06	0.001694797	0.381329218	4.556510732	2.559847661
119.28	-0.000487928	6.80363E-06	0.001652863	0.371894115	4.556510792	2.559847661
119.285	-0.000745965	8.08338E-06	0.001911055	0.429987399	4.556510933	2.559847661
119.29	-0.000960745	9.15981E-06	0.002127919	0.478781815	4.556511166	2.559847661
119.295	-0.000885745	8.78898E-06	0.002053023	0.461930063	4.556511365	2.559847661
119.3	-0.001016945	9.43635E-06	0.002183631	0.491317033	4.556511626	2.559847661
119.305	-0.001282131	1.07604E-05	0.002450366	0.55133244	4.556512041	2.559847661
119.31	-0.001321037	1.09565E-05	0.002489869	0.560220557	4.556512482	2.559847661
119.315	-0.001595281	1.23185E-05	0.002764211	0.621947473	4.556513126	2.559847661
119.32	-0.001966681	1.41785E-05	0.003138835	0.706237918	4.556514103	2.559847661
119.325	-0.001948936	1.41003E-05	0.003122982	0.702671	4.556515063	2.559847661
119.33	-0.002096246	1.48331E-05	0.003270671	0.73590105	4.556516174	2.559847661
119.335	-0.002410529	1.6409E-05	0.003588026	0.807305861	4.556517642	2.559847661
119.34	-0.002376481	1.62509E-05	0.003556051	0.800111484	4.55651907	2.559847661
119.345	-0.002503954	1.68866E-05	0.003684198	0.828944626	4.556520654	2.559847661
119.35	-0.002799334	1.83712E-05	0.003983144	0.896207484	4.556522635	2.559847661
119.355	-0.002665068	1.77181E-05	0.003851234	0.866527559	4.55652443	2.559847661
119.36	-0.002622779	1.75073E-05	0.003808672	0.856951194	4.556526169	2.559847661
119.365	-0.002907615	1.89341E-05	0.004096488	0.921709807	4.556528305	2.559847661
119.37	-0.002880883	1.88174E-05	0.004072783	0.916376199	4.556530403	2.559847661
119.375	-0.002792236	1.83802E-05	0.00398449	0.896510138	4.556532374	2.559847661
119.38	-0.002983457	1.93401E-05	0.004178223	0.940100156	4.556534623	2.559847661
119.385	-0.002970114	1.92893E-05	0.004167839	0.937763802	4.556536853	2.559847661
119.39	-0.002853884	1.87165E-05	0.004052156	0.911735153	4.556538911	2.559847661
119.395	-0.003001674	1.94593E-05	0.004202177	0.945489769	4.556541188	2.559847661
119.4	-0.003021238	1.95726E-05	0.004224945	0.950612537	4.556543495	2.559847661
119.405	-0.00289182	1.89369E-05	0.00409655	0.921723756	4.556545609	2.559847661
119.41	-0.002991656	1.94416E-05	0.004198498	0.944662039	4.556547871	2.559847661
119.415	-0.003015372	1.95765E-05	0.004225741	0.950791776	4.556550169	2.559847661
119.42	-0.002871248	1.88709E-05	0.004083219	0.918724235	4.556552253	2.559847661
119.425	-0.002890718	1.8979E-05	0.004105054	0.923637056	4.556554365	2.559847661
119.43	-0.002772631	1.84098E-05	0.003990108	0.897774329	4.556556308	2.559847661
119.435	-0.00247249	1.6926E-05	0.003690475	0.830356767	4.556557853	2.559847661
119.44	-0.002404923	1.65978E-05	0.003624212	0.815447724	4.556559314	2.559847661
119.445	-0.002212846	1.56587E-05	0.003434592	0.772783268	4.556560552	2.559847661
119.45	-0.001803521	1.36282E-05	0.003024671	0.680551038	4.556561374	2.559847661
119.455	-0.001691254	1.30722E-05	0.002912439	0.655298843	4.556562097	2.559847661
119.46	-0.001528548	1.22758E-05	0.002751686	0.619129354	4.556562688	2.559847661
119.465	-0.001122813	1.0262E-05	0.002345236	0.527678191	4.556563006	2.559847661
119.47	-0.000971023	9.50725E-06	0.002192927	0.493408572	4.556563245	2.559847661
119.475	-0.000791984	8.62611E-06	0.002015117	0.453401226	4.556563403	2.559847661
119.48	-0.000395667	6.6569E-06	0.001617777	0.363999888	4.556563443	2.559847661
119.485	-0.000199097	5.6773E-06	0.001420138	0.319530964	4.556563453	2.559847661
119.49	2.38759E-05	4.57208E-06	0.001197171	0.269363446	4.556563453	2.559847661
119.495	0.000360843	2.89288E-06	0.000858439	0.193148754	4.556563486	2.559847661
119.5	0.000489215	2.25016E-06	0.000728799	0.163979807	4.556563546	2.559847661
119.505	0.000643979	1.48114E-06	0.000573691	0.129080552	4.556563651	2.559847661
119.51	0.000827951	5.63109E-07	0.000388538	0.087421051	4.556563824	2.559847661
119.515	0.000915193	1.30775E-07	0.000301347	0.067803033	4.556564036	2.559847661
119.52	0.001242048	-1.49337E-06	-2.61826E-05	-0.005891083	4.556564426	2.559847661
119.525	0.001545112	-3.01063E-06	-0.000332124	-0.074727857	4.556565029	2.559847661
119.53	0.001598525	-3.28045E-06	-0.000386527	-0.086968602	4.556565675	2.559847661
119.535	0.001876124	-4.66235E-06	-0.000665145	-0.149657693	4.556566565	2.559847661
119.54	0.002143083	-6.00264E-06	-0.00093535	-0.210453856	4.556567725	2.559847661
119.545	0.002141797	-6.0026E-06	-0.000935332	-0.210449705	4.556568885	2.559847661
119.55	0.002362441	-7.10198E-06	-0.001156961	-0.260316172	4.556570295	2.559847661
119.555	0.002617053	-8.38112E-06	-0.001414799	-0.318329672	4.556572026	2.559847661
119.56	0.002634067	-8.47468E-06	-0.001433656	-0.32257253	4.55657378	2.559847661
119.565	0.002798127	-9.29605E-06	-0.001599209	-0.359821941	4.556575759	2.559847661
119.57	0.002957078	-1.0099E-05	-0.001761044	-0.396234844	4.556577969	2.559847661
119.575	0.002976538	-1.02034E-05	-0.001782072	-0.400966123	4.556580208	2.559847661
119.58	0.003177611	-1.12109E-05	-0.001985125	-0.446653137	4.55658276	2.559847661
119.585	0.003296223	-1.18158E-05	-0.002107029	-0.474081481	4.556585506	2.559847661
119.59	0.003243996	-1.15636E-05	-0.002056084	-0.462618941	4.556588166	2.559847661
119.595	0.003419264	-1.24409E-05	-0.002232988	-0.502422304	4.556591121	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
119.6	0.003603159	-1.33695E-05	-0.002420109	-0.544524431	4.556594402	2.559847661
119.605	0.003653147	-1.36293E-05	-0.002472467	-0.556305175	4.556597775	2.559847661
119.61	0.003821905	-1.44804E-05	-0.002643957	-0.594890436	4.556601467	2.559847661
119.615	0.003906741	-1.49192E-05	-0.002732365	-0.614782065	4.556605324	2.559847661
119.62	0.003893069	-1.48633E-05	-0.002721064	-0.612239435	4.556609155	2.559847661
119.625	0.004011217	-1.54648E-05	-0.002842293	-0.639515902	4.556613221	2.559847661
119.63	0.003997349	-1.54144E-05	-0.002832048	-0.637210694	4.55661726	2.559847661
119.635	0.003866242	-1.47743E-05	-0.002702767	-0.608122565	4.556621038	2.559847661
119.64	0.003874866	-1.48296E-05	-0.002713932	-0.61063479	4.556624833	2.559847661
119.645	0.003788534	-1.44164E-05	-0.002630476	-0.591857179	4.55662846	2.559847661
119.65	0.003623424	-1.3606E-05	-0.002466825	-0.555035548	4.556631779	2.559847661
119.655	0.003554478	-1.32752E-05	-0.002400026	-0.540005778	4.556634972	2.559847661
119.66	0.003356537	-1.23039E-05	-0.002203912	-0.495880094	4.556637819	2.559847661
119.665	0.003145343	-1.12606E-05	-0.001993268	-0.448485317	4.55664032	2.559847661
119.67	0.00303839	-1.07395E-05	-0.001888054	-0.424812202	4.556642653	2.559847661
119.675	0.002725842	-9.19548E-06	-0.00157636	-0.354681036	4.556644531	2.559847661
119.68	0.00244017	-7.77523E-06	-0.001289684	-0.290178936	4.556646036	2.559847661
119.685	0.002384212	-7.5027E-06	-0.001234677	-0.277802391	4.556647472	2.559847661
119.69	0.002130232	-6.24933E-06	-0.000981716	-0.220886076	4.556648619	2.559847661
119.695	0.001818165	-4.69741E-06	-0.000668532	-0.150419607	4.556649455	2.559847661
119.7	0.001718415	-4.20415E-06	-0.000568998	-0.128024466	4.556650201	2.559847661
119.705	0.001473457	-2.99282E-06	-0.000324578	-0.073030076	4.55665075	2.559847661
119.71	0.001163002	-1.44811E-06	-1.29222E-05	-0.00290749	4.556651092	2.559847661
119.715	0.001000514	-6.41087E-07	0.000149888	0.033724791	4.556651345	2.559847661
119.72	0.000695654	8.72273E-07	0.000455171	0.102413442	4.556651467	2.559847661
119.725	0.000354788	2.57277E-06	0.000798166	0.179587373	4.556651499	2.559847661
119.73	0.00017574	3.46823E-06	0.000978768	0.220222725	4.556651507	2.559847661
119.735	-3.05583E-05	4.49791E-06	0.001186427	0.266946044	4.556651507	2.559847661
119.74	-0.000169627	5.19517E-06	0.001327036	0.298583071	4.556651514	2.559847661
119.745	-0.000260496	5.64739E-06	0.001418229	0.31910158	4.556651531	2.559847661
119.75	-0.000526221	6.97101E-06	0.001685125	0.379153213	4.556651601	2.559847661
119.755	-0.000708451	7.88512E-06	0.001869436	0.420623003	4.556651728	2.559847661
119.76	-0.000787091	8.27825E-06	0.001948698	0.438457016	4.556651885	2.559847661
119.765	-0.001055867	9.61785E-06	0.002218772	0.499223692	4.556652167	2.559847661
119.77	-0.001270004	1.0693E-05	0.002435513	0.547990416	4.556652574	2.559847661
119.775	-0.001333387	1.10142E-05	0.002500271	0.562560913	4.556653024	2.559847661
119.78	-0.001516345	1.19288E-05	0.002684626	0.604040752	4.556653605	2.559847661
119.785	-0.001694549	1.28248E-05	0.002865229	0.644676513	4.55665433	2.559847661
119.79	-0.001771727	1.32172E-05	0.002944311	0.662469889	4.556655124	2.559847661
119.795	-0.001871955	1.37234E-05	0.003046342	0.685426866	4.556656009	2.559847661
119.8	-0.001948564	1.41129E-05	0.003124843	0.703089623	4.556656969	2.559847661
119.805	-0.002030052	1.45262E-05	0.003208143	0.721832078	4.556658011	2.559847661
119.81	-0.00209207	1.48453E-05	0.003272441	0.736299127	4.556659117	2.559847661
119.815	-0.002032618	1.45575E-05	0.003214317	0.723221233	4.556660161	2.559847661
119.82	-0.00205836	1.46897E-05	0.003241018	0.729229056	4.556661232	2.559847661
119.825	-0.002140962	1.51104E-05	0.003325875	0.74832178	4.55666239	2.559847661
119.83	-0.002022619	1.45303E-05	0.003208706	0.721958933	4.556663424	2.559847661
119.835	-0.001959425	1.42166E-05	0.003145351	0.707704026	4.556664395	2.559847661
119.84	-0.002080336	1.48233E-05	0.003267883	0.735273664	4.556665488	2.559847661
119.845	-0.002079885	1.48302E-05	0.003269284	0.735588857	4.556666582	2.559847661
119.85	-0.002036804	1.46206E-05	0.003226952	0.726064218	4.55666763	2.559847661
119.855	-0.002079965	1.48419E-05	0.003271649	0.736121053	4.556668724	2.559847661
119.86	-0.002025794	1.45807E-05	0.003218886	0.724249357	4.556669761	2.559847661
119.865	-0.001941873	1.41675E-05	0.003135432	0.70547225	4.556670714	2.559847661
119.87	-0.001918903	1.40581E-05	0.003113353	0.700504531	4.556671645	2.559847661
119.875	-0.001835434	1.3648E-05	0.003030532	0.681869754	4.556672496	2.559847661
119.88	-0.001759734	1.32733E-05	0.002954871	0.664845996	4.556673279	2.559847661
119.885	-0.001747508	1.32152E-05	0.002943126	0.662203365	4.556674051	2.559847661
119.89	-0.001714994	1.30566E-05	0.002911103	0.654998286	4.556674794	2.559847661
119.895	-0.001698342	1.2976E-05	0.00289483	0.651336823	4.556675523	2.559847661
119.9	-0.001693484	1.29549E-05	0.002890565	0.650377159	4.556676248	2.559847661
119.905	-0.00168123	1.28964E-05	0.002878745	0.647717589	4.556676962	2.559847661
119.91	-0.00170575	1.30216E-05	0.002904034	0.653407693	4.556677698	2.559847661
119.915	-0.001684655	1.29209E-05	0.002883708	0.648834282	4.556678415	2.559847661
119.92	-0.001657238	1.27861E-05	0.00285648	0.642707929	4.556679109	2.559847661
119.925	-0.001723083	1.31175E-05	0.002923406	0.657766409	4.556679859	2.559847661
119.93	-0.001694262	1.29814E-05	0.002895928	0.651583832	4.556680585	2.559847661
119.935	-0.00157881	1.24098E-05	0.002780492	0.625610707	4.556681215	2.559847661
119.94	-0.001570364	1.23704E-05	0.002772551	0.623823977	4.556681838	2.559847661
119.945	-0.001491209	1.19833E-05	0.00269437	0.60623314	4.5566824	2.559847661
119.95	-0.00129963	1.10319E-05	0.002502279	0.563012763	4.556682827	2.559847661
119.955	-0.001214903	1.06101E-05	0.002417129	0.543854128	4.5566832	2.559847661
119.96	-0.001108407	1.00835E-05	0.002310805	0.519931183	4.556683511	2.559847661
119.965	-0.00090828	9.08705E-06	0.002109653	0.47467189	4.556683719	2.559847661
119.97	-0.000810398	8.59663E-06	0.002010656	0.45239751	4.556683885	2.559847661
119.975	-0.000759333	8.34227E-06	0.001959311	0.440844939	4.556684031	2.559847661
119.98	-0.000664296	7.86919E-06	0.001863819	0.419359361	4.556684142	2.559847661
119.985	-0.000573099	7.41503E-06	0.00177215	0.39873378	4.556684225	2.559847661
119.99	-0.0004503	6.80363E-06	0.001648746	0.370967924	4.556684277	2.559847661
119.995	-0.000334118	6.22341E-06	0.001531643	0.344619692	4.556684305	2.559847661
120	-0.000237285	5.74066E-06	0.001434215	0.322698474	4.556684319	2.559847661
120.005	-6.9203E-05	4.90267E-06	0.0012651	0.284647564	4.55668432	2.559847661
120.01	7.51807E-05	4.17894E-06	0.001119053	0.251786839	4.556684322	2.559847661
120.015	0.000146926	3.8176E-06	0.001046138	0.235381133	4.556684327	2.559847661
120.02	0.000248155	3.30998E-06	0.000943708	0.212334394	4.556684343	2.559847661
120.025	0.000318164	2.95579E-06	0.000872242	0.196254347	4.556684368	2.559847661
120.03	0.000335532	2.86521E-06	0.000853966	0.192142286	4.556684397	2.559847661
120.035	0.0003896	2.5926E-06	0.000798959	0.179765782	4.556684435	2.559847661
120.04	0.000433757	2.36767E-06	0.000753576	0.169554608	4.556684483	2.559847661
120.045	0.000440688	2.3283E-06	0.000745632	0.167767272	4.556684532	2.559847661
120.05	0.000434229	2.35554E-06	0.000751135	0.169005409	4.556684579	2.559847661
120.055	0.000393623	2.55307E-06	0.00079103	0.177981769	4.556684619	2.559847661
120.06	0.000343853	2.79705E-06	0.000840308	0.189069242	4.556684648	2.559847661
120.065	0.000263795	3.19165E-06	0.00092	0.207000077	4.556684666	2.559847661
120.07	0.000144832	3.78222E-06	0.001039268	0.233835223	4.556684671	2.559847661
120.075	7.56669E-05	4.12666E-06	0.001108824	0.249485475	4.556684673	2.559847661
120.08	6.95471E-06	4.4675E-06	0.001177651	0.264971394	4.556684673	2.559847661
120.085	-0.00010579	5.02963E-06	0.001291161	0.290511243	4.556684676	2.559847661
120.09	-0.000144893	5.22754E-06	0.001331123	0.299502739	4.556684681	2.559847661
120.095	-0.000130315	5.15602E-06	0.001316677	0.29625232	4.556684685	2.559847661
120.1	-0.000143377	5.22134E-06	0.00132987	0.299220787	4.55668469	2.559847661
120.105	-0.000143298	5.22189E-06	0.001329981	0.299245693	4.556684696	2.559847661
120.11	-0.00013712	5.19117E-06	0.001323776	0.297849601	4.5566847	2.559847661
120.115	-0.000144888	5.23004E-06	0.001331626	0.29961583	4.556684706	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
120.12	-0.000137809	5.19541E-06	0.001324632	0.298042167	4.55668471	2.559847661
120.125	-0.000123858	5.12597E-06	0.001310606	0.294886417	4.556684714	2.559847661
120.13	-0.000117913	5.09591E-06	0.001304535	0.293520473	4.556684718	2.559847661
120.135	-0.000134703	5.17942E-06	0.001321403	0.297315726	4.556684722	2.559847661
120.14	-0.00014589	5.2365E-06	0.001332931	0.299909487	4.556684728	2.559847661
120.145	-0.000108839	5.0531E-06	0.001295889	0.291575053	4.556684731	2.559847661
120.15	-8.56216E-05	4.93741E-06	0.001272523	0.286317681	4.556684733	2.559847661
120.155	-7.17979E-05	4.86977E-06	0.001258863	0.283244188	4.556684734	2.559847661
120.16	-4.77962E-06	4.53691E-06	0.001191637	0.268118263	4.556684734	2.559847661
120.165	4.63008E-05	4.28197E-06	0.001140149	0.256533472	4.556684734	2.559847661
120.17	9.9965E-05	4.01528E-06	0.001086291	0.244415516	4.556684737	2.559847661
120.175	0.00021036	3.46446E-06	0.000975056	0.219387518	4.556684748	2.559847661
120.18	0.000266793	3.18017E-06	0.000917648	0.206470759	4.556684766	2.559847661
120.185	0.000305487	2.98604E-06	0.000878446	0.197650393	4.55668479	2.559847661
120.19	0.000401444	2.50514E-06	0.00078134	0.175801477	4.556684831	2.559847661
120.195	0.000417365	2.42049E-06	0.000764251	0.171956424	4.556684875	2.559847661
120.2	0.000392085	2.54413E-06	0.000789223	0.17757514	4.556684913	2.559847661
120.205	0.000444024	2.28308E-06	0.000736508	0.165714262	4.556684963	2.559847661
120.21	0.000449444	2.25115E-06	0.000730077	0.16426741	4.556685014	2.559847661
120.215	0.000407221	2.45875E-06	0.000772007	0.173701643	4.556685056	2.559847661
120.22	0.00042973	2.34441E-06	0.000748913	0.168505456	4.556685103	2.559847661
120.225	0.000429518	2.34073E-06	0.000748169	0.168338081	4.556685149	2.559847661
120.23	0.000367223	2.6473E-06	0.000810088	0.182269826	4.556685184	2.559847661
120.235	0.000331976	2.82084E-06	0.000845137	0.190155906	4.556685211	2.559847661
120.24	0.000319308	2.88107E-06	0.0008573	0.192892574	4.556685237	2.559847661
120.245	0.000286197	3.0423E-06	0.000889862	0.200218967	4.556685258	2.559847661
120.25	0.000231246	3.3125E-06	0.000944431	0.212496968	4.556685271	2.559847661
120.255	0.000163806	3.64546E-06	0.001011672	0.227626275	4.556685278	2.559847661
120.26	9.59868E-05	3.98068E-06	0.001079367	0.242857635	4.556685281	2.559847661
120.265	2.7057E-05	4.32149E-06	0.001148187	0.258342162	4.556685281	2.559847661
120.27	-5.90386E-05	4.74783E-06	0.001234278	0.277712482	4.556685282	2.559847661
120.275	-0.000164313	5.27066E-06	0.001339848	0.301465702	4.556685288	2.559847661
120.28	-0.000246117	5.67789E-06	0.001422073	0.319966523	4.556685304	2.559847661
120.285	-0.000309105	5.99055E-06	0.0014852	0.33417001	4.556685328	2.559847661
120.29	-0.000418881	6.5364E-06	0.001595407	0.358966523	4.556685372	2.559847661
120.295	-0.000503345	6.95905E-06	0.001680736	0.378165565	4.556685436	2.559847661
120.3	-0.00051181	7.00176E-06	0.001689358	0.380105591	4.556685502	2.559847661
120.305	-0.000586693	7.37307E-06	0.00176432	0.396972028	4.556685589	2.559847661
120.31	-0.000686507	7.87209E-06	0.001865059	0.419638328	4.556685709	2.559847661
120.315	-0.000686498	7.87361E-06	0.001865362	0.419706532	4.556685828	2.559847661
120.32	-0.000739546	8.13586E-06	0.001918308	0.431619254	4.556685966	2.559847661
120.325	-0.000864048	8.75703E-06	0.002043699	0.459832282	4.556686155	2.559847661
120.33	-0.000912014	8.99848E-06	0.002092436	0.470798133	4.556686365	2.559847661
120.335	-0.000978937	9.33228E-06	0.002159815	0.485958385	4.556686607	2.559847661
120.34	-0.001081606	9.84682E-06	0.002263672	0.50932628	4.556686903	2.559847661
120.345	-0.001100951	9.94741E-06	0.002283977	0.513894722	4.556687209	2.559847661
120.35	-0.001115803	1.00237E-05	0.002299376	0.517359579	4.556687524	2.559847661
120.355	-0.001132999	1.01129E-05	0.002317378	0.521410089	4.556687848	2.559847661
120.36	-0.00109454	9.92384E-06	0.002279192	0.512818159	4.556688151	2.559847661
120.365	-0.001099776	9.95074E-06	0.002284626	0.514040773	4.556688457	2.559847661
120.37	-0.001101069	9.96023E-06	0.002286542	0.51447194	4.556688763	2.559847661
120.375	-0.00103219	9.61852E-06	0.002217528	0.498943703	4.556689032	2.559847661
120.38	-0.001031669	9.6149E-06	0.002216798	0.498779449	4.556689301	2.559847661
120.385	-0.00105577	9.73686E-06	0.00224143	0.504321768	4.556689583	2.559847661
120.39	-0.001000076	9.46099E-06	0.002185712	0.491785207	4.556689836	2.559847661
120.395	-0.000979499	9.35761E-06	0.002164833	0.487087398	4.556690078	2.559847661
120.4	-0.000982422	9.373E-06	0.002167942	0.487786897	4.556690322	2.559847661
120.405	-0.000931337	9.11868E-06	0.002116581	0.476230744	4.556690541	2.559847661
120.41	-0.000927361	9.09687E-06	0.002112176	0.475239669	4.556690759	2.559847661
120.415	-0.000963371	9.2761E-06	0.002148377	0.483384872	4.556690993	2.559847661
120.42	-0.000957158	9.24538E-06	0.002142171	0.481988439	4.556691225	2.559847661
120.425	-0.000977702	9.34659E-06	0.002162614	0.486588192	4.556691467	2.559847661
120.43	-0.001029708	9.60626E-06	0.002215059	0.498388206	4.556691735	2.559847661
120.435	-0.001037369	9.64603E-06	0.00222309	0.500195163	4.556692006	2.559847661
120.44	-0.001037844	9.64886E-06	0.002223662	0.500323897	4.556692279	2.559847661
120.445	-0.001058915	9.75483E-06	0.002245064	0.505139337	4.556692562	2.559847661
120.45	-0.001051613	9.72031E-06	0.00223809	0.503570285	4.556692842	2.559847661
120.455	-0.001016756	9.54759E-06	0.002203206	0.495721347	4.556693103	2.559847661
120.46	-0.000990733	9.4179E-06	0.002177012	0.489827692	4.556693351	2.559847661
120.465	-0.00097331	9.33089E-06	0.002159439	0.485873712	4.55669359	2.559847661
120.47	-0.000950637	9.21736E-06	0.00213651	0.48071486	4.556693819	2.559847661
120.475	-0.00093782	9.15199E-06	0.002123308	0.477744291	4.556694041	2.559847661
120.48	-0.000956894	9.24524E-06	0.002142142	0.481982027	4.556694273	2.559847661
120.485	-0.000987976	9.39905E-06	0.002173208	0.488971854	4.556694519	2.559847661
120.49	-0.001012882	9.52209E-06	0.002198058	0.49456301	4.556694779	2.559847661
120.495	-0.001060685	9.75878E-06	0.002245862	0.505318966	4.556695063	2.559847661
120.5	-0.00113482	1.01277E-05	0.002320362	0.522081536	4.556695388	2.559847661
120.505	-0.001194321	1.04249E-05	0.002380357	0.535580214	4.556695749	2.559847661
120.51	-0.001238544	1.06459E-05	0.002424947	0.545613011	4.556696137	2.559847661
120.515	-0.001303751	1.09712E-05	0.002490611	0.560387365	4.556696566	2.559847661
120.52	-0.001382382	1.13648E-05	0.002570055	0.578262389	4.556697049	2.559847661
120.525	-0.001430824	1.16093E-05	0.002619392	0.589363271	4.556697567	2.559847661
120.53	-0.001454867	1.17319E-05	0.002644124	0.594927876	4.556698102	2.559847661
120.535	-0.001491399	1.19167E-05	0.002681426	0.603320962	4.556698664	2.559847661
120.54	-0.001512224	1.20245E-05	0.002703192	0.608218207	4.556699242	2.559847661
120.545	-0.001490564	1.19205E-05	0.00268218	0.603490571	4.556699803	2.559847661
120.55	-0.001474572	1.18438E-05	0.002666696	0.600006545	4.556700353	2.559847661
120.555	-0.00145804	1.17654E-05	0.002650844	0.596439954	4.55670089	2.559847661
120.56	-0.00139557	1.14578E-05	0.002588729	0.582463996	4.556701382	2.559847661
120.565	-0.001338716	1.11766E-05	0.00253193	0.56968432	4.556701835	2.559847661
120.57	-0.001307591	1.1024E-05	0.002501109	0.562749621	4.556702267	2.559847661
120.575	-0.001244159	1.07108E-05	0.002437872	0.548521164	4.556702659	2.559847661
120.58	-0.001175734	1.03714E-05	0.002369335	0.533100441	4.556703008	2.559847661
120.585	-0.001131734	1.01538E-05	0.002325375	0.523209274	4.556703332	2.559847661
120.59	-0.001068891	9.8425E-06	0.002262521	0.509067228	4.55670362	2.559847661
120.595	-0.001000915	9.50467E-06	0.002194305	0.493718623	4.556703874	2.559847661
120.6	-0.000945466	9.22893E-06	0.002138625	0.481190699	4.5567041	2.559847661
120.605	-0.000887203	8.93855E-06	0.002079993	0.467998525	4.556704299	2.559847661
120.61	-0.000859908	8.8017E-06	0.002052361	0.461781146	4.556704485	2.559847661
120.615	-0.000854035	8.77243E-06	0.002046451	0.460451457	4.55670467	2.559847661
120.62	-0.000837074	8.68801E-06	0.002029405	0.45661616	4.556704847	2.559847661
120.625	-0.000848371	8.74421E-06	0.002040756	0.45917014	4.556705029	2.559847661
120.63	-0.000863533	8.82129E-06	0.002056326	0.462673417	4.556705217	2.559847661
120.635	-0.000842078	8.71604E-06	0.002035067	0.457890102	4.556705396	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
120.64	-0.000839444	8.704E-06	0.002032636	0.457342999	4.556705575	2.559847661
120.645	-0.000832569	8.67237E-06	0.002026248	0.455905817	4.55670575	2.559847661
120.65	-0.000772573	8.37583E-06	0.001966375	0.442434284	4.556705901	2.559847661
120.655	-0.000724538	8.13738E-06	0.00191823	0.431601747	4.556706033	2.559847661
120.66	-0.000687084	7.95226E-06	0.001880854	0.423192129	4.556706153	2.559847661
120.665	-0.000619796	7.6181E-06	0.001813389	0.408012461	4.55670625	2.559847661
120.67	-0.00057325	7.38609E-06	0.001766549	0.397473459	4.556706333	2.559847661
120.675	-0.000541493	7.2283E-06	0.001734692	0.390305687	4.556706407	2.559847661
120.68	-0.000495952	7.00155E-06	0.001688915	0.380005984	4.556706469	2.559847661
120.685	-0.000475861	6.90116E-06	0.001668649	0.375446022	4.556706526	2.559847661
120.69	-0.000457723	6.81147E-06	0.001650541	0.371371767	4.556706579	2.559847661
120.695	-0.000419382	6.62083E-06	0.001612056	0.362712669	4.556706624	2.559847661
120.7	-0.00039979	6.5234E-06	0.001592387	0.358287027	4.556706664	2.559847661
120.705	-0.000365632	6.35428E-06	0.001558245	0.3506052	4.556706698	2.559847661
120.71	-0.000304549	6.05004E-06	0.001496829	0.336786624	4.556706721	2.559847661
120.715	-0.000273772	5.89599E-06	0.001465732	0.32978969	4.55670674	2.559847661
120.72	-0.000243855	5.74717E-06	0.001435691	0.323030398	4.556706755	2.559847661
120.725	-0.000188342	5.47032E-06	0.001379805	0.310456203	4.556706764	2.559847661
120.73	-0.000150873	5.28262E-06	0.001341916	0.301931201	4.55670677	2.559847661
120.735	-0.000111805	5.08738E-06	0.001302508	0.2930643	4.556706773	2.559847661
120.74	-5.90246E-05	4.82308E-06	0.001249159	0.281060763	4.556706774	2.559847661
120.745	-3.00347E-05	4.67675E-06	0.001219621	0.274414752	4.556706774	2.559847661
120.75	-4.86426E-07	4.52805E-06	0.001189607	0.267661602	4.556706774	2.559847661
120.755	3.18891E-05	4.36453E-06	0.001156602	0.260235482	4.556706774	2.559847661
120.76	3.42235E-05	4.35072E-06	0.001153815	0.259608452	4.556706775	2.559847661
120.765	5.07019E-05	4.26735E-06	0.001136986	0.255821929	4.556706775	2.559847661
120.77	7.80468E-05	4.1288E-06	0.001109022	0.249529891	4.556706777	2.559847661
120.775	6.52702E-05	4.19022E-06	0.001121428	0.252321198	4.556706778	2.559847661
120.78	7.62585E-05	4.13493E-06	0.00111026	0.249808555	4.55670678	2.559847661
120.785	0.000128696	3.87186E-06	0.001057162	0.23786149	4.556706784	2.559847661
120.79	0.000139031	3.81735E-06	0.001046162	0.235386446	4.556706789	2.559847661
120.795	0.000144476	3.78878E-06	0.001040394	0.234088703	4.556706794	2.559847661
120.8	0.000191544	3.55243E-06	0.000992692	0.223355695	4.556706803	2.559847661
120.805	0.000215401	3.43047E-06	0.000968077	0.217817378	4.556706815	2.559847661
120.81	0.000229882	3.35625E-06	0.000953098	0.214447133	4.556706828	2.559847661
120.815	0.00027909	3.1089E-06	0.000903176	0.203214547	4.556706848	2.559847661
120.82	0.000323746	2.88305E-06	0.000857595	0.192958805	4.556706874	2.559847661
120.825	0.000364542	2.67632E-06	0.000815874	0.183571579	4.556706908	2.559847661
120.83	0.000410195	2.44452E-06	0.000769093	0.173045936	4.556706951	2.559847661
120.835	0.000429956	2.34099E-06	0.0007482	0.168344991	4.556706997	2.559847661
120.84	0.000442634	2.27286E-06	0.00073445	0.165251141	4.556707047	2.559847661
120.845	0.000443395	2.26322E-06	0.000732508	0.164814332	4.556707096	2.559847661
120.85	0.000403008	2.45869E-06	0.000771987	0.173697184	4.556707137	2.559847661
120.855	0.000364742	2.64461E-06	0.000809538	0.182145972	4.556707171	2.559847661
120.86	0.000328079	2.82183E-06	0.00084533	0.190199288	4.556707198	2.559847661
120.865	0.000251237	3.19927E-06	0.000921557	0.207350358	4.556707214	2.559847661
120.87	0.000173303	3.58343E-06	0.000999138	0.224806101	4.556707222	2.559847661
120.875	0.000104379	3.9224E-06	0.001067591	0.240208039	4.556707225	2.559847661
120.88	4.45827E-06	4.4157E-06	0.001167208	0.262621737	4.556707225	2.559847661
120.885	-0.000106635	4.96583E-06	0.001278293	0.287615855	4.556707228	2.559847661
120.89	-0.000211919	5.48753E-06	0.001383633	0.311317519	4.556707239	2.559847661
120.895	-0.000322415	6.03565E-06	0.001494302	0.336217935	4.556707265	2.559847661
120.9	-0.000429302	6.56639E-06	0.001601458	0.360327974	4.556707312	2.559847661
120.905	-0.000534218	7.08767E-06	0.001706699	0.384007233	4.556707384	2.559847661
120.91	-0.000634813	7.588E-06	0.001807707	0.406734019	4.556707486	2.559847661
120.915	-0.000723219	8.02772E-06	0.001896474	0.426706738	4.556707618	2.559847661
120.92	-0.000819046	8.50429E-06	0.001992677	0.448352368	4.556707787	2.559847661
120.925	-0.000921583	9.01494E-06	0.002095757	0.471545376	4.556708002	2.559847661
120.93	-0.001014971	9.48048E-06	0.002189728	0.492688767	4.556708262	2.559847661
120.935	-0.001108968	9.94932E-06	0.002284359	0.513980768	4.556708573	2.559847661
120.94	-0.001197198	1.03902E-05	0.00237334	0.5340016	4.556708936	2.559847661
120.945	-0.001264949	1.07293E-05	0.002441784	0.54940137	4.55670934	2.559847661
120.95	-0.001326217	1.10359E-05	0.002503668	0.563325394	4.556709784	2.559847661
120.955	-0.001385529	1.13331E-05	0.002563641	0.57681929	4.55671027	2.559847661
120.96	-0.001428056	1.15468E-05	0.002606769	0.586522973	4.556710785	2.559847661
120.965	-0.001462633	1.17203E-05	0.002641785	0.594401664	4.556711326	2.559847661
120.97	-0.001510879	1.19617E-05	0.002690501	0.605362705	4.556711903	2.559847661
120.975	-0.001559146	1.22037E-05	0.002739347	0.616352988	4.556712517	2.559847661
120.98	-0.001594678	1.23822E-05	0.00277536	0.62445601	4.55671316	2.559847661
120.985	-0.001643029	1.26243E-05	0.002824218	0.635448958	4.556713842	2.559847661
120.99	-0.00169049	1.28629E-05	0.002872372	0.646283707	4.556714564	2.559847661
120.995	-0.001707606	1.29503E-05	0.002890012	0.650252652	4.556715301	2.559847661
121	-0.001732758	1.30769E-05	0.002915565	0.656002105	4.55671606	2.559847661
121.005	-0.0017655	1.32422E-05	0.002948907	0.663504075	4.556716848	2.559847661
121.01	-0.001765432	1.3244E-05	0.002949266	0.663584856	4.556717636	2.559847661
121.015	-0.001772111	1.32782E-05	0.002956174	0.665139043	4.556718429	2.559847661
121.02	-0.001796928	1.34032E-05	0.0029814	0.670815049	4.556719246	2.559847661
121.025	-0.001803972	1.34398E-05	0.002988784	0.672476358	4.556720068	2.559847661
121.03	-0.001822356	1.35322E-05	0.003007439	0.676673824	4.556720907	2.559847661
121.035	-0.001847768	1.36604E-05	0.003033302	0.682493061	4.55672177	2.559847661
121.04	-0.001855255	1.36991E-05	0.003041111	0.684250031	4.55672264	2.559847661
121.045	-0.001883036	1.38385E-05	0.003069246	0.690580407	4.556723536	2.559847661
121.05	-0.001908152	1.39658E-05	0.003094932	0.6963596	4.556724457	2.559847661
121.055	-0.001908467	1.39691E-05	0.003095598	0.696509511	4.556725377	2.559847661
121.06	-0.001934912	1.41023E-05	0.003122466	0.702554894	4.556726323	2.559847661
121.065	-0.00194929	1.41768E-05	0.003137494	0.705936215	4.556727284	2.559847661
121.07	-0.001927273	1.40691E-05	0.003115746	0.701042769	4.556728223	2.559847661
121.075	-0.001938127	1.41243E-05	0.0031269	0.703552526	4.556729172	2.559847661
121.08	-0.001947256	1.41723E-05	0.003136599	0.705734734	4.55673013	2.559847661
121.085	-0.001922189	1.40493E-05	0.003111753	0.70014451	4.556731064	2.559847661
121.09	-0.001927791	1.40782E-05	0.003117579	0.701455384	4.556732003	2.559847661
121.095	-0.001938255	1.41324E-05	0.003128534	0.703920103	4.556732953	2.559847661
121.1	-0.001922659	1.40564E-05	0.003113185	0.700466565	4.556733887	2.559847661
121.105	-0.001929594	1.4092E-05	0.003120367	0.702082603	4.556734828	2.559847661
121.11	-0.001942142	1.41563E-05	0.003133356	0.705005055	4.556735782	2.559847661
121.115	-0.00194178	1.41561E-05	0.003133316	0.704995996	4.556736734	2.559847661
121.12	-0.001955219	1.42244E-05	0.003147101	0.708097823	4.556737701	2.559847661
121.125	-0.001970933	1.43044E-05	0.003163239	0.711728709	4.556738682	2.559847661
121.13	-0.001993546	1.44186E-05	0.003186292	0.716915676	4.556739687	2.559847661
121.135	-0.002026815	1.45866E-05	0.003220188	0.724542358	4.556740725	2.559847661
121.14	-0.002046182	1.46857E-05	0.003240192	0.729043307	4.556741783	2.559847661
121.145	-0.002074053	1.48271E-05	0.003268713	0.735460525	4.556742871	2.559847661
121.15	-0.00210634	1.49915E-05	0.003301893	0.742925937	4.556743992	2.559847661
121.155	-0.002108574	1.50067E-05	0.003304951	0.743613952	4.556745116	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
121.16	-0.002110389	1.50194E-05	0.003307518	0.74419155	4.556746241	2.559847661
121.165	-0.002105911	1.50017E-05	0.003303932	0.74338465	4.556747362	2.559847661
121.17	-0.002063333	1.4794E-05	0.003261991	0.733948045	4.556748438	2.559847661
121.175	-0.002021722	1.45902E-05	0.003220834	0.724687762	4.556749471	2.559847661
121.18	-0.001981333	1.43929E-05	0.003180984	0.715721404	4.556750463	2.559847661
121.185	-0.001918405	1.4083E-05	0.0031184	0.701640104	4.556751394	2.559847661
121.19	-0.001862825	1.38092E-05	0.003063106	0.689198876	4.556752271	2.559847661
121.195	-0.001797875	1.34893E-05	0.002998497	0.674661869	4.556753088	2.559847661
121.2	-0.001706914	1.30392E-05	0.002907595	0.654208822	4.556753824	2.559847661
121.205	-0.001625539	1.26361E-05	0.002826212	0.635897722	4.556754492	2.559847661
121.21	-0.001528745	1.21567E-05	0.002729395	0.614113837	4.556755082	2.559847661
121.215	-0.001407647	1.15548E-05	0.002607877	0.586772415	4.556755583	2.559847661
121.22	-0.001312649	1.1082E-05	0.002512406	0.56529135	4.556756019	2.559847661
121.225	-0.001217475	1.06087E-05	0.002416855	0.54379236	4.556756393	2.559847661
121.23	-0.001105344	1.00499E-05	0.002304044	0.518409798	4.556756702	2.559847661
121.235	-0.001024196	9.64462E-06	0.002222218	0.499999122	4.556756967	2.559847661
121.24	-0.000948232	9.26582E-06	0.002145748	0.482793393	4.556757194	2.559847661
121.245	-0.000856319	8.80687E-06	0.002053101	0.46194778	4.55675738	2.559847661
121.25	-0.000791293	8.48114E-06	0.001987351	0.447153889	4.556757538	2.559847661
121.255	-0.000731281	8.18106E-06	0.001926777	0.433524828	4.556757673	2.559847661
121.26	-0.000658682	7.81771E-06	0.001853434	0.417022761	4.556757783	2.559847661
121.265	-0.000611291	7.57947E-06	0.001805347	0.406203038	4.556757877	2.559847661
121.27	-0.000564628	7.34557E-06	0.001758136	0.395580489	4.556757958	2.559847661
121.275	-0.000505456	7.04874E-06	0.001698223	0.382100193	4.556758022	2.559847661
121.28	-0.000474599	6.89256E-06	0.001666702	0.375007911	4.556758079	2.559847661
121.285	-0.000443554	6.73638E-06	0.00163518	0.367915529	4.556758129	2.559847661
121.29	-0.000395103	6.49291E-06	0.00158604	0.356859036	4.556758169	2.559847661
121.295	-0.000375823	6.39424E-06	0.001566125	0.352378069	4.556758204	2.559847661
121.3	-0.000359773	6.31272E-06	0.001549672	0.348676226	4.556758237	2.559847661
121.305	-0.000319676	6.11099E-06	0.001508959	0.339515719	4.556758263	2.559847661
121.31	-0.000304223	6.03114E-06	0.001492843	0.335889646	4.556758286	2.559847661
121.315	-0.000304775	6.03182E-06	0.00149298	0.335920589	4.55675831	2.559847661
121.32	-0.000291275	5.96253E-06	0.001478996	0.332774059	4.556758331	2.559847661
121.325	-0.000294728	5.9772E-06	0.001481962	0.333441429	4.556758353	2.559847661
121.33	-0.000309877	6.05081E-06	0.001496829	0.336786562	4.556758377	2.559847661
121.335	-0.000317543	6.08724E-06	0.001504186	0.338441811	4.556758403	2.559847661
121.34	-0.000339835	6.19648E-06	0.00152625	0.343406242	4.556758432	2.559847661
121.345	-0.000362791	6.30981E-06	0.001549139	0.348556324	4.556758465	2.559847661
121.35	-0.000374348	6.36629E-06	0.001560545	0.351122704	4.556758501	2.559847661
121.355	-0.00039977	6.49181E-06	0.001585897	0.35682689	4.556758541	2.559847661
121.36	-0.00041975	6.59103E-06	0.001605935	0.361335397	4.556758586	2.559847661
121.365	-0.000424476	6.61394E-06	0.001610563	0.362376664	4.556758631	2.559847661
121.37	-0.000447104	6.72585E-06	0.001633163	0.367461626	4.556758682	2.559847661
121.375	-0.000466976	6.82493E-06	0.001653174	0.371964102	4.556758737	2.559847661
121.38	-0.000466873	6.82425E-06	0.001653037	0.371933369	4.556758792	2.559847661
121.385	-0.000483377	6.90589E-06	0.001669524	0.375642852	4.556758851	2.559847661
121.39	-0.000503496	7.0064E-06	0.001689823	0.380210245	4.556758915	2.559847661
121.395	-0.00050258	7.00214E-06	0.001688962	0.38001645	4.556758979	2.559847661
121.4	-0.00051045	7.04117E-06	0.001696844	0.381789916	4.556759045	2.559847661
121.405	-0.000524881	7.1135E-06	0.001711451	0.385076536	4.556759114	2.559847661
121.41	-0.000523868	7.10912E-06	0.001710567	0.384877645	4.556759184	2.559847661
121.415	-0.00052387	7.10963E-06	0.001710669	0.384900567	4.556759253	2.559847661
121.42	-0.000521221	7.09739E-06	0.001708198	0.384344554	4.556759322	2.559847661
121.425	-0.000502139	7.00329E-06	0.001689191	0.380067895	4.556759385	2.559847661
121.43	-0.000482151	6.90438E-06	0.001669215	0.375573287	4.556759444	2.559847661
121.435	-0.000457273	6.78131E-06	0.001644358	0.369980439	4.556759497	2.559847661
121.44	-0.000420071	6.59653E-06	0.001607038	0.361583528	4.556759542	2.559847661
121.445	-0.000387149	6.43268E-06	0.001573946	0.354137899	4.55675958	2.559847661
121.45	-0.000351842	6.25704E-06	0.001538476	0.346157037	4.556759611	2.559847661
121.455	-0.000308168	6.03927E-06	0.001494496	0.336261616	4.556759635	2.559847661
121.46	-0.000274853	5.87264E-06	0.001460854	0.328692136	4.556759654	2.559847661
121.465	-0.000245631	5.72649E-06	0.001431359	0.322055794	4.556759669	2.559847661
121.47	-0.000213684	5.56643E-06	0.001399056	0.314787511	4.556759681	2.559847661
121.475	-0.000194635	5.47029E-06	0.001379654	0.310422167	4.55675969	2.559847661
121.48	-0.000181438	5.40346E-06	0.001366168	0.307387777	4.556759699	2.559847661
121.485	-0.00016988	5.34452E-06	0.001354272	0.30471118	4.556759706	2.559847661
121.49	-0.000175809	5.37254E-06	0.001359932	0.30598478	4.556759714	2.559847661
121.495	-0.000190927	5.44677E-06	0.001374924	0.309357994	4.556759723	2.559847661
121.5	-0.000207022	5.52598E-06	0.001390923	0.312957782	4.556759734	2.559847661
121.505	-0.0002329	5.65407E-06	0.001416794	0.318778564	4.556759747	2.559847661
121.51	-0.000261617	5.79675E-06	0.00144561	0.32526215	4.556759765	2.559847661
121.515	-0.000288824	5.93209E-06	0.001472943	0.331412137	4.556759786	2.559847661
121.52	-0.000318396	6.07942E-06	0.001502699	0.338107236	4.556759811	2.559847661
121.525	-0.000346034	6.21731E-06	0.001530546	0.344372875	4.556759842	2.559847661
121.53	-0.000376299	6.36833E-06	0.001561046	0.351235403	4.556759878	2.559847661
121.535	-0.000409186	6.53274E-06	0.001594249	0.358706095	4.55675992	2.559847661
121.54	-0.000438835	6.68115E-06	0.00162422	0.365449455	4.556759969	2.559847661
121.545	-0.000476056	6.86739E-06	0.001661831	0.373912036	4.556760026	2.559847661
121.55	-0.000513825	7.05709E-06	0.00170014	0.382531419	4.556760093	2.559847661
121.555	-0.000536325	7.17103E-06	0.001723147	0.387708098	4.556760165	2.559847661
121.56	-0.000557422	7.27794E-06	0.001744736	0.392565604	4.556760244	2.559847661
121.565	-0.000573986	7.36283E-06	0.001761879	0.396422668	4.556760327	2.559847661
121.57	-0.000569256	7.34175E-06	0.001757622	0.395465004	4.556760409	2.559847661
121.575	-0.000558279	7.28915E-06	0.001746996	0.393074182	4.556760488	2.559847661
121.58	-0.000545548	7.22787E-06	0.00173462	0.390289401	4.556760563	2.559847661
121.585	-0.000521097	7.10807E-06	0.001710423	0.384845262	4.556760632	2.559847661
121.59	-0.000495725	6.98327E-06	0.001685219	0.379174328	4.556760694	2.559847661
121.595	-0.000472106	6.86717E-06	0.00166177	0.373898273	4.55676075	2.559847661
121.6	-0.000445177	6.73449E-06	0.001634973	0.367869034	4.5567608	2.559847661
121.605	-0.000417153	6.5963E-06	0.001607065	0.361589649	4.556760844	2.559847661
121.61	-0.000382423	6.42465E-06	0.001572398	0.353789583	4.556760881	2.559847661
121.615	-0.000346057	6.24446E-06	0.001536009	0.34560204	4.556760911	2.559847661
121.62	-0.000314184	6.08664E-06	0.001504138	0.338430942	4.556760936	2.559847661
121.625	-0.000274784	5.89133E-06	0.001464694	0.329556128	4.556760955	2.559847661
121.63	-0.00023532	5.69523E-06	0.001425094	0.320646174	4.556760969	2.559847661
121.635	-0.000203812	5.53883E-06	0.001393511	0.313540004	4.55676098	2.559847661
121.64	-0.000162788	5.33516E-06	0.001352384	0.304286484	4.556760987	2.559847661
121.645	-0.000117914	5.11183E-06	0.001307313	0.294145398	4.55676099	2.559847661
121.65	-8.05064E-05	4.9256E-06	0.001269731	0.285689417	4.556760992	2.559847661
121.655	-3.58695E-05	4.70341E-06	0.001224892	0.275600673	4.556760992	2.559847661
121.66	1.19808E-05	4.4647E-06	0.001176721	0.264762283	4.556760992	2.559847661
121.665	5.22719E-05	4.26344E-06	0.001136107	0.255624117	4.556760993	2.559847661
121.67	9.37334E-05	4.05625E-06	0.001094298	0.246217073	4.556760995	2.559847661
121.675	0.00013223	3.86346E-06	0.001055394	0.237463734	4.556760999	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
121.68	0.000163398	3.70709E-06	0.001023841	0.230364312	4.556761006	2.559847661
121.685	0.000193451	3.55615E-06	0.000993383	0.22351107	4.556761016	2.559847661
121.69	0.000215008	3.4473E-06	0.000971419	0.218569367	4.556761027	2.559847661
121.695	0.000230621	3.36827E-06	0.000955472	0.214981094	4.556761041	2.559847661
121.7	0.00024921	3.27432E-06	0.000936514	0.210715736	4.556761056	2.559847661
121.705	0.000258046	3.22873E-06	0.000927316	0.208646177	4.556761073	2.559847661
121.71	0.000261345	3.21111E-06	0.000923761	0.207846259	4.55676109	2.559847661
121.715	0.000274015	3.14678E-06	0.000910781	0.204925676	4.556761109	2.559847661
121.72	0.00027851	3.12274E-06	0.000905928	0.203833907	4.556761129	2.559847661
121.725	0.000271729	3.15521E-06	0.000912487	0.205309558	4.556761148	2.559847661
121.73	0.000273906	3.14323E-06	0.000910068	0.204765197	4.556761167	2.559847661
121.735	0.000272574	3.1483E-06	0.000911092	0.204995599	4.556761185	2.559847661
121.74	0.000258109	3.21896E-06	0.000925364	0.208206827	4.556761202	2.559847661
121.745	0.000246933	3.27347E-06	0.000936372	0.210683749	4.556761218	2.559847661
121.75	0.000230356	3.35463E-06	0.000952765	0.214372061	4.556761231	2.559847661
121.755	0.000200677	3.50139E-06	0.000982406	0.22104136	4.556761241	2.559847661
121.76	0.000174941	3.62894E-06	0.001008167	0.226837527	4.556761249	2.559847661
121.765	0.000147743	3.76376E-06	0.001035395	0.232963801	4.556761255	2.559847661
121.77	0.000115335	3.92499E-06	0.001067958	0.240290468	4.556761258	2.559847661
121.775	9.44724E-05	4.02905E-06	0.001088974	0.245019147	4.55676126	2.559847661
121.78	7.50897E-05	4.12556E-06	0.001108463	0.249404146	4.556761262	2.559847661
121.785	5.14628E-05	4.24356E-06	0.001132293	0.254765982	4.556761262	2.559847661
121.79	4.05561E-05	4.29842E-06	0.001143374	0.257259065	4.556761263	2.559847661
121.795	3.01349E-05	4.35056E-06	0.001153904	0.259628296	4.556761263	2.559847661
121.8	1.40303E-05	4.43137E-06	0.001170221	0.263299824	4.556761263	2.559847661
121.805	1.20612E-05	4.44204E-06	0.001172376	0.263784607	4.556761263	2.559847661
121.81	1.4924E-05	4.42829E-06	0.001169601	0.263160142	4.556761263	2.559847661
121.815	1.50344E-05	4.42838E-06	0.001169619	0.263164206	4.556761263	2.559847661
121.82	2.56592E-05	4.37616E-06	0.001159071	0.260790929	4.556761263	2.559847661
121.825	3.83438E-05	4.31337E-06	0.001146389	0.257937476	4.556761264	2.559847661
121.83	5.16325E-05	4.24762E-06	0.001133108	0.254949409	4.556761264	2.559847661
121.835	7.26058E-05	4.14334E-06	0.001112047	0.250210674	4.556761266	2.559847661
121.84	8.69539E-05	4.07172E-06	0.001097583	0.246956105	4.556761268	2.559847661
121.845	9.94829E-05	4.00934E-06	0.001084985	0.244121561	4.55676127	2.559847661
121.85	0.000117853	3.91761E-06	0.001066459	0.239953193	4.556761274	2.559847661
121.855	0.000125103	3.88105E-06	0.001059073	0.238291393	4.556761278	2.559847661
121.86	0.000131617	3.84855E-06	0.00105251	0.23681485	4.556761282	2.559847661
121.865	0.000148394	3.76473E-06	0.001035581	0.233005771	4.556761287	2.559847661
121.87	0.000156524	3.72365E-06	0.001027285	0.231139084	4.556761294	2.559847661
121.875	0.000162458	3.69377E-06	0.001021251	0.229781373	4.5567613	2.559847661
121.88	0.000174272	3.63439E-06	0.001009259	0.227083173	4.556761308	2.559847661
121.885	0.000177302	3.61855E-06	0.001006058	0.226363135	4.556761316	2.559847661
121.89	0.000178314	3.61293E-06	0.001004925	0.2261081	4.556761324	2.559847661
121.895	0.000179663	3.60545E-06	0.001003413	0.225767892	4.556761332	2.559847661
121.9	0.000171284	3.64643E-06	0.001011691	0.227630366	4.55676134	2.559847661
121.905	0.000164132	3.68155E-06	0.001018784	0.229226334	4.556761346	2.559847661
121.91	0.000155555	3.72358E-06	0.001027273	0.231136414	4.556761352	2.559847661
121.915	0.000138326	3.80895E-06	0.001044516	0.235016035	4.556761357	2.559847661
121.92	0.00012906	3.85496E-06	0.001053809	0.237107051	4.556761362	2.559847661
121.925	0.00012149	3.8922E-06	0.00106133	0.23879926	4.556761365	2.559847661
121.93	0.000104524	3.9764E-06	0.001078335	0.242625293	4.556761368	2.559847661
121.935	9.50979E-05	4.02334E-06	0.001087815	0.244758335	4.55676137	2.559847661
121.94	8.86452E-05	4.05512E-06	0.001094235	0.24620291	4.556761372	2.559847661
121.945	7.29508E-05	4.13299E-06	0.001109962	0.249741362	4.556761374	2.559847661
121.95	6.12073E-05	4.19145E-06	0.001121768	0.252397732	4.556761375	2.559847661
121.955	5.18317E-05	4.2379E-06	0.001131149	0.254508441	4.556761375	2.559847661
121.96	3.54709E-05	4.31917E-06	0.001147563	0.258201724	4.556761376	2.559847661
121.965	2.08422E-05	4.39205E-06	0.001162282	0.261513423	4.556761376	2.559847661
121.97	8.20089E-06	4.45495E-06	0.001174985	0.264371672	4.556761376	2.559847661
121.975	-8.34468E-06	4.53735E-06	0.001191624	0.268115376	4.556761376	2.559847661
121.98	-2.44318E-05	4.61764E-06	0.00120784	0.271763901	4.556761376	2.559847661
121.985	-3.84565E-05	4.68772E-06	0.001221991	0.274947896	4.556761376	2.559847661
121.99	-5.25666E-05	4.75829E-06	0.001236242	0.278154456	4.556761377	2.559847661
121.995	-6.5078E-05	4.82104E-06	0.001248915	0.281005794	4.556761378	2.559847661
122	-7.3213E-05	4.86207E-06	0.0012572	0.282870017	4.556761379	2.559847661
122.005	-7.83069E-05	4.88791E-06	0.001262418	0.284043956	4.556761381	2.559847661
122.01	-8.31854E-05	4.91269E-06	0.001267422	0.285169923	4.556761383	2.559847661
122.015	-8.42552E-05	4.91858E-06	0.001268611	0.285437508	4.556761384	2.559847661
122.02	-8.09417E-05	4.90253E-06	0.001265369	0.28470799	4.556761386	2.559847661
122.025	-7.82541E-05	4.8895E-06	0.001262738	0.284116119	4.556761388	2.559847661
122.03	-7.32008E-05	4.8647E-06	0.001257729	0.282989108	4.556761389	2.559847661
122.035	-6.6627E-05	4.83216E-06	0.001251156	0.281510081	4.55676139	2.559847661
122.04	-6.38179E-05	4.81834E-06	0.001248364	0.28088189	4.556761391	2.559847661
122.045	-5.79988E-05	4.78961E-06	0.001242562	0.279576368	4.556761392	2.559847661
122.05	-5.03553E-05	4.75159E-06	0.001234883	0.277848584	4.556761393	2.559847661
122.055	-4.80514E-05	4.74015E-06	0.001232573	0.277329033	4.556761393	2.559847661
122.06	-4.20158E-05	4.71028E-06	0.001226539	0.275971293	4.556761394	2.559847661
122.065	-3.36639E-05	4.66863E-06	0.001218127	0.274078498	4.556761394	2.559847661
122.07	-3.18054E-05	4.65932E-06	0.001216248	0.273655743	4.556761394	2.559847661
122.075	-2.50394E-05	4.62577E-06	0.001209472	0.272131137	4.556761394	2.559847661
122.08	-1.37466E-05	4.56938E-06	0.001198082	0.269568515	4.556761394	2.559847661
122.085	-9.77336E-06	4.54932E-06	0.001194032	0.268657089	4.556761394	2.559847661
122.09	-3.94356E-06	4.52017E-06	0.001188143	0.267332079	4.556761394	2.559847661
122.095	4.21221E-06	4.47915E-06	0.001179858	0.265468024	4.556761394	2.559847661
122.1	3.04091E-06	4.48446E-06	0.001180932	0.265709588	4.556761394	2.559847661
122.105	1.6951E-07	4.49845E-06	0.001183758	0.266345467	4.556761394	2.559847661
122.11	-1.44263E-06	4.50609E-06	0.0011853	0.266692428	4.556761394	2.559847661
122.115	-9.26447E-06	4.54465E-06	0.001193087	0.268444673	4.556761395	2.559847661
122.12	-1.72919E-05	4.58442E-06	0.001201121	0.270252309	4.556761395	2.559847661
122.125	-2.38857E-05	4.61702E-06	0.001207705	0.271733586	4.556761395	2.559847661
122.13	-3.42274E-05	4.66829E-06	0.001218061	0.274063618	4.556761395	2.559847661
122.135	-4.47652E-05	4.72064E-06	0.001228634	0.276442618	4.556761396	2.559847661
122.14	-5.70688E-05	4.78177E-06	0.001240981	0.279220689	4.556761396	2.559847661
122.145	-7.28478E-05	4.86038E-06	0.001256857	0.282792724	4.556761398	2.559847661
122.15	-8.58929E-05	4.92552E-06	0.001270013	0.285753009	4.5567614	2.559847661
122.155	-9.945E-05	4.99321E-06	0.001283681	0.288828169	4.556761402	2.559847661
122.16	-0.000115102	5.07153E-06	0.001299498	0.292386979	4.556761405	2.559847661
122.165	-0.000124643	5.11959E-06	0.001309203	0.294570745	4.556761409	2.559847661
122.17	-0.000131621	5.15479E-06	0.00131631	0.296169856	4.556761414	2.559847661
122.175	-0.000140328	5.19868E-06	0.001325173	0.298163874	4.556761419	2.559847661
122.18	-0.000143709	5.21615E-06	0.001328702	0.298957919	4.556761424	2.559847661
122.185	-0.000144287	5.2195E-06	0.001329378	0.299110135	4.556761429	2.559847661
122.19	-0.000148358	5.24023E-06	0.001333564	0.300051889	4.556761435	2.559847661
122.195	-0.000150957	5.25377E-06	0.001336297	0.300666788	4.55676144	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
122.2	-0.000150367	5.25138E-06	0.001335815	0.300558303	4.556761446	2.559847661
122.205	-0.000151112	5.25559E-06	0.001336664	0.300749476	4.556761452	2.559847661
122.21	-0.000152429	5.26275E-06	0.001338112	0.301075207	4.556761458	2.559847661
122.215	-0.000149987	5.25132E-06	0.001335802	0.300555387	4.556761464	2.559847661
122.22	-0.000142811	5.21624E-06	0.001328717	0.298961337	4.556761469	2.559847661
122.225	-0.000134652	5.17615E-06	0.001320621	0.297139645	4.556761473	2.559847661
122.23	-0.00012627	5.13496E-06	0.0013123	0.295267525	4.556761477	2.559847661
122.235	-0.000114405	5.07637E-06	0.001300466	0.292604882	4.556761481	2.559847661
122.24	-0.000102224	5.01602E-06	0.001288279	0.289862702	4.556761483	2.559847661
122.245	-9.25867E-05	4.96832E-06	0.001278644	0.287694947	4.556761485	2.559847661
122.25	-8.13964E-05	4.91289E-06	0.001267449	0.285176122	4.556761487	2.559847661
122.255	-6.98746E-05	4.85569E-06	0.001255897	0.282576749	4.556761488	2.559847661
122.26	-6.06727E-05	4.81002E-06	0.001246673	0.28050137	4.556761489	2.559847661
122.265	-5.08914E-05	4.76147E-06	0.001236868	0.278295327	4.55676149	2.559847661
122.27	-4.13313E-05	4.71398E-06	0.001227276	0.276137096	4.55676149	2.559847661
122.275	-3.19658E-05	4.66748E-06	0.001217885	0.274024059	4.556761491	2.559847661
122.28	-2.05327E-05	4.61062E-06	0.0012064	0.27144011	4.556761491	2.559847661
122.285	-1.10518E-05	4.56337E-06	0.001196859	0.269293182	4.556761491	2.559847661
122.29	-2.88292E-06	4.52273E-06	0.00118865	0.267446286	4.556761491	2.559847661
122.295	7.98207E-06	4.46861E-06	0.001177721	0.264987143	4.556761491	2.559847661
122.3	1.66746E-05	4.42519E-06	0.001168952	0.26301417	4.556761491	2.559847661
122.305	2.37884E-05	4.38972E-06	0.001161789	0.261402498	4.556761491	2.559847661
122.31	3.45367E-05	4.33611E-06	0.001150962	0.258966384	4.556761491	2.559847661
122.315	4.33232E-05	4.29209E-06	0.001142071	0.256965978	4.556761492	2.559847661
122.32	4.85634E-05	4.26577E-06	0.001136756	0.255770185	4.556761492	2.559847661
122.325	5.55562E-05	4.23074E-06	0.001129681	0.254178256	4.556761493	2.559847661
122.33	6.09831E-05	4.20338E-06	0.001124155	0.252934985	4.556761494	2.559847661
122.335	6.28548E-05	4.19375E-06	0.001122211	0.252497472	4.556761495	2.559847661
122.34	6.4448E-05	4.18554E-06	0.001120554	0.252124563	4.556761496	2.559847661
122.345	6.39902E-05	4.18754E-06	0.001120958	0.252215447	4.556761497	2.559847661
122.35	6.2158E-05	4.19649E-06	0.001122765	0.252622197	4.556761498	2.559847661
122.355	6.22176E-05	4.19605E-06	0.001122676	0.252602033	4.556761499	2.559847661
122.36	6.07905E-05	4.20296E-06	0.001124072	0.252916131	4.5567615	2.559847661
122.365	5.74512E-05	4.2195E-06	0.001127413	0.253667908	4.556761501	2.559847661
122.37	5.68347E-05	4.22256E-06	0.00112803	0.253806667	4.556761502	2.559847661
122.375	5.64023E-05	4.22461E-06	0.001128445	0.253900104	4.556761502	2.559847661
122.38	5.3423E-05	4.23941E-06	0.001131434	0.254572687	4.556761503	2.559847661
122.385	5.29716E-05	4.24173E-06	0.001131903	0.254678248	4.556761504	2.559847661
122.39	5.4741E-05	4.2329E-06	0.001130119	0.254276821	4.556761505	2.559847661
122.395	5.3369E-05	4.23968E-06	0.001131488	0.254584815	4.556761505	2.559847661
122.4	5.22623E-05	4.24527E-06	0.001132617	0.254838857	4.556761506	2.559847661
122.405	5.41152E-05	4.23609E-06	0.001130763	0.254421751	4.556761507	2.559847661
122.41	5.39911E-05	4.2367E-06	0.001130886	0.254449319	4.556761508	2.559847661
122.415	5.33522E-05	4.23998E-06	0.00113155	0.254598683	4.556761508	2.559847661
122.42	5.55453E-05	4.22918E-06	0.001129368	0.254107788	4.556761509	2.559847661
122.425	5.73836E-05	4.22011E-06	0.001127536	0.253695671	4.55676151	2.559847661
122.43	6.03877E-05	4.20531E-06	0.001124547	0.253023144	4.556761511	2.559847661
122.435	6.65558E-05	4.17471E-06	0.001118366	0.251632254	4.556761512	2.559847661
122.44	7.216E-05	4.14683E-06	0.001112735	0.250365357	4.556761513	2.559847661
122.445	7.84348E-05	4.11562E-06	0.001106432	0.24894725	4.556761515	2.559847661
122.45	8.56251E-05	4.07976E-06	0.00109919	0.247317736	4.556761517	2.559847661
122.455	9.04355E-05	4.05572E-06	0.001094337	0.246225795	4.556761519	2.559847661
122.46	9.6959E-05	4.02323E-06	0.001087774	0.244749097	4.556761521	2.559847661
122.465	0.00010516	3.98224E-06	0.001079496	0.24288666	4.556761524	2.559847661
122.47	0.000109905	3.95842E-06	0.001074685	0.241804208	4.556761527	2.559847661
122.475	0.000115663	3.92962E-06	0.001068871	0.240495927	4.55676153	2.559847661
122.48	0.000123026	3.89271E-06	0.001061417	0.238818714	4.556761534	2.559847661
122.485	0.0001267	3.87412E-06	0.001057661	0.23797381	4.556761538	2.559847661
122.49	0.000130682	3.85405E-06	0.001053609	0.237062076	4.556761543	2.559847661
122.495	0.00013513	3.83155E-06	0.001049066	0.236039862	4.556761547	2.559847661
122.5	0.000134987	3.8319E-06	0.001049136	0.236055677	4.556761552	2.559847661
122.505	0.000134585	3.83366E-06	0.001049491	0.236135561	4.556761556	2.559847661
122.51	0.000135286	3.82989E-06	0.001048729	0.235964105	4.556761561	2.559847661
122.515	0.000133535	3.83833E-06	0.001050435	0.236347858	4.556761565	2.559847661
122.52	0.000132596	3.84281E-06	0.001051341	0.236551651	4.55676157	2.559847661
122.525	0.00013274	3.84185E-06	0.001051146	0.236507887	4.556761574	2.559847661
122.53	0.000131132	3.8496E-06	0.001052712	0.23686016	4.556761579	2.559847661
122.535	0.000129895	3.85553E-06	0.001053908	0.237129405	4.556761583	2.559847661
122.54	0.000127757	3.86588E-06	0.001055999	0.23759979	4.556761587	2.559847661
122.545	0.000123075	3.88895E-06	0.001060659	0.238648294	4.556761591	2.559847661
122.55	0.000119164	3.90824E-06	0.001064556	0.239525098	4.556761595	2.559847661
122.555	0.000114547	3.93102E-06	0.001069155	0.240559916	4.556761598	2.559847661
122.56	0.000107786	3.96454E-06	0.001075927	0.242083563	4.556761601	2.559847661
122.565	0.000103099	3.98783E-06	0.001080631	0.243141921	4.556761603	2.559847661
122.57	9.88225E-05	4.00901E-06	0.001084908	0.244104219	4.556761606	2.559847661
122.575	9.20929E-05	4.04246E-06	0.001091664	0.245624391	4.556761608	2.559847661
122.58	8.76438E-05	4.06467E-06	0.001096149	0.246633481	4.55676161	2.559847661
122.585	8.51333E-05	4.07713E-06	0.001098667	0.247200104	4.556761612	2.559847661
122.59	7.99407E-05	4.10295E-06	0.00110388	0.248373083	4.556761613	2.559847661
122.595	7.5518E-05	4.12503E-06	0.001108341	0.24937663	4.556761615	2.559847661
122.6	7.2872E-05	4.13821E-06	0.001111003	0.249975745	4.556761616	2.559847661
122.605	6.76148E-05	4.1644E-06	0.001116292	0.2511656	4.556761617	2.559847661
122.61	6.34221E-05	4.18541E-06	0.001120536	0.252120591	4.556761618	2.559847661
122.615	6.2286E-05	4.19115E-06	0.001121694	0.252381255	4.556761619	2.559847661
122.62	5.86458E-05	4.2093E-06	0.00112536	0.253206075	4.55676162	2.559847661
122.625	5.51722E-05	4.22675E-06	0.001128885	0.253999049	4.556761621	2.559847661
122.63	5.49348E-05	4.22804E-06	0.001129146	0.254057844	4.556761622	2.559847661
122.635	5.25371E-05	4.24002E-06	0.001131565	0.25460213	4.556761622	2.559847661
122.64	4.96154E-05	4.25472E-06	0.001134534	0.255270181	4.556761623	2.559847661
122.645	4.9374E-05	4.25607E-06	0.001134807	0.255331465	4.556761624	2.559847661
122.65	4.81242E-05	4.2624E-06	0.001136086	0.25561927	4.556761624	2.559847661
122.655	4.80039E-05	4.26319E-06	0.001136244	0.25565495	4.556761625	2.559847661
122.66	5.01072E-05	4.25283E-06	0.001134151	0.25518402	4.556761626	2.559847661
122.665	5.00228E-05	4.25332E-06	0.001134252	0.255206605	4.556761626	2.559847661
122.67	5.14572E-05	4.24635E-06	0.001132843	0.254889593	4.556761627	2.559847661
122.675	5.53341E-05	4.2271E-06	0.001128954	0.254014733	4.556761628	2.559847661
122.68	5.60379E-05	4.22359E-06	0.001128246	0.253855299	4.556761628	2.559847661
122.685	5.74941E-05	4.21644E-06	0.001126801	0.253530266	4.556761629	2.559847661
122.69	6.12633E-05	4.19766E-06	0.00112301	0.252677171	4.55676163	2.559847661
122.695	6.16564E-05	4.19564E-06	0.001122601	0.25258521	4.556761631	2.559847661
122.7	6.2051E-05	4.19372E-06	0.001122213	0.252497989	4.556761632	2.559847661
122.705	6.47095E-05	4.18046E-06	0.001119536	0.251895553	4.556761633	2.559847661
122.71	6.486E-05	4.17963E-06	0.001119367	0.251857658	4.556761634	2.559847661
122.715	6.42838E-05	4.1825E-06	0.001119946	0.251987913	4.556761635	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
122.72	6.50988E-05	4.17842E-06	0.001119123	0.251802567	4.556761636	2.559847661
122.725	6.48036E-05	4.17983E-06	0.001119407	0.251866659	4.556761637	2.559847661
122.73	6.37967E-05	4.18481E-06	0.001120414	0.252093134	4.556761638	2.559847661
122.735	6.27011E-05	4.19025E-06	0.001121512	0.252340297	4.556761639	2.559847661
122.74	6.18781E-05	4.19435E-06	0.001122341	0.252526627	4.55676164	2.559847661
122.745	6.18253E-05	4.19458E-06	0.001122387	0.252537078	4.556761641	2.559847661
122.75	5.98607E-05	4.20429E-06	0.001124348	0.252978239	4.556761642	2.559847661
122.755	5.65202E-05	4.22092E-06	0.001127708	0.253734216	4.556761643	2.559847661
122.76	5.45928E-05	4.23055E-06	0.001129652	0.254171716	4.556761644	2.559847661
122.765	5.18409E-05	4.24425E-06	0.001132419	0.254794184	4.556761645	2.559847661
122.77	4.79965E-05	4.26345E-06	0.001136298	0.255667021	4.556761645	2.559847661
122.775	4.57781E-05	4.27461E-06	0.00113855	0.256173768	4.556761646	2.559847661
122.78	4.37011E-05	4.28502E-06	0.001140653	0.256646857	4.556761646	2.559847661
122.785	4.07547E-05	4.29979E-06	0.001143636	0.257318155	4.556761647	2.559847661
122.79	3.86395E-05	4.31046E-06	0.001145792	0.257803274	4.556761647	2.559847661
122.795	3.71795E-05	4.31787E-06	0.001147288	0.258139839	4.556761647	2.559847661
122.8	3.5787E-05	4.32495E-06	0.001148717	0.25846141	4.556761648	2.559847661
122.805	3.46398E-05	4.33081E-06	0.001149902	0.258728017	4.556761648	2.559847661
122.81	3.36597E-05	4.33586E-06	0.001150922	0.258957438	4.556761648	2.559847661
122.815	3.33953E-05	4.33737E-06	0.001151227	0.259026038	4.556761648	2.559847661
122.82	3.41636E-05	4.33374E-06	0.001150493	0.258860852	4.556761649	2.559847661
122.825	3.54203E-05	4.32765E-06	0.001149264	0.258584392	4.556761649	2.559847661
122.83	3.72512E-05	4.31871E-06	0.001147457	0.258177847	4.556761649	2.559847661
122.835	3.98518E-05	4.3059E-06	0.001144871	0.257595949	4.55676165	2.559847661
122.84	4.20956E-05	4.29484E-06	0.001142635	0.25709297	4.55676165	2.559847661
122.845	4.376E-05	4.28667E-06	0.001140986	0.256721894	4.556761651	2.559847661
122.85	4.64914E-05	4.2732E-06	0.001138266	0.25610984	4.556761651	2.559847661
122.855	4.93679E-05	4.25896E-06	0.001135388	0.255462388	4.556761652	2.559847661
122.86	5.08074E-05	4.25188E-06	0.001133959	0.255140851	4.556761653	2.559847661
122.865	5.35737E-05	4.23826E-06	0.001131208	0.254521722	4.556761653	2.559847661
122.87	5.80304E-05	4.21615E-06	0.001126742	0.25351698	4.556761654	2.559847661
122.875	6.10982E-05	4.20091E-06	0.001123665	0.252824616	4.556761655	2.559847661
122.88	6.44905E-05	4.1841E-06	0.001120269	0.252060612	4.556761656	2.559847661
122.885	6.89307E-05	4.16201E-06	0.001115808	0.251056814	4.556761657	2.559847661
122.89	7.1715E-05	4.14814E-06	0.001113007	0.250426479	4.556761659	2.559847661
122.895	7.50005E-05	4.13182E-06	0.00110971	0.249684798	4.55676166	2.559847661
122.9	7.92333E-05	4.11071E-06	0.001105447	0.248725493	4.556761662	2.559847661
122.905	8.11597E-05	4.10106E-06	0.001103498	0.248287104	4.556761663	2.559847661
122.91	8.3458E-05	4.08964E-06	0.00110119	0.247767843	4.556761665	2.559847661
122.915	8.71156E-05	4.07138E-06	0.001097503	0.246938232	4.556761667	2.559847661
122.92	8.86308E-05	4.06376E-06	0.001095965	0.246592124	4.556761669	2.559847661
122.925	9.04313E-05	4.0548E-06	0.001094155	0.246184767	4.556761671	2.559847661
122.93	9.37617E-05	4.03816E-06	0.001090794	0.245428696	4.556761673	2.559847661
122.935	9.51426E-05	4.03119E-06	0.001089386	0.245111858	4.556761676	2.559847661
122.94	9.61994E-05	4.02589E-06	0.001088316	0.244871168	4.556761678	2.559847661
122.945	9.83668E-05	4.01504E-06	0.001086124	0.244378005	4.55676168	2.559847661
122.95	9.92802E-05	4.0104E-06	0.001085188	0.244167287	4.556761683	2.559847661
122.955	9.98398E-05	4.00757E-06	0.001084615	0.244038333	4.556761685	2.559847661
122.96	0.000100844	4.0025E-06	0.001083592	0.243808282	4.556761688	2.559847661
122.965	0.000101297	4.00019E-06	0.001083125	0.243703123	4.556761691	2.559847661
122.97	0.000101981	3.99673E-06	0.001082426	0.243545839	4.556761693	2.559847661
122.975	0.000102461	3.99426E-06	0.001081928	0.243433744	4.556761696	2.559847661
122.98	0.00010219	3.99555E-06	0.001082188	0.243492276	4.556761698	2.559847661
122.985	0.000102101	3.99594E-06	0.001082266	0.243509923	4.556761701	2.559847661
122.99	0.000101405	3.99935E-06	0.001082955	0.243664767	4.556761704	2.559847661
122.995	0.000100382	4.00442E-06	0.00108398	0.243895513	4.556761706	2.559847661
123	0.000100233	4.00515E-06	0.001084128	0.243928746	4.556761709	2.559847661
123.005	9.96579E-05	4.00799E-06	0.001084701	0.244057694	4.556761711	2.559847661
123.01	9.89701E-05	4.01143E-06	0.001085395	0.244213915	4.556761714	2.559847661
123.015	9.92885E-05	4.00986E-06	0.001085077	0.24414242	4.556761716	2.559847661
123.02	9.92665E-05	4.00996E-06	0.001085098	0.244147092	4.556761719	2.559847661
123.025	9.9164E-05	4.01049E-06	0.001085205	0.244171202	4.556761721	2.559847661
123.03	9.97188E-05	4.00775E-06	0.001084651	0.244046499	4.556761724	2.559847661
123.035	0.000100228	4.00522E-06	0.001084142	0.243931942	4.556761726	2.559847661
123.04	0.000101339	3.99972E-06	0.00108303	0.243681648	4.556761729	2.559847661
123.045	0.000102548	3.99368E-06	0.001081811	0.243407509	4.556761732	2.559847661
123.05	0.000103237	3.99026E-06	0.00108112	0.243251996	4.556761734	2.559847661
123.055	0.000105096	3.98102E-06	0.001079253	0.242831859	4.556761737	2.559847661
123.06	0.000106847	3.97225E-06	0.001077483	0.242433664	4.55676174	2.559847661
123.065	0.000107379	3.96958E-06	0.001076943	0.242312166	4.556761743	2.559847661
123.07	0.000109083	3.9611E-06	0.001075229	0.241926552	4.556761746	2.559847661
123.075	0.000110836	3.95232E-06	0.001073457	0.241527747	4.556761749	2.559847661
123.08	0.000111949	3.94675E-06	0.001072332	0.241274801	4.556761752	2.559847661
123.085	0.000114599	3.93351E-06	0.001069658	0.240673127	4.556761755	2.559847661
123.09	0.000116021	3.92632E-06	0.001068206	0.240346299	4.556761759	2.559847661
123.095	0.000115929	3.92673E-06	0.001068289	0.240365116	4.556761762	2.559847661
123.1	0.000118506	3.91388E-06	0.001065693	0.239780835	4.556761766	2.559847661
123.105	0.00012074	3.90261E-06	0.001063417	0.239268924	4.556761769	2.559847661
123.11	0.00012072	3.9026E-06	0.001063416	0.239268496	4.556761773	2.559847661
123.115	0.000121858	3.89684E-06	0.001062252	0.239006611	4.556761777	2.559847661
123.12	0.000121964	3.89616E-06	0.001062115	0.23897591	4.556761781	2.559847661
123.125	0.000120804	3.90186E-06	0.001063265	0.239234709	4.556761784	2.559847661
123.13	0.000121645	3.89759E-06	0.001062404	0.239040892	4.556761788	2.559847661
123.135	0.000121162	3.89985E-06	0.00106286	0.239143402	4.556761792	2.559847661
123.14	0.00011953	3.90796E-06	0.001064486	0.239509238	4.556761795	2.559847661
123.145	0.000119896	3.90598E-06	0.001064099	0.239422181	4.556761799	2.559847661
123.15	0.000118098	3.91478E-06	0.001065875	0.23982198	4.556761803	2.559847661
123.155	0.000115177	3.92929E-06	0.001068805	0.240481135	4.556761806	2.559847661
123.16	0.000115037	3.92994E-06	0.001068936	0.24051066	4.556761809	2.559847661
123.165	0.000113026	3.93983E-06	0.001070934	0.240960244	4.556761812	2.559847661
123.17	0.000110167	3.95406E-06	0.001073809	0.241607039	4.556761816	2.559847661
123.175	0.000110453	3.95262E-06	0.001073517	0.241541324	4.556761819	2.559847661
123.18	0.000108921	3.96013E-06	0.001075036	0.241883025	4.556761822	2.559847661
123.185	0.000106338	3.97298E-06	0.00107763	0.242466839	4.556761824	2.559847661
123.19	0.000106525	3.97202E-06	0.001077436	0.242423077	4.556761827	2.559847661
123.195	0.000104442	3.98226E-06	0.001079506	0.242888742	4.55676183	2.559847661
123.2	0.000100577	4.00149E-06	0.001083389	0.243762624	4.556761833	2.559847661
123.205	9.9401E-05	4.00737E-06	0.001084576	0.244029572	4.556761835	2.559847661
123.21	9.75705E-05	4.01643E-06	0.001086407	0.244441515	4.556761838	2.559847661
123.215	9.47543E-05	4.03046E-06	0.001089241	0.245079147	4.55676184	2.559847661
123.22	9.34294E-05	4.03708E-06	0.001090576	0.245379635	4.556761842	2.559847661
123.225	9.13203E-05	4.04757E-06	0.001092695	0.245856337	4.556761844	2.559847661
123.23	8.90474E-05	4.05893E-06	0.00109499	0.246372642	4.556761846	2.559847661
123.235	8.81349E-05	4.06351E-06	0.001095915	0.246580963	4.556761848	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
123.24	8.68116E-05	4.07013E-06	0.001097251	0.246881531	4.55676185	2.559847661
123.245	8.60256E-05	4.07409E-06	0.001098052	0.247061625	4.556761852	2.559847661
123.25	8.59034E-05	4.07471E-06	0.001098176	0.247089666	4.556761854	2.559847661
123.255	8.44824E-05	4.08179E-06	0.001099606	0.2474114	4.556761856	2.559847661
123.26	8.35471E-05	4.0865E-06	0.001100558	0.247625441	4.556761857	2.559847661
123.265	8.36253E-05	4.08613E-06	0.001100483	0.247608768	4.556761859	2.559847661
123.27	8.2814E-05	4.09018E-06	0.001101301	0.247792743	4.556761861	2.559847661
123.275	8.23192E-05	4.09268E-06	0.001101807	0.247906528	4.556761863	2.559847661
123.28	8.26219E-05	4.09119E-06	0.001101505	0.247838711	4.556761864	2.559847661
123.285	8.22861E-05	4.09286E-06	0.001101842	0.247914514	4.556761866	2.559847661
123.29	8.17343E-05	4.09561E-06	0.001102399	0.248039787	4.556761868	2.559847661
123.295	8.12439E-05	4.09806E-06	0.001102894	0.248151165	4.556761869	2.559847661
123.3	8.07096E-05	4.10074E-06	0.001103435	0.248272894	4.556761871	2.559847661
123.305	8.0561E-05	4.1015E-06	0.001103588	0.248307294	4.556761873	2.559847661
123.31	8.02074E-05	4.10327E-06	0.001103946	0.248387756	4.556761874	2.559847661
123.315	8.00753E-05	4.10396E-06	0.001104085	0.248419051	4.556761876	2.559847661
123.32	8.10135E-05	4.0993E-06	0.001103143	0.24820709	4.556761878	2.559847661
123.325	8.1276E-05	4.09795E-06	0.00110287	0.248145764	4.556761879	2.559847661
123.33	8.04556E-05	4.10201E-06	0.001103691	0.248330524	4.556761881	2.559847661
123.335	8.02842E-05	4.10286E-06	0.001103863	0.248369088	4.556761882	2.559847661
123.34	7.98539E-05	4.10497E-06	0.001104288	0.248464742	4.556761884	2.559847661
123.345	7.83822E-05	4.11228E-06	0.001105765	0.248797045	4.556761886	2.559847661
123.35	7.76366E-05	4.11601E-06	0.001106518	0.248966517	4.556761887	2.559847661
123.355	7.7281E-05	4.11776E-06	0.001106873	0.249046365	4.556761889	2.559847661
123.36	7.60814E-05	4.12372E-06	0.001108076	0.249317205	4.55676189	2.559847661
123.365	7.5199E-05	4.12813E-06	0.001108966	0.2495174	4.556761892	2.559847661
123.37	7.46344E-05	4.13093E-06	0.001109532	0.249644595	4.556761893	2.559847661
123.375	7.31905E-05	4.1381E-06	0.00111098	0.249970544	4.556761894	2.559847661
123.38	7.14768E-05	4.14665E-06	0.001112706	0.250358848	4.556761896	2.559847661
123.385	6.99671E-05	4.15419E-06	0.00111423	0.25070167	4.556761897	2.559847661
123.39	6.87789E-05	4.16015E-06	0.001115433	0.250972506	4.556761898	2.559847661
123.395	6.83368E-05	4.16239E-06	0.001115885	0.251074151	4.556761899	2.559847661
123.4	6.75551E-05	4.16629E-06	0.001116673	0.251251357	4.5567619	2.559847661
123.405	6.61741E-05	4.17319E-06	0.001118067	0.251565077	4.556761901	2.559847661
123.41	6.53213E-05	4.17748E-06	0.001118933	0.251759868	4.556761903	2.559847661
123.415	6.42065E-05	4.18305E-06	0.001120059	0.252013314	4.556761904	2.559847661
123.42	6.28206E-05	4.19001E-06	0.001121465	0.25232958	4.556761905	2.559847661
123.425	6.25156E-05	4.1916E-06	0.001121786	0.252401802	4.556761906	2.559847661
123.43	6.23074E-05	4.19268E-06	0.001122003	0.25245078	4.556761907	2.559847661
123.435	6.17972E-05	4.19527E-06	0.001122527	0.252568536	4.556761908	2.559847661
123.44	6.17019E-05	4.19579E-06	0.001122632	0.252592311	4.556761908	2.559847661
123.445	6.1169E-05	4.19849E-06	0.001123178	0.252714983	4.556761909	2.559847661
123.45	6.10603E-05	4.19912E-06	0.001123303	0.252743245	4.55676191	2.559847661
123.455	6.22095E-05	4.19344E-06	0.001122158	0.252485546	4.556761911	2.559847661
123.46	6.2511E-05	4.19196E-06	0.001121857	0.252417885	4.556761912	2.559847661
123.465	6.2338E-05	4.19287E-06	0.001122041	0.252459217	4.556761913	2.559847661
123.47	6.30386E-05	4.18942E-06	0.001121345	0.252302698	4.556761914	2.559847661
123.475	6.32909E-05	4.18819E-06	0.001121097	0.252246847	4.556761915	2.559847661
123.48	6.37916E-05	4.18576E-06	0.001120605	0.252136157	4.556761916	2.559847661
123.485	6.53417E-05	4.17807E-06	0.001119052	0.251786751	4.556761917	2.559847661
123.49	6.61377E-05	4.1741E-06	0.001118251	0.251606406	4.556761919	2.559847661
123.495	6.66657E-05	4.17149E-06	0.001117723	0.251487733	4.55676192	2.559847661
123.5	6.76171E-05	4.16675E-06	0.001116767	0.251272496	4.556761921	2.559847661
123.505	6.78584E-05	4.16554E-06	0.001116523	0.251217583	4.556761922	2.559847661
123.51	6.82798E-05	4.16346E-06	0.001116102	0.251123049	4.556761923	2.559847661
123.515	6.89682E-05	4.16003E-06	0.001115409	0.250967115	4.556761924	2.559847661
123.52	6.89629E-05	4.16007E-06	0.001115416	0.250968652	4.556761926	2.559847661
123.525	6.99745E-05	4.15506E-06	0.001114406	0.250741251	4.556761927	2.559847661
123.53	7.15954E-05	4.14697E-06	0.00111277	0.250373324	4.556761928	2.559847661
123.535	7.16152E-05	4.14683E-06	0.001112742	0.250367019	4.556761929	2.559847661
123.54	7.17534E-05	4.14615E-06	0.001112605	0.250336147	4.556761931	2.559847661
123.545	7.28759E-05	4.14054E-06	0.001111473	0.250081462	4.556761932	2.559847661
123.55	7.3177E-05	4.139E-06	0.001111162	0.250011504	4.556761933	2.559847661
123.555	7.33348E-05	4.1382E-06	0.001111	0.249974968	4.556761935	2.559847661
123.56	7.37402E-05	4.13614E-06	0.001110585	0.249881561	4.556761936	2.559847661
123.565	7.3204E-05	4.13878E-06	0.001111117	0.250001272	4.556761937	2.559847661
123.57	7.3002E-05	4.13979E-06	0.00111132	0.250047031	4.556761939	2.559847661
123.575	7.35957E-05	4.1368E-06	0.001110717	0.249911388	4.55676194	2.559847661
123.58	7.29493E-05	4.13997E-06	0.001111357	0.250055379	4.556761942	2.559847661
123.585	7.19096E-05	4.14515E-06	0.001112404	0.250290888	4.556761943	2.559847661
123.59	7.23342E-05	4.14305E-06	0.001111979	0.250195311	4.556761944	2.559847661
123.595	7.26721E-05	4.14133E-06	0.001111632	0.250117127	4.556761946	2.559847661
123.6	7.19587E-05	4.14485E-06	0.001112343	0.250277143	4.556761947	2.559847661
123.605	7.1428E-05	4.14749E-06	0.001112875	0.250396931	4.556761948	2.559847661
123.61	7.10027E-05	4.14959E-06	0.001113301	0.250492706	4.556761949	2.559847661
123.615	7.04949E-05	4.15212E-06	0.001113812	0.250607694	4.556761951	2.559847661
123.62	7.05656E-05	4.15177E-06	0.001113742	0.250591857	4.556761952	2.559847661
123.625	7.0592E-05	4.15163E-06	0.001113712	0.250585215	4.556761953	2.559847661
123.63	7.03802E-05	4.15267E-06	0.001113923	0.250632742	4.556761954	2.559847661
123.635	7.05401E-05	4.15186E-06	0.001113759	0.250595856	4.556761956	2.559847661
123.64	7.0102E-05	4.15401E-06	0.001114193	0.250693418	4.556761957	2.559847661
123.645	6.90066E-05	4.15946E-06	0.001115294	0.250941126	4.556761958	2.559847661
123.65	6.8725E-05	4.16088E-06	0.001115581	0.251005826	4.556761959	2.559847661
123.655	6.88348E-05	4.16034E-06	0.001115471	0.250981032	4.55676196	2.559847661
123.66	6.86977E-05	4.16102E-06	0.001115609	0.251012056	4.556761962	2.559847661
123.665	6.88713E-05	4.16016E-06	0.001115436	0.250973012	4.556761963	2.559847661
123.67	6.91327E-05	4.15886E-06	0.001115172	0.250913668	4.556761964	2.559847661
123.675	6.94568E-05	4.15724E-06	0.001114845	0.250840019	4.556761965	2.559847661
123.68	6.99004E-05	4.155E-06	0.001114394	0.250738647	4.556761967	2.559847661
123.685	6.98237E-05	4.15536E-06	0.001114466	0.25075484	4.556761968	2.559847661
123.69	6.98525E-05	4.15521E-06	0.001114435	0.250747897	4.556761969	2.559847661
123.695	7.02226E-05	4.15334E-06	0.001114058	0.250663016	4.55676197	2.559847661
123.7	6.99404E-05	4.15472E-06	0.001114336	0.250725614	4.556761971	2.559847661
123.705	6.99819E-05	4.15451E-06	0.001114294	0.250716202	4.556761973	2.559847661
123.71	7.08757E-05	4.15003E-06	0.00111339	0.250512757	4.556761974	2.559847661
123.715	7.09166E-05	4.14977E-06	0.001113337	0.250500878	4.556761975	2.559847661
123.72	7.03742E-05	4.15244E-06	0.001113876	0.250622183	4.556761977	2.559847661
123.725	7.03652E-05	4.15246E-06	0.001113881	0.250623126	4.556761978	2.559847661
123.73	7.02485E-05	4.15301E-06	0.001113991	0.250647863	4.556761979	2.559847661
123.735	7.00075E-05	4.15418E-06	0.001114227	0.250700976	4.55676198	2.559847661
123.74	6.98819E-05	4.15476E-06	0.001114345	0.25072772	4.556761981	2.559847661
123.745	6.94787E-05	4.15673E-06	0.001114743	0.250817224	4.556761983	2.559847661
123.75	6.91959E-05	4.15811E-06	0.001115021	0.250879765	4.556761984	2.559847661
123.755	6.89522E-05	4.15928E-06	0.001115257	0.250932811	4.556761985	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
123.76	6.82091E-05	4.16293E-06	0.001115995	0.251098888	4.556761986	2.559847661
123.765	6.74798E-05	4.16653E-06	0.001116722	0.251262431	4.556761987	2.559847661
123.77	6.67556E-05	4.1701E-06	0.001117443	0.251424603	4.556761989	2.559847661
123.775	6.577E-05	4.17498E-06	0.001118428	0.251646322	4.55676199	2.559847661
123.78	6.51216E-05	4.17819E-06	0.001119076	0.251792119	4.556761991	2.559847661
123.785	6.44757E-05	4.18137E-06	0.001119718	0.251936632	4.556761992	2.559847661
123.79	6.33584E-05	4.1869E-06	0.001120836	0.252188075	4.556761993	2.559847661
123.795	6.24782E-05	4.19127E-06	0.001121718	0.252386481	4.556761994	2.559847661
123.8	6.16797E-05	4.19521E-06	0.001122515	0.252565942	4.556761995	2.559847661
123.805	6.0488E-05	4.20113E-06	0.001123709	0.252834593	4.556761996	2.559847661
123.81	5.954E-05	4.20584E-06	0.001124661	0.25304872	4.556761997	2.559847661
123.815	5.87341E-05	4.20983E-06	0.001125468	0.253230194	4.556761997	2.559847661
123.82	5.75351E-05	4.21578E-06	0.00112667	0.253500724	4.556761998	2.559847661
123.825	5.64988E-05	4.22094E-06	0.001127712	0.253735201	4.556761999	2.559847661
123.83	5.56996E-05	4.22492E-06	0.001128514	0.253915692	4.556762	2.559847661
123.835	5.46465E-05	4.23015E-06	0.001129572	0.2541537	4.556762001	2.559847661
123.84	5.38165E-05	4.23429E-06	0.001130408	0.254341808	4.556762001	2.559847661
123.845	5.32924E-05	4.2369E-06	0.001130934	0.254460077	4.556762002	2.559847661
123.85	5.22376E-05	4.24213E-06	0.001131992	0.254698089	4.556762003	2.559847661
123.855	5.10258E-05	4.24818E-06	0.001133213	0.254972818	4.556762003	2.559847661
123.86	5.05358E-05	4.25063E-06	0.001133709	0.255084436	4.556762004	2.559847661
123.865	5.01022E-05	4.25279E-06	0.001134144	0.255182303	4.556762005	2.559847661
123.87	4.91837E-05	4.25736E-06	0.001135067	0.255390105	4.556762005	2.559847661
123.875	4.8549E-05	4.26054E-06	0.001135708	0.25553436	4.556762006	2.559847661
123.88	4.81844E-05	4.26235E-06	0.001136075	0.255616942	4.556762007	2.559847661
123.885	4.75155E-05	4.26568E-06	0.001136748	0.255768323	4.556762007	2.559847661
123.89	4.71015E-05	4.26776E-06	0.001137167	0.255862605	4.556762008	2.559847661
123.895	4.70248E-05	4.26814E-06	0.001137243	0.25587976	4.556762008	2.559847661
123.9	4.64012E-05	4.27123E-06	0.001137867	0.256020154	4.556762009	2.559847661
123.905	4.55888E-05	4.27528E-06	0.001138685	0.256204224	4.556762009	2.559847661
123.91	4.5325E-05	4.2766E-06	0.001138952	0.256264298	4.55676201	2.559847661
123.915	4.50371E-05	4.27802E-06	0.00113924	0.256328963	4.55676201	2.559847661
123.92	4.43167E-05	4.2816E-06	0.001139963	0.256491655	4.556762011	2.559847661
123.925	4.36898E-05	4.28473E-06	0.001140595	0.256633941	4.556762011	2.559847661
123.93	4.35568E-05	4.2854E-06	0.001140731	0.256664382	4.556762012	2.559847661
123.935	4.35733E-05	4.28531E-06	0.001140711	0.256659988	4.556762012	2.559847661
123.94	4.30089E-05	4.28809E-06	0.001141274	0.256786562	4.556762013	2.559847661
123.945	4.20681E-05	4.29277E-06	0.001142218	0.256999068	4.556762013	2.559847661
123.95	4.14443E-05	4.29587E-06	0.001142846	0.257140249	4.556762014	2.559847661
123.955	4.07889E-05	4.29913E-06	0.001143504	0.257288318	4.556762014	2.559847661
123.96	4.00715E-05	4.30271E-06	0.001144226	0.257450845	4.556762014	2.559847661
123.965	3.97462E-05	4.30433E-06	0.001144553	0.25752451	4.556762015	2.559847661
123.97	3.91468E-05	4.3073E-06	0.001145154	0.257659643	4.556762015	2.559847661
123.975	3.83848E-05	4.3111E-06	0.001145921	0.257832325	4.556762016	2.559847661
123.98	3.82177E-05	4.31194E-06	0.00114609	0.257870139	4.556762016	2.559847661
123.985	3.75883E-05	4.31505E-06	0.001146718	0.25801147	4.556762016	2.559847661
123.99	3.63851E-05	4.32104E-06	0.001147928	0.25828383	4.556762017	2.559847661
123.995	3.59145E-05	4.3234E-06	0.001148404	0.25839098	4.556762017	2.559847661
124	3.54373E-05	4.32576E-06	0.001148882	0.258498486	4.556762017	2.559847661
124.005	3.44575E-05	4.33064E-06	0.001149868	0.258720208	4.556762018	2.559847661
124.01	3.3806E-05	4.33389E-06	0.001150524	0.258867979	4.556762018	2.559847661
124.015	3.2963E-05	4.33809E-06	0.001151372	0.259058774	4.556762018	2.559847661
124.02	3.21249E-05	4.34229E-06	0.00115222	0.259249428	4.556762018	2.559847661
124.025	3.19973E-05	4.34294E-06	0.00115235	0.259278839	4.556762019	2.559847661
124.03	3.12597E-05	4.3466E-06	0.00115309	0.259445229	4.556762019	2.559847661
124.035	3.01408E-05	4.35219E-06	0.00115422	0.259699458	4.556762019	2.559847661
124.04	3.00608E-05	4.35262E-06	0.001154306	0.259718799	4.556762019	2.559847661
124.045	2.97082E-05	4.35437E-06	0.001154659	0.259798234	4.55676202	2.559847661
124.05	2.86497E-05	4.35965E-06	0.001155726	0.260038426	4.55676202	2.559847661
124.055	2.83608E-05	4.36112E-06	0.001156024	0.260105337	4.55676202	2.559847661
124.06	2.83332E-05	4.36127E-06	0.001156053	0.260111987	4.55676202	2.559847661
124.065	2.79714E-05	4.36308E-06	0.001156419	0.260194237	4.55676202	2.559847661
124.07	2.77568E-05	4.36416E-06	0.001156636	0.260243194	4.556762021	2.559847661
124.075	2.72025E-05	4.36692E-06	0.001157194	0.260368748	4.556762021	2.559847661
124.08	2.6551E-05	4.37019E-06	0.001157855	0.260517347	4.556762021	2.559847661
124.085	2.67463E-05	4.36925E-06	0.001157664	0.260474483	4.556762021	2.559847661
124.09	2.70199E-05	4.36788E-06	0.001157389	0.260412455	4.556762021	2.559847661
124.095	2.66238E-05	4.36985E-06	0.001157786	0.260501854	4.556762022	2.559847661
124.1	2.62635E-05	4.37166E-06	0.001158152	0.260584092	4.556762022	2.559847661
124.105	2.63179E-05	4.3714E-06	0.0011581	0.260572393	4.556762022	2.559847661
124.11	2.63681E-05	4.37115E-06	0.001158049	0.260561081	4.556762022	2.559847661
124.115	2.62827E-05	4.37158E-06	0.001158135	0.260580428	4.556762022	2.559847661
124.12	2.62368E-05	4.37181E-06	0.001158181	0.26059076	4.556762022	2.559847661
124.125	2.60087E-05	4.37294E-06	0.00115841	0.260642163	4.556762023	2.559847661
124.13	2.56734E-05	4.37462E-06	0.001158748	0.260718404	4.556762023	2.559847661
124.135	2.59009E-05	4.37349E-06	0.001158522	0.260667448	4.556762023	2.559847661
124.14	2.622E-05	4.37189E-06	0.001158198	0.260594489	4.556762023	2.559847661
124.145	2.58041E-05	4.37394E-06	0.001158612	0.26068773	4.556762023	2.559847661
124.15	2.5391E-05	4.376E-06	0.001159028	0.260781351	4.556762023	2.559847661
124.155	2.54047E-05	4.37593E-06	0.001159014	0.260778218	4.556762024	2.559847661
124.16	2.53263E-05	4.37631E-06	0.001159091	0.260795576	4.556762024	2.559847661
124.165	2.5264E-05	4.37661E-06	0.001159152	0.260809257	4.556762024	2.559847661
124.17	2.50622E-05	4.3776E-06	0.001159351	0.260854077	4.556762024	2.559847661
124.175	2.44935E-05	4.38042E-06	0.001159921	0.260982313	4.556762024	2.559847661
124.18	2.42344E-05	4.38172E-06	0.001160183	0.261041097	4.556762024	2.559847661
124.185	2.42574E-05	4.38159E-06	0.001160158	0.261035514	4.556762024	2.559847661
124.19	2.40418E-05	4.38265E-06	0.001160372	0.261083597	4.556762025	2.559847661
124.195	2.37129E-05	4.38427E-06	0.001160699	0.261157308	4.556762025	2.559847661
124.2	2.31722E-05	4.38695E-06	0.00116124	0.261279013	4.556762025	2.559847661
124.205	2.26206E-05	4.3897E-06	0.001161795	0.261403863	4.556762025	2.559847661
124.21	2.25518E-05	4.39004E-06	0.001161864	0.261419363	4.556762025	2.559847661
124.215	2.23738E-05	4.39091E-06	0.001162039	0.261458707	4.556762025	2.559847661
124.22	2.17302E-05	4.3941E-06	0.001162683	0.261603719	4.556762025	2.559847661
124.225	2.11807E-05	4.39683E-06	0.001163236	0.261728	4.556762026	2.559847661
124.23	2.08486E-05	4.39849E-06	0.00116357	0.26180317	4.556762026	2.559847661
124.235	2.07E-05	4.39922E-06	0.001163718	0.261836634	4.556762026	2.559847661
124.24	2.05274E-05	4.40006E-06	0.001163888	0.261874881	4.556762026	2.559847661
124.245	1.98474E-05	4.40343E-06	0.001164569	0.262027925	4.556762026	2.559847661
124.25	1.91229E-05	4.40704E-06	0.001165298	0.262191979	4.556762026	2.559847661
124.255	1.88449E-05	4.40843E-06	0.001165578	0.262255121	4.556762026	2.559847661
124.26	1.85671E-05	4.40981E-06	0.001165857	0.262317843	4.556762026	2.559847661
124.265	1.83201E-05	4.41104E-06	0.001166106	0.262373778	4.556762026	2.559847661
124.27	1.82838E-05	4.41122E-06	0.001166141	0.262381673	4.556762026	2.559847661
124.275	1.79924E-05	4.41265E-06	0.001166431	0.262446935	4.556762026	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Layer 1 Output

Time (s)	Acceleration (g)	Strain (%)	Shear Stress Ratio (Shear/Eff. Vert.)	Shear Stress(psf)	Arias intensity (ft/s)	Housner Intensity (ft/s)
124.28	1.75524E-05	4.41484E-06	0.001166872	0.262546303	4.556762027	2.559847661
124.285	1.73838E-05	4.41568E-06	0.001167041	0.262584313	4.556762027	2.559847661
124.29	1.72134E-05	4.41651E-06	0.00116721	0.262622344	4.556762027	2.559847661
124.295	1.69205E-05	4.41796E-06	0.001167503	0.262688149	4.556762027	2.559847661
124.3	1.67122E-05	4.41899E-06	0.00116771	0.262734716	4.556762027	2.559847661
124.305	1.63244E-05	4.4209E-06	0.001168096	0.262821584	4.556762027	2.559847661
124.31	1.56048E-05	4.42447E-06	0.001168818	0.262983956	4.556762027	2.559847661
124.315	1.51273E-05	4.42686E-06	0.0011693	0.263092421	4.556762027	2.559847661
124.32	1.52441E-05	4.42628E-06	0.001169183	0.26306622	4.556762027	2.559847661
124.325	1.54647E-05	4.42517E-06	0.001168958	0.263015504	4.556762027	2.559847661
124.33	1.52577E-05	4.42617E-06	0.00116916	0.26306104	4.556762027	2.559847661
124.335	1.46899E-05	4.42898E-06	0.001169727	0.263188618	4.556762027	2.559847661
124.34	1.41946E-05	4.43143E-06	0.001170224	0.263300342	4.556762027	2.559847661
124.345	1.40328E-05	4.43223E-06	0.001170385	0.263336571	4.556762027	2.559847661
124.35	1.38943E-05	4.4329E-06	0.00117052	0.263366991	4.556762027	2.559847661
124.355	1.34496E-05	4.43509E-06	0.001170963	0.263466583	4.556762027	2.559847661
124.36	1.29995E-05	4.43732E-06	0.001171412	0.263567744	4.556762027	2.559847661
124.365	1.26578E-05	4.439E-06	0.001171752	0.263644121	4.556762028	2.559847661
124.37	1.19817E-05	4.44234E-06	0.001172427	0.263795976	4.556762028	2.559847661
124.375	1.11363E-05	4.44654E-06	0.001173275	0.263986931	4.556762028	2.559847661
124.38	1.08005E-05	4.44822E-06	0.001173613	0.264063014	4.556762028	2.559847661
124.385	1.08002E-05	4.4482E-06	0.00117361	0.264062325	4.556762028	2.559847661
124.39	1.03619E-05	4.45035E-06	0.001174044	0.264159992	4.556762028	2.559847661

Period (sec)	PSA (g)

Frequency (Hz)	Fourier Amplitude (g-sec)	Fourier Amplitude Ratio

Profile Output

Effective Stress	
Depth (ft)	Stress (psf)
2.5	225
7.5	675
12.5	1125
17.5	1575
22.5	2025
27.5	2475
32.5	2925
37.5	3375
42.5	3825
47.5	4275
52.5	4725
57.5	5175
62.5	5625
67.5	6075
72.5	6525
77.5	6975
82.5	7425
87.5	7875
92.5	8325
97.5	8775
102.5	9225
107.5	9675
112.5	10125
117.5	10575
122.5	11025
127.5	11475
132.5	11925
137.5	12375
142.5	12825
147.5	13275
152.5	13725
157.5	14175
163	14670
168	15160
172.5	15655
177.5	16049
182.5	16287
187.5	16525
192.5	16763

PGA (g)	
Depth (ft)	PGA (g)
0	0.158166
5	0.144013
10	0.141639
15	0.146525
20	0.146287
25	0.14341
30	0.153583
35	0.13824
40	0.141919
45	0.136727
50	0.1362
55	0.154363
60	0.156375
65	0.175746
70	0.161308
75	0.167631
80	0.150121
85	0.159966
90	0.142577
95	0.125694
100	0.139341
105	0.127819
110	0.135227
115	0.148372
120	0.146787
125	0.153395
130	0.180751
135	0.152231
140	0.174391
145	0.15544
150	0.174258
155	0.182257
160	0.149036
166	0.150762
170	0.155749
175	0.136877
180	0.132135
185	0.141173
190	0.121762

Maximum	
Depth (ft)	Displacement (ft)
0	0.054983
5	0.054958
10	0.054875
15	0.05473
20	0.054523
25	0.05424
30	0.053876
35	0.05342
40	0.052862
45	0.052199
50	0.051428
55	0.050548
60	0.049552
65	0.048438
70	0.047206
75	0.045879
80	0.04444
85	0.042882
90	0.041249
95	0.039568
100	0.038015
105	0.036341
110	0.03455
115	0.03264
120	0.030624
125	0.028569
130	0.026522
135	0.024439
140	0.022286
145	0.020046
150	0.01768
155	0.015183
160	0.012495
166	0.009004
170	0.007859
175	0.006372
180	0.004838
185	0.003249
190	0.001625

Max. Strain	
Depth (ft)	Strain (%)
2.5	0.000817
7.5	0.0024
12.5	0.003797
17.5	0.005252
22.5	0.007025
27.5	0.008548
32.5	0.010354
37.5	0.01246
42.5	0.014723
47.5	0.016946
52.5	0.019104
57.5	0.021498
62.5	0.024032
67.5	0.026356
72.5	0.02882
77.5	0.031735
82.5	0.035162
87.5	0.038693
92.5	0.042096
97.5	0.044824
102.5	0.046733
107.5	0.048035
112.5	0.048887
117.5	0.048851
122.5	0.048508
127.5	0.048209
132.5	0.04719
137.5	0.048166
142.5	0.050091
147.5	0.052147
152.5	0.053758
157.5	0.055048
163	0.058439
168	0.02863
172.5	0.029796
177.5	0.0308
182.5	0.031795
187.5	0.032487
192.5	0.032504

Max. Stress Ratio	
Depth (ft)	Shear Stress Ratio (Shear/Eff. Vert.)
2.5	0.158987963
7.5	0.147618247
12.5	0.13521454
17.5	0.128707814
22.5	0.128418545
27.5	0.123654594
32.5	0.122116636
37.5	0.122223145
42.5	0.122419562
47.5	0.121411949
52.5	0.119610878
57.5	0.118512892
62.5	0.117507855
67.5	0.115575095
72.5	0.113920751
77.5	0.113144561
82.5	0.113071318
87.5	0.112751749
92.5	0.111895553
97.5	0.109925879
102.5	0.106970546
107.5	0.103519127
112.5	0.099854748
117.5	0.095567237
122.5	0.091322523
127.5	0.087450958
132.5	0.083187898
137.5	0.081051994
142.5	0.079858913
147.5	0.078800701
152.5	0.077431951
157.5	0.075893803
163	0.075590469
168	0.076267781
172.5	0.077238732
177.5	0.078413443
182.5	0.07960648
187.5	0.08023385
192.5	0.079676037

Mobilized Shear Strength

Layer	Shear Strength (psf)	Friction Angle (deg)
1	35.8	9
2	99.6	8.4
3	152.1	7.7
4	202.7	7.3
5	260	7.3
6	306	7
7	357.2	7
8	412.5	7
9	468.3	7
10	519	6.9
11	565.2	6.8
12	613.3	6.8
13	661	6.7
14	702.1	6.6
15	743.3	6.5
16	789.2	6.5
17	839.6	6.5
18	887.9	6.4
19	931.5	6.4
20	964.6	6.3
21	986.8	6.1
22	1001.5	5.9
23	1011	5.7
24	1010.6	5.5
25	1006.8	5.2
26	1003.5	5
27	992	4.8
28	1003	4.6
29	1024.2	4.6
30	1046.1	4.5
31	1062.8	4.4
32	1075.8	4.3
33	1108.9	4.3
34	1156.2	4.4
35	1209.2	4.4
36	1258.5	4.5
37	1296.6	4.6
38	1325.9	4.6
39	1335.6	4.6

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Attachment G2:

Abrahamson, N., Addo, K., and Silva, W., 2020, Hard-rock to soft-rock site factors for NGA-East:

Hard-Rock to Soft-Rock Site Factors for NGA-East

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1 Introduction

The NGA-East project developed ground-motion models (GMMs) for a reference hard-rock site condition with V_{S30}=3000 m/s and $\kappa_0 = 0.006sec$ (Goulet et al., 2018). For application to site conditions other than hard rock, site factors are needed to adjust the NGA-East hard-rock GMMs to soft-rock or soil site conditions. Site factors developed to be applicable to the NGA-East hard-rock GMMs were subsequently developed by an expert panel (Stewart et al., 2020). These site factors have been used by the U.S. Geological survey in the computation of the recent U.S. national uniform hazard maps for CENA sites.

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Using the Stewart et al. (2020) site factors to estimate response spectra for soft-rock conditions (V_{S30}=760 m/s) leads to a large increase in the short-period content compared to the NGA-W2 GMMs for the same site condition. For example, Figure 1 shows the pseudo spectral acceleration (PSA) for a magnitude 6 earthquake at a distance of 20 km using the central NGA-East GMM for hard-rock conditions, the central NGA-East GMM with the median Stewart et al. (2020) site factors for V_{S30}=760 m/s, and the average NGA-W2 for V_{S30}=760 m/s. The short-period ($T < 0.1$) PSA values for V_{S30} = 760 m/s for a CENA site are 3-5 times larger than for a Western North America (WNA) site with the same V_{S30}; however, as will be shown later, this large increase is not seen in the NGA-East data for soft-rock conditions.

The key issue is that the site terms used by the NGA-East GMM developers to adjust the NGA-East ground-motion data to hard-rock site conditions were developed independently of the site terms used to adjust the NGA-East hard-rock GMM back to soft-rock conditions. Stewart et al. (2020) noted that the SR/HR site factors should be developed as part of the GMM rather than being developed in an independent study. If the site factors are developed independently of the GMMs, there can be inconsistencies that can lead to a bias in the computed ground motions.

The objective of this study is to check the consistency between the soft-rock ground-motion data in the NGA-East database and the NGA-East hard-rock GMMs with the Stewart et al. (2020) SR/HR site factors. In other words, if we close the loop, do the Stewart et al. (2020) soft-rock / hard-rock (SR/HR) site factors reflect the inverse of the HR/SR site factors used in the development of the NGA-East GMMs? In developing site factors to apply to the NGA-East hard-rock GMMs, the question is not what is the correct site factors between a hard-rock site and a soft-rock site in eastern North America but what site factors should be applied to the NGA-East hard-rock GMMs that will be consistent with the methods used by the developers of the NGA-East GMMs to adjust the observed ground motions on soil and soft-rock conditions to hard-rock conditions.

2 HR/SR factors used by NGA-East GMM Developers

In the NGA-East project, the reference hard-rock site condition (V_{S30}=3000 m/s and κ_0 =0.006 sec) was fixed, but the available empirical ground-motion data set compiled by the NGA-East project (Goulet et al., 2014) was sparse in terms of ground-motion data from hard-rock sites. For example, for rupture distances less than 150 km, 20% of the sites have $1500 \geq V_{S30} \leq 2000$ m/s and there are no sites with $V_{S30} > 2000$ m/s. The distributions of V_{S30} for sites at distances less than 100 km and less than 150 km are shown in Figure 2. Therefore, the developers of the NGA-East seed GMMs had to adjust either the observed ground motions or their GMMs for soft-rock conditions to the specified reference hard-rock site condition.

The approach for converting the ground motions to the reference hard-rock condition was not specified in the NGA-East Project. The idea was that this conversion should be part of the epistemic uncertainty in the final GMM. Therefore, each developer of the seed GMMs selected their own method to adjust the as-recorded ground motions or their empirical model for soft-rock conditions to the reference hard-rock site condition (Goulet et al., 2015).

Because the NGA-East GMM developers used different approaches to correct the recorded ground motions to hard-rock conditions, and the seed models were later categorized into the 17 representative models, it is difficult to determine the HR/SR factors that were used in the individual NGA-East GMM. Therefore, in this paper, we simply evaluate how well the central NGA-East hard-rock GMM, combined with a set of SR/HR site factors, fits the observed CENA soft-rock ground-motion data.

3 Stewart et al Site Factors

The Stewart et al. (2020) site factors included a linear site term as well as a nonlinear site term. This evaluation is focused on the linear site term. In the Stewart et al. (2020) model, the linear

site term has the form:

$$f_{lin} = F_V(V_{S30}, T) + F_{760}(V_{S30}, T) \tag{1}$$

in which $F_{760}(T)$ is the linear site term to adjust the PSA values from the NGA-East hard-rock site condition (V_S=3000 m/s, κ_0=0.006 sec) to V_{S30}=760 m/s, and $f_V(V_{S30}, T)$ is the linear site term to adjust the PSA values from V_{S30}=760 m/s to the desired V_{S30} value.

Stewart et al. (2020) used analytical modeling of 1-D site response to estimate the F_{760} term. Multiple methods with alternative V_S profiles were considered. Two sets of site factors were developed for two alternative V_S profiles: F_{760_IMP} for V_S profiles with a strong impedance contrast leading to site resonance near T=0.1 sec; and F_{760_gr} for V_S profiles with a gradient rather than a strong impedance contrast.

The two sets of recommended F_{760} factors are shown in Figure 3. These give the median site terms with associated epistemic uncertainties judged to be appropriate by the expert panel. As noted in Stewart et al. (2020), a limitation for the F_{760} term is that it is only based on analytical modeling and does not include checks or constraints with observed ground motions.

4 Data Set

The ground-motion data sets in the CENA have grown significantly since the NGA-East database was compiled; however, the objective of this study is to simply check if the NGA-East soft-rock data, the hard-rock GMM, and the Stewart et al. (2020) SR/HR site factors are internally consistent. Therefore, we have not expanded the data set to include recent recordings that were not part of the initial NGA-east database.

The full NGA-East data set has 9382 recordings, but a much smaller subset is applicable for the evaluation of the compatibility of the NGA-East hard-rock GMMs and the Stewart et al. (2020) short-period site factors for soft-rock site conditions. The final NGA-East GMMs are non-parameteric tables of ground-motion values and are defined for $M \geq 4$, so only earthquakes with

magnitudes greater than or equal to 4.0 are used to avoid extrapolating the NGA-East GMMs to smaller magnitudes. To limit the distance effects on the site factors for PSA at short periods, the rupture distances are initially limited to 200 km. An evaluation of the distance effects on the site factors is given in the next section. The magnitude-distance distribution of the data with rupture distances less than 200 km and with V_{S30} between 500 and 1000 m/s are shown in Figure 4.

Based on the filtering applied to the recordings, the useable period range of the data is listed in the NGA-East data file. At very short periods (e.g. at periods much shorter than the peak in the PSA), the PSA values are not sensitive to the low-pass filters used in the data processing. This allows the useable period range to be extended to periods less than the filter corner period. For spectral periods less than 0.03 sec, the PSA values are considered reliable if the corner period of the low-pass filter is less than 0.025 sec.

5 Empirical SR/HR Site Factors from NGA-East

Empirical estimates of the SR/HR factors are computed using the residuals computed relative to the NGA-East central GMM for the reference hard-rock site condition. The residuals are plotted as functions of distance and V_{S30} in Figure 5. These figures show a distance trend in the short-period residuals with increased residuals at distances greater than 150 km. This distance dependence may reflect differences in the distance attenuation (e.g. effects of post-critical reflections from the Moho) or Q effects. To avoid complex distance attenuation and Q effects affecting the short-period site terms, distance limits of 70, 100, and 150 km are used.

To evaluate the site factors for the soft-rock (V_{S30} = 760 m/s) site condition, we selected two subsets of data based on the V_{S30} value: $650 < V_{S30} < 900$ m/s and $500 < V_{S30} < 1000$ m/s. The number of recordings in each subset (distance range of V_{S30} range) is listed in Table 1. For the shorter distance limits (70 and 100 km), the available empirical data is very sparse, with between 12 and 52 recordings, depending on the distance and V_{S30} range. With this criteria, the number of useable recordings is shown as a function of period in Figure 6.

For the narrow V_{S30} range (650 - 850 m/s), the individual residuals and the mean residuals at each spectral period are shown in Figure 7 for distance limits of 100 and 150 km. The empirical SR/HR factors show a peak in the amplification in the 0.1 to 0.15 sec range, consistent with the Stewart et al. (2020) F_{760_IMP} site factors. The SR/HR site factors at periods greater than 0.15 sec are also consistent with the Stewart et al. (2020) F_{760_IMP} site factors. At very short periods ($T < 0.075$ sec), there is a large discrepancy between the empirical SR/HR factors and the F_{760_IMP} factors with the empirical SR/HR factors being smaller by up to a factor of 2.

Using the wider V_{S30} range increases the number of recordings, but may introduce a bias due to the V_{S30} scaling. Therefore, for the subset that includes lower V_{S30} values ($500 < V_{S30} < 1000m/s$), the residuals computed with respect to the NGA-East hard-rock GMM are modified to include the effects of F_V scaling given in the Stewart et al. (2020) model.

$$resid_i(T) = Obs_i(T) - Med_{HR}(M_i, R_i, T) - f_V(V_{S30}, T) \tag{2}$$

Figure 8 shows the mean residuals for $R_{RUP} < 70km$ and for $R_{RUP} < 100km$. Using the larger datasets with the wider range of V_{S30}, the resonance at T=0.1 to T=0.15 sec is not seen, but the large overprediction of the short-period ground motion is still observed.

6 Analytical SR/HR Site Factors

Following a similar approach as used by Stewart et al. (2020), we used analytical modeling of the site response to estimate the SR/HR factor. The analytical site factors are estimated by the ratio of the surface motions from the site response for two profiles, the reference hard-rock site and the target soft-rock profile. The V_S profile for used for the soft-rock site is gradient profile shown in Figure 9.

The SR/HR ratio was computed for κ_0 values of 0.02, 0.03, and 0.04 sec for the soft-rock site. Figure 10 compares the analytical results to the empirical SR/HR terms based on the mean residuals using subsets of the data for four different V_{S30} and R_{RUP} ranges. For this V_S profile, a

κ_0 of 0.03 sec leads to site factors that are generally consistent with the empirical SR/HR factors at short periods from the NGA-East data. At long periods, the analytical site factors for gradient profile lead to less amplification than the empirical factors, indicating that there is a difference in the deeper V_S profile for the soft-rock site that is not captured in the gradient profile shown in Figure 9.

Figure 11 compares the two Stewart et al. (2020) models for F_{760} with the mean residuals for the different subsets of NGA-East data and with the analytical results of the PEA model with κ_0=0.03 sec. The Stewart et al. (2020) F_{760_IMP} model is consistent with the mean residuals from the narrow V_{S30} range (650-850 m/s) for periods between 0.1 and 0.5 sec, and it captures the site resonance at T=0.12 sec; however, at periods less than 0.1 sec, the F_{760_IMP} model significantly overestimates the mean residuals. The Stewart et al. (2020) F_{760_gr} model is consistent with the mean residuals from the wider V_{S30} range (500-1000 m/s) that do not show as strong of a resonance at T=0.12 sec, but leads to much larger amplification at periods between 0.3 and 0.6 sec. The F_{760_gr} model also significantly overestimates the mean residuals at very short periods.

7 Model for SR/HR site factors for NGA-East

Based on the comparisons with the empirical SR/HR site factors, new SR/HR site factors are proposed as shown in Figure 12. Similar to the Stewart et al. (2020) approach, two SR/HR factors are proposed: Model 1 based on the strong impedance contrast that leads to the peak in the SR/HR factors near T=0.1 sec and Model 2 based on the wider range of V_{S30} values that does not show the resonance at T=0.1 sec.

For Model 1, the SR/HR factors are based the analytical results periods of 0.02 to 0.2 sec. At periods less than 0.02 sec, the model is lower than the analytical factors so that when combined with the NGA-East hard-rock GMM, the shape of the spectrum at periods less than 0.02 sec is appropriate (i.e., the spectrum does not increase). At periods from 0.2 to 1 sec, Model 1 follows the Stewart et al. (2020) SR/HR factors.

For Model 2, the SR/HR factors at periods less than 0.08 sec capture the lower part of the empirical SR/HR range. For periods from 0.08 to 0.2 sec, the model is based on the empirical site factors for V_{S30} between 500 and 1000 m/s. At periods from 0.2 to 1.0 sec, Model 2 is based on the empirical SR/HR factors and the F_{760_gr} model for periods greater than 2 sec.

The SR/HR site factors for the two models are listed in Table 2. Using these site factors, the response spectra for the M=6, R_{RUP}-20 km scenario are shown in Figure 13 along with the NGA-East GMM for hard-rock sites and the NGA-W2 for soft-rock sites. Compared with Figure 1, soft-rock sites in the eastern U.S still show a large increase in the short-period ground motion compared to sites in the western U.S., but the difference is reduced for periods less than 0.1 sec.

8 Conclusions

At short periods ($T < 0.1$ sec), there is a large discrepancy between the Stewart et al. (2020) F_{760} site terms and the empirical F_{760} site terms. Most buildings are not sensitive to the PSA at periods less than 0.1 sec, but for structures, systems, and components that are sensitive to these short periods, such as safety-related equipment in nuclear power plants and concrete dams, the SR/HR site factors given by Stewart et al. (2020) are not applicable to the NGA-East GMMs. As an alternative, we recommend using the SR/HR site factors listed in Table 2 to adjust the NGA-East hard-rock GMMs.

The discrepancy in the short-period site terms is likely a result of the site terms for the NGA-East hard-rock GMMs being developed independent of the development of the hard-rock site GMM which also used term factors to adjust the observed ground-motion data to hard-rock conditions. One possible explanation for this mismatch of the NGA-East GMM and the site factors for short periods may be that the NGA-East GMMs overestimated the effect of kappa on the short-period ground motions for the hard-rock site condition with $\kappa = 0.006sec$, as suggested by the empirical analysis of hard-rock site residuals by Ktenidou and Abrahamson (2016). That is, the Stewart et al. (2020) F_{760} site terms may be appropriate for correcting hard-rock ground motions to soft-

rock conditions, but these site factors are not consistent with the NGA-East hard-rock ground motions due to the large kappa effects included in NGA-East GMMs.

If analytical modeling of the site response is used, the consistency between the site response and the factors used to adjust the soft-rock ground motions to hard-rock conditions should be carefully considered. Simply using the NGA-East hard-rock ground motions as inputs to a site-specific analysis with a thin soil profile will lead to the same overprediction of the short-period ground motions that was seen for the analytical modeling by Stewart et al. (2020).

This study addressed the consistency between the NGA-East hard-rock GMM and the Stewart et al. (2020) F_{760} site terms using the NGA-East data. The empirical evaluation of the SR/HR site factors should be extended to include the more recent ground-motion data in Eastern North America to develop improved empirical constraints on the site factors. In addition, future updates of the hard-rock ground-motion models for Eastern North America should re-evaluate the kappa scaling with an emphasis on separating how much of the lower kappa values for hard-rock sites represents damping and how much represents site amplification in the high-frequency range.

9 Acknowledgments

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10 References

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Table 1: Number of recordings in the NGA-East Data set for different subsets

Min Mag	Rupture Dist (km)	VS30 Range	Number of rec
4.0	0-70	500-1000	35
4.0	0-70	650-850	12
4.0	0-100	500-1000	52
4.0	0-100	650-850	20
4.0	0-150	500-1000	81
4.0	0-150	650-850	30

Table 2: Proposed models for F_{760} terms applicable to the NGA-East HR GMM

Period (sec)	Model 1	Model 2
0.01	-0.20	-0.30
0.015	-0.45	-0.55
0.02	-0.54	-0.62
0.03	-0.50	-0.56
0.04	-0.32	-0.45
0.05	-0.15	-0.30
0.075	0.25	0.05
0.1	0.58	0.35
0.12	0.82	0.39
0.15	0.67	0.35
0.2	0.419	0.30
0.25	0.332	0.25
0.3	0.270	0.25
0.4	0.209	0.25
0.5	0.175	0.25
0.75	0.127	0.25
1	0.095	0.25
1.5	0.083	0.25
2	0.079	0.25
3	0.073	0.25
4	0.066	0.25
5	0.064	0.25
10	0.056	0.25

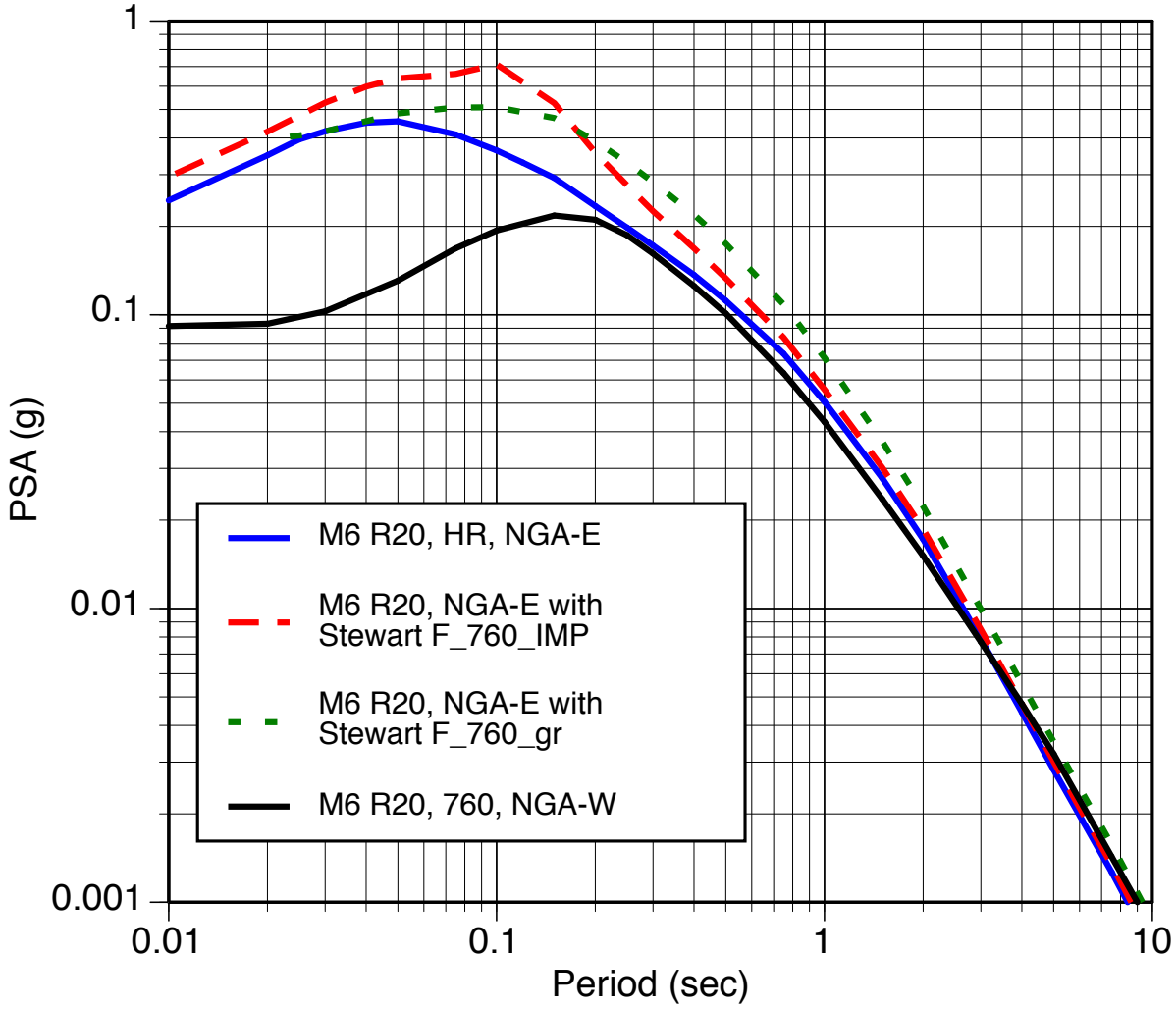

Figure 1: Comparison of PSA for M=6, R_{RUP}=20 km, and $V_{S30} = 760m/s$ for soft-rock sites in the western U.S. and in the Eastern U.S.

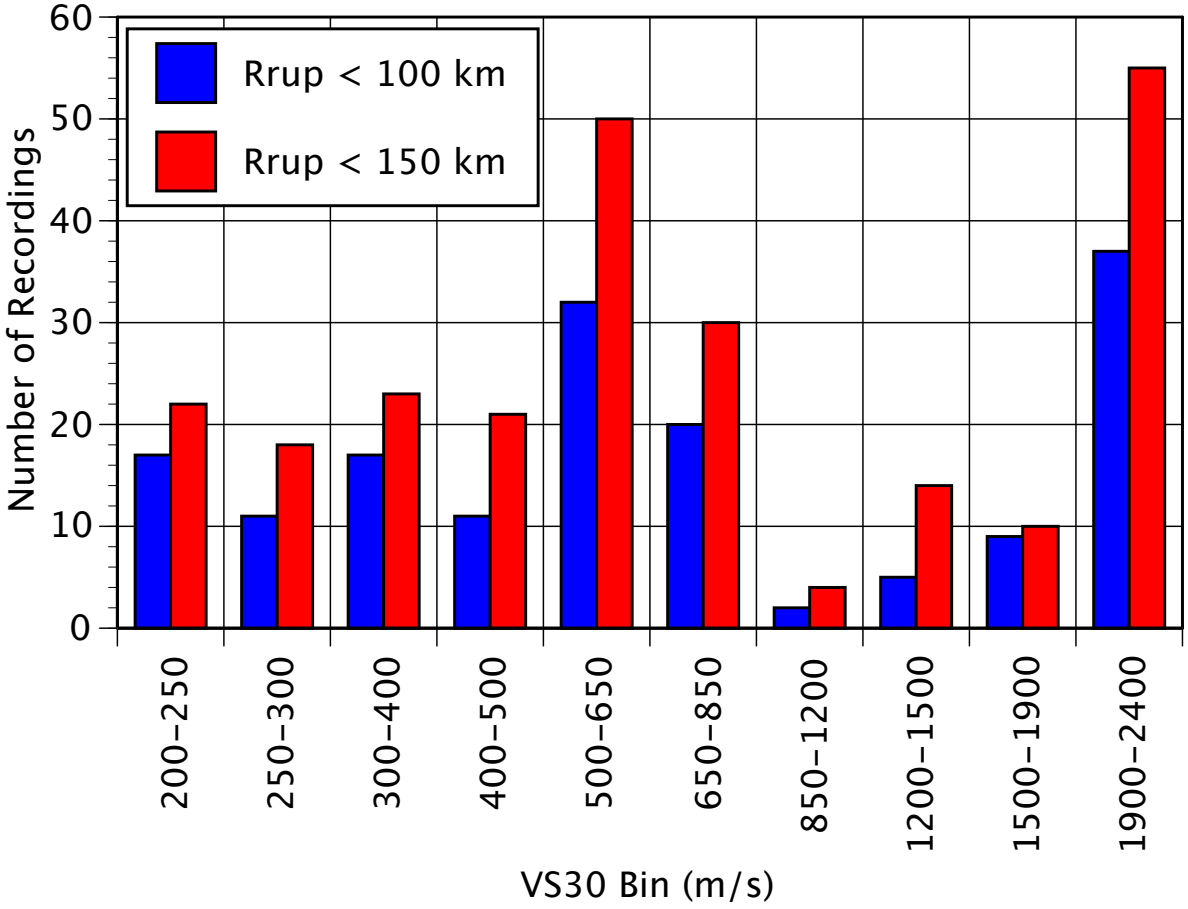

Figure 2: Distribution of the V_{S30} values for two distance ranges.

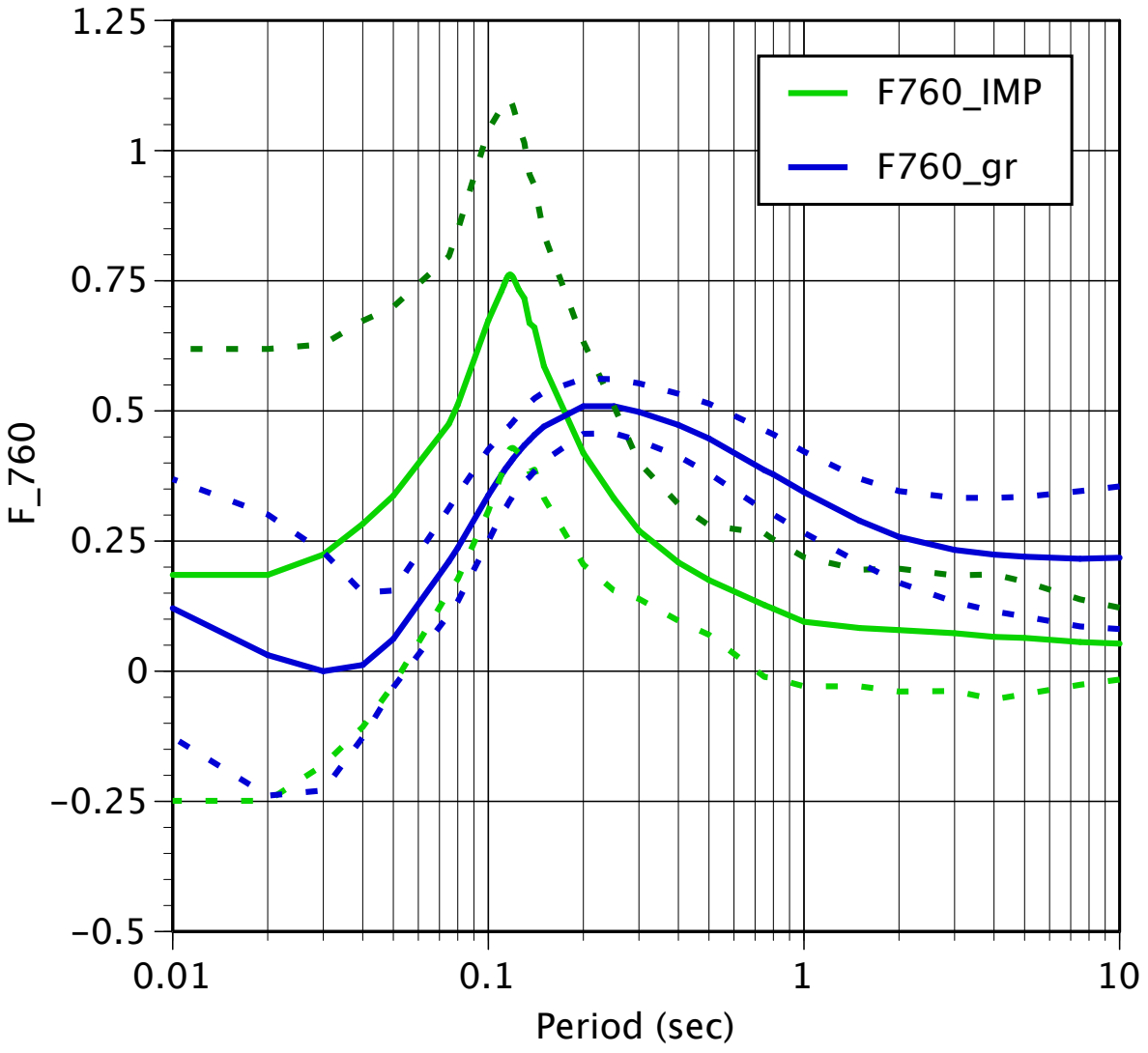

Figure 3: Consensus $F_{760} models from$Stewart et al. (2020).

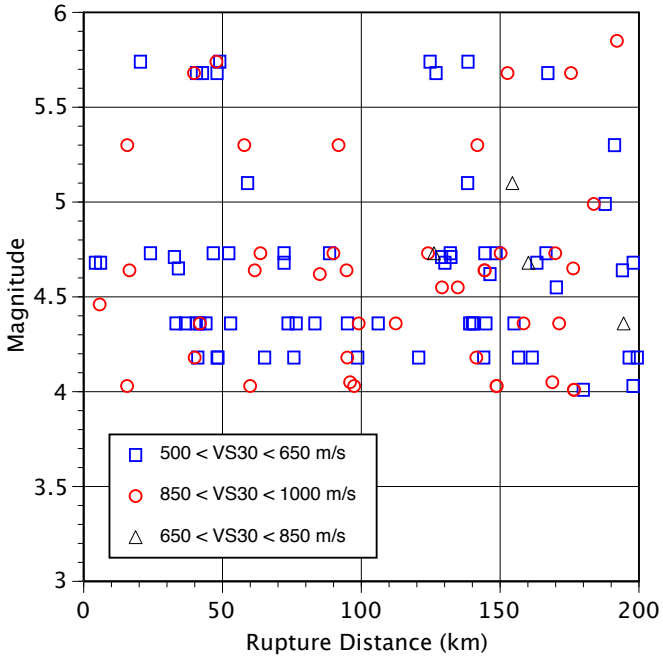

Figure 4: Magnitude-distance distribution of the NGA-East data set with $500 < V_{S30} < 1000$ m/s.

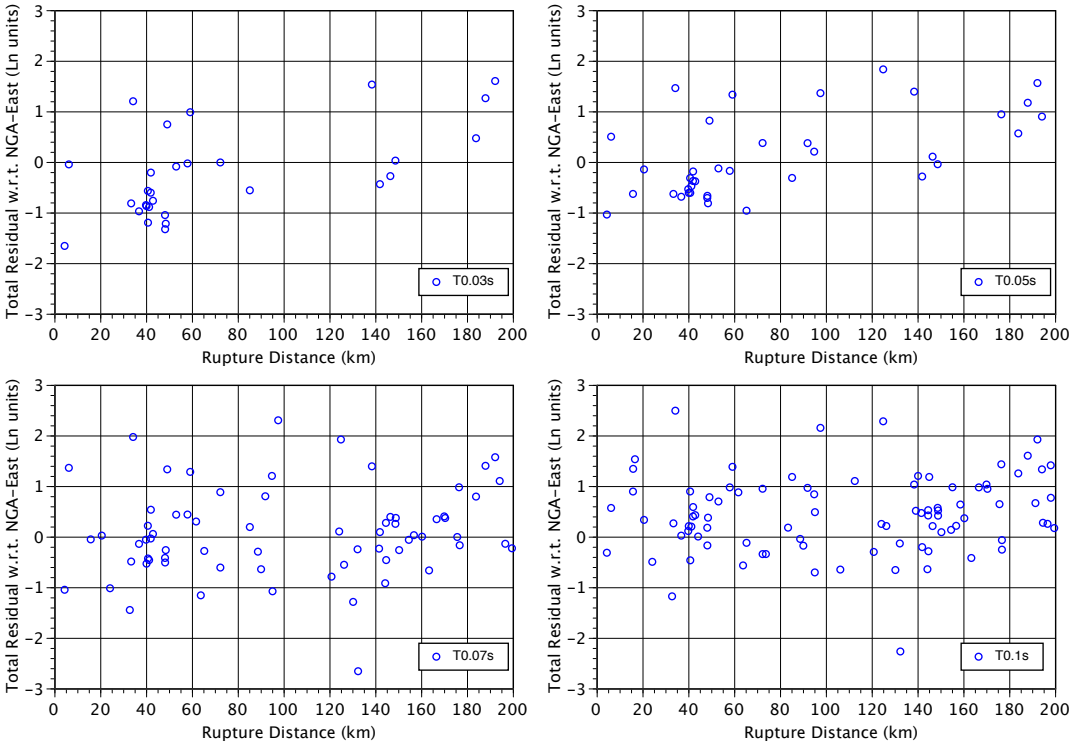

Figure 5: Distance dependence of the short-period residuals.

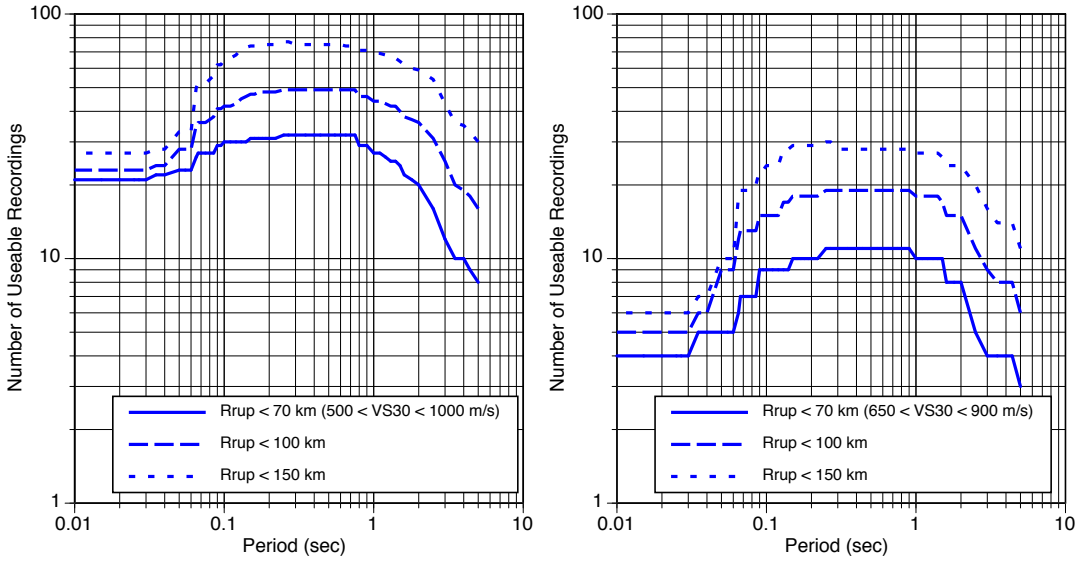

Figure 6: Period dependence of the useable number of recordings .

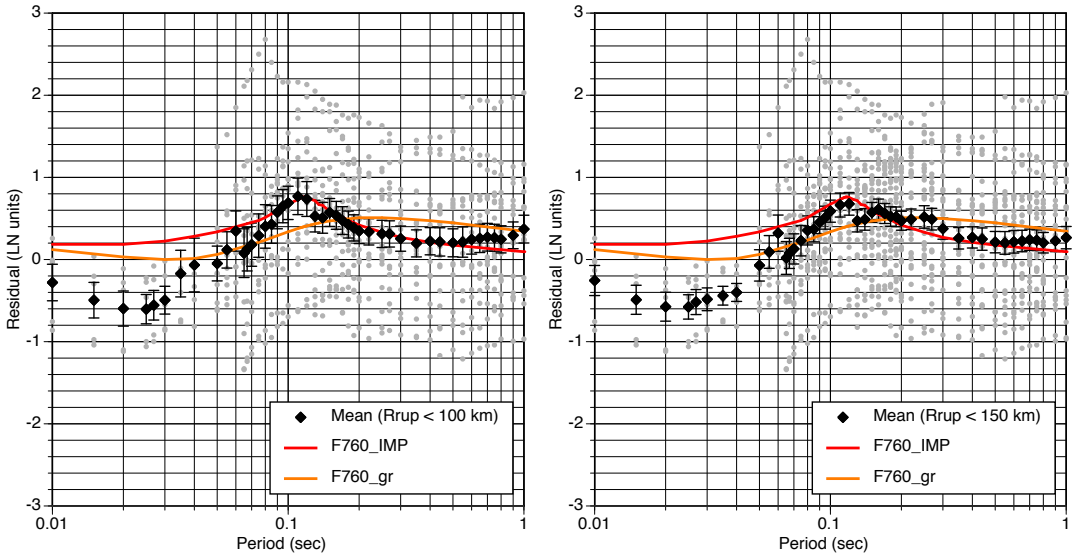

Figure 7: Period dependence of the residuals for $650 < VS30 < 900m/s$.

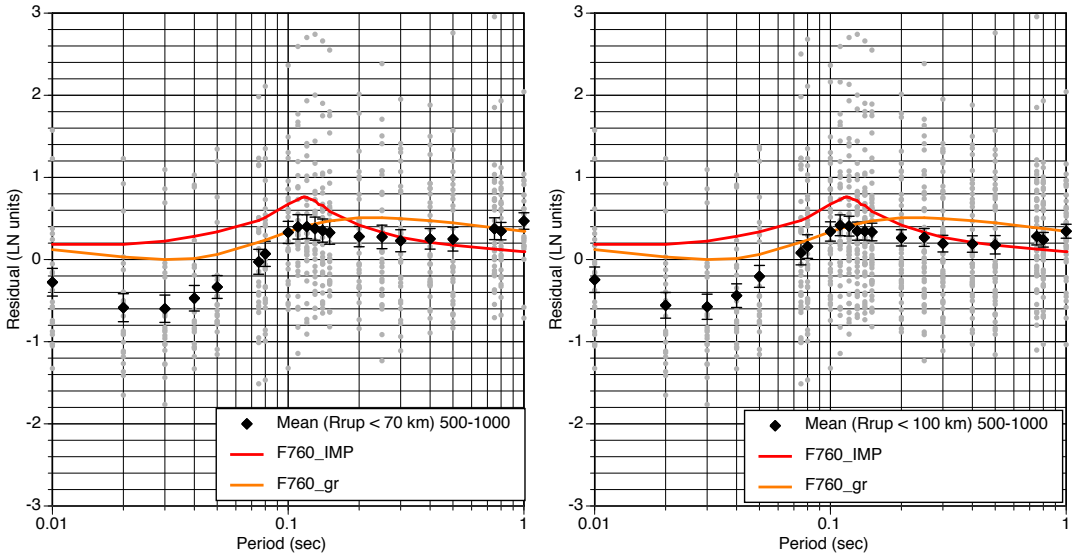

Figure 8: Period dependence of the residuals for $500 < VS30 < 1000 m/s$.

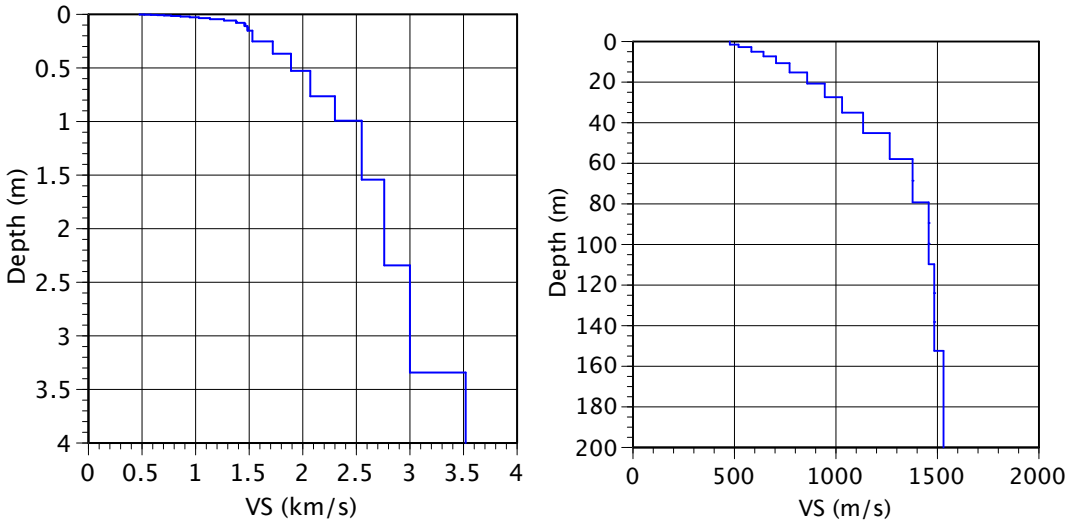

Figure 9: Deep and shallow parts of the V_S profile used for the soft-rock site with a V_S gradient.

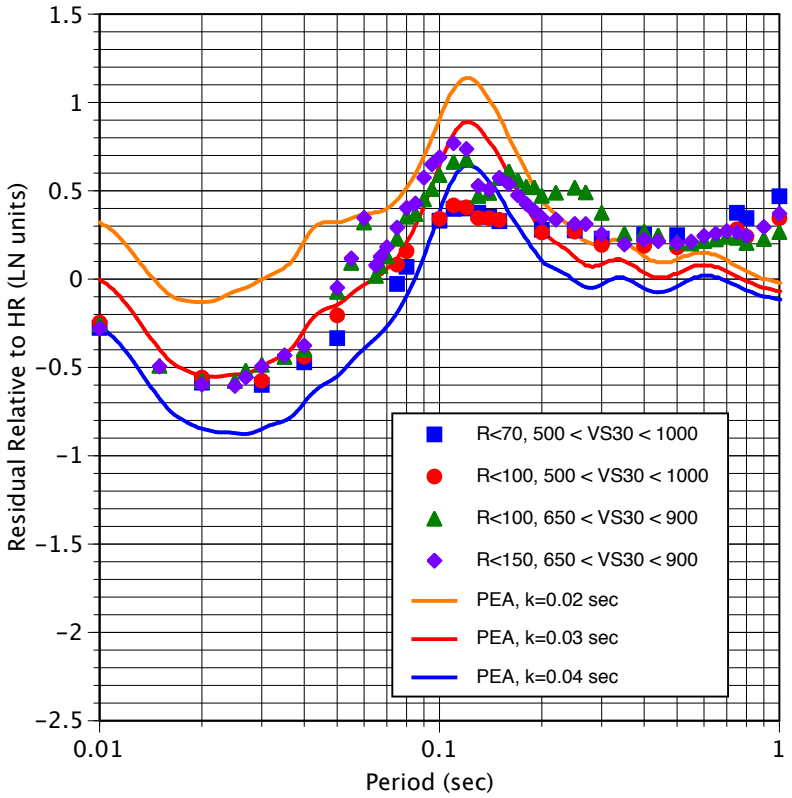

Figure 10: Comparison of empirical site terms with analytical modeling for three kappa values.

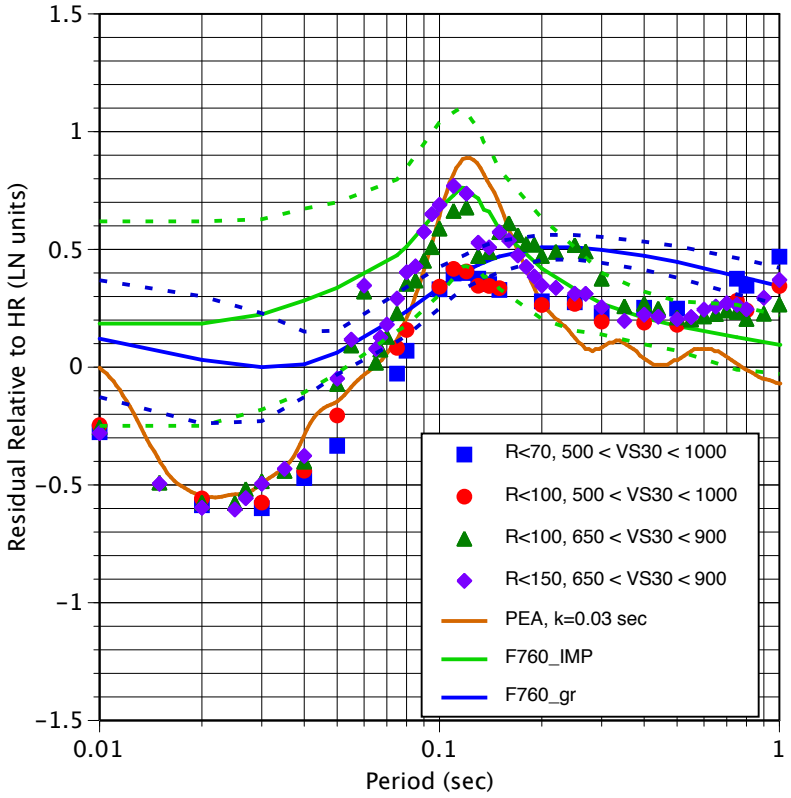

Figure 11: Comparison of the Stewart et al. (2020) model and the PEA simulations with the residuals.

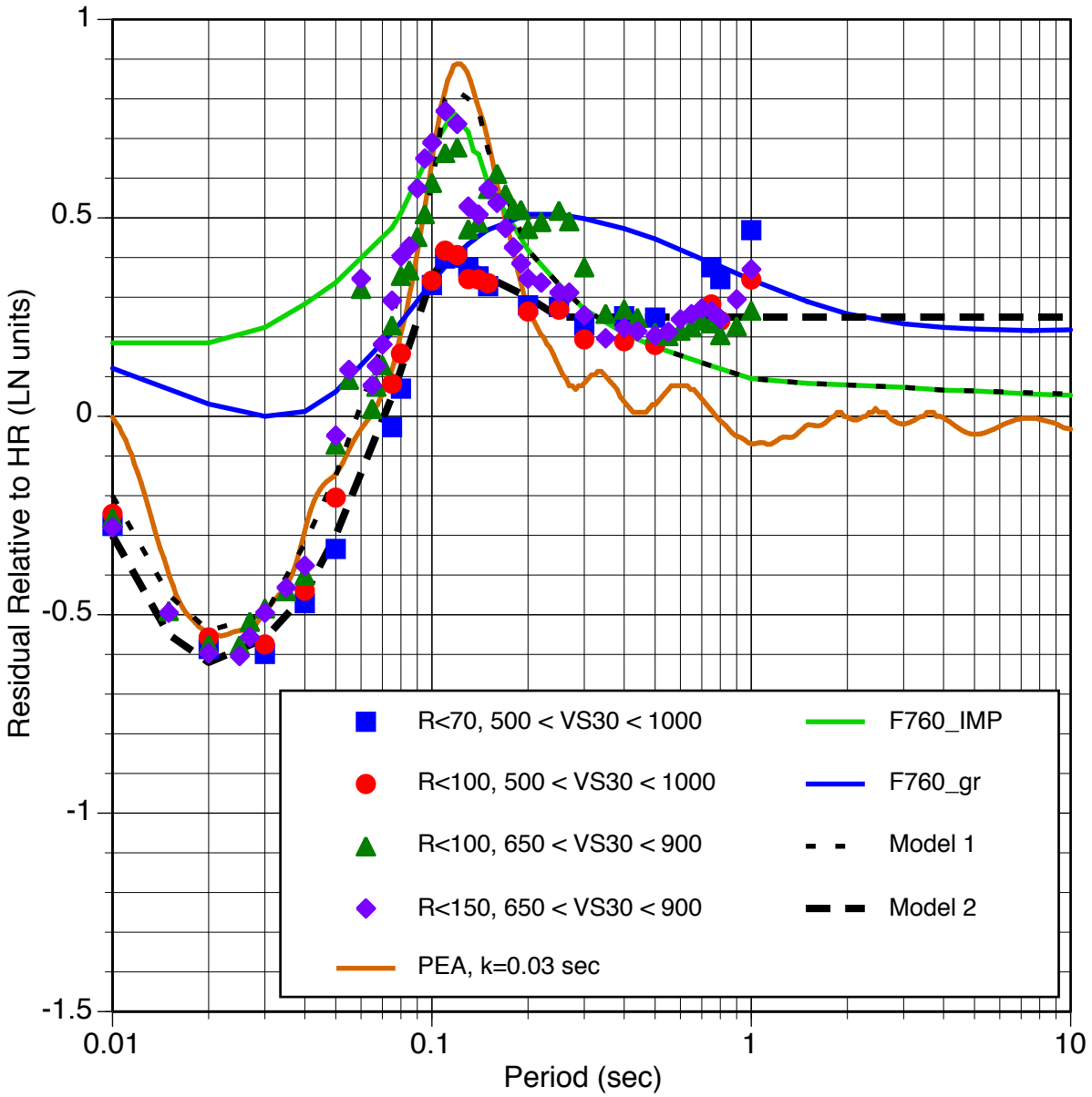

Figure 12: Comparison of the proposed models with the Stewart et al. (2020) median F_{760_IMP} and F_{760_gr} models.

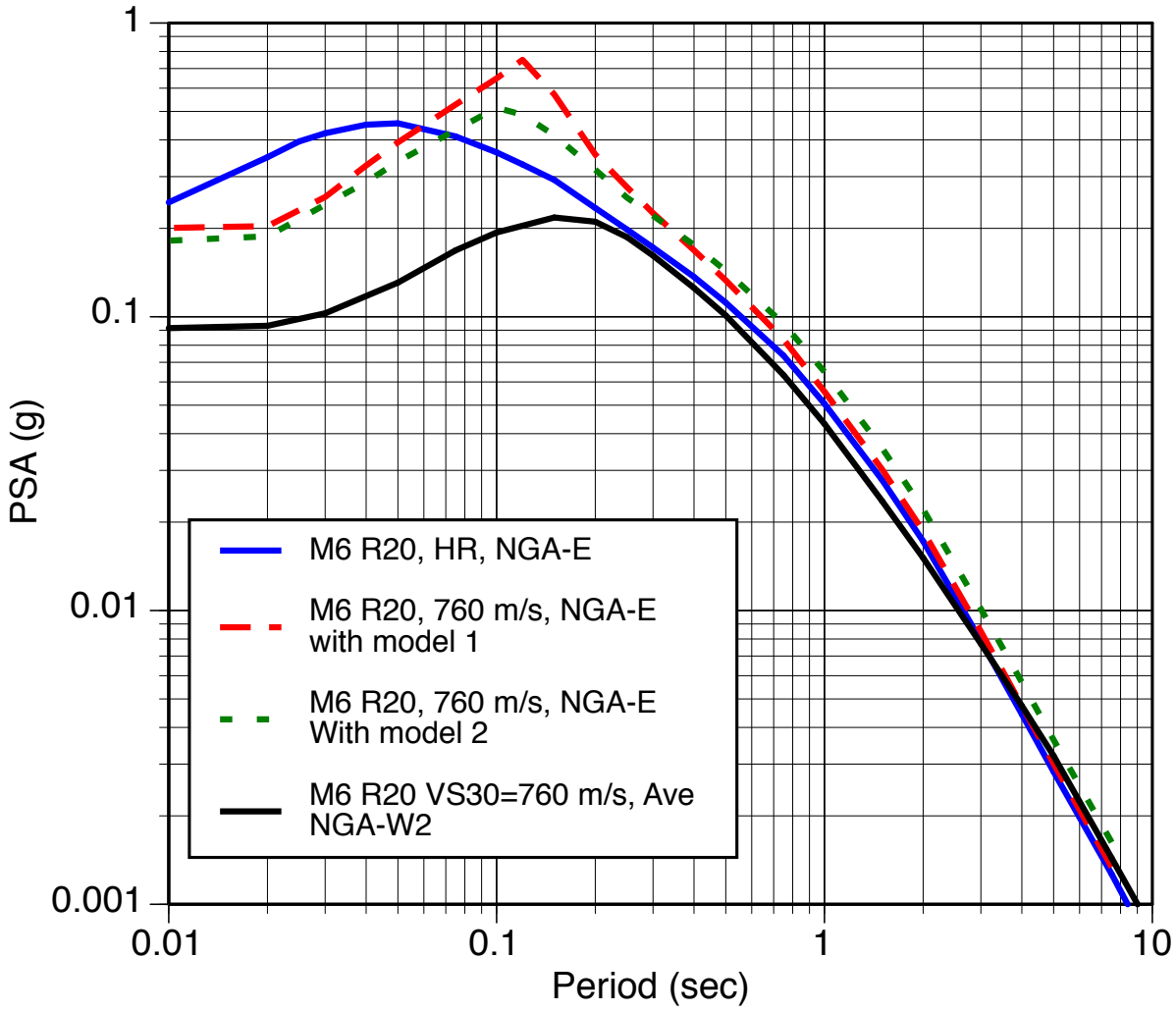

Figure 13: Comparison of PSA for M=6, R_{RUP}=20 km, and $V_{S30} = 760m/s$ for soft-rock sites in the western U.S. and in the Eastern U.S. using the proposed SR/HR site factors

BIG RIVERS ELECTRIC CORPORATION

D.B. WILSON GENERATING STATION

WILSON PHASE 1 LANDFILL CLOSURE PLAN
ATTACHMENT H

HENDERSON, KENTUCKY

JANUARY 12, 2021

SITE OVERVIEW MAP

DWG NO.	DWG DESCRIPTION
BGR-WCP-000	COVER SHEET
BGR-WCP-001	GENERAL NOTES
BGR-WCP-100	EXISTING CONDITIONS AERIAL
BGR-WCP-101	EXISTING CONDITIONS OVERALL
BGR-WCP-102	EXISTING CONDITIONS PROFILE PLAN
BGR-WCP-103	CENTER PROFILE AND SECTIONS
BGR-WCP-104	CENTER CROSS SECTIONS
BGR-WCP-105	CENTER CROSS SECTIONS (CONT.)
BGR-WCP-106	CENTER CROSS SECTIONS (CONT.)
BGR-WCP-107	CENTER CROSS SECTIONS (CONT.)
BGR-WCP-108	PERIMETER PROFILE
BGR-WCP-109	PERIMETER SECTIONS
BGR-WCP-110	STORMWATER PIPE PROFILES A-D
BGR-WCP-111	STORMWATER PIPE PROFILES E-I
BGR-WCP-112	EXISTING CONDITIONS DITCH PLAN
BGR-WCP-113	WEST DITCH PROFILE AND SECTIONS
BGR-WCP-114	EAST DITCH PROFILE AND SECTIONS
BGR-WCP-115	NORTH DITCH PROFILE AND SECTIONS
BGR-WCP-116	SOUTH DITCH PROFILE AND SECTIONS
BGR-WCP-200	PROPOSED CONDITIONS OVERALL
BGR-WCP-300	DETAILS I
BGR-WCP-301	DETAILS II
BGR-WCP-302	DETAILS III
BGR-WCP-303	DETAILS IV

PREPARED FOR:

BIG RIVERS ELECTRIC CORPORATION
201 3RD STREET
HENDERSON, KY 42420
CONTACT: TRAVIS SNEED
PHONE: 270-844-5207

PREPARED BY:

AECOM
BRIAN COLE, P.E.
500 WEST JEFFERSON ST., SUITE 1600
LOUISVILLE, KY 40202
PHONE: (502) 569-2301

0 1000 2000 3000
GRAPHIC SCALE (IN FEET)

REV	DATE	JOB NO.	PROJECT TYPE	DES	DFTR	CHKD	ENG	APPD	DESCRIPTION

AECOM

SEAL

STATE OF KENTUCKY · MICHAEL BRIAN COLE · 28910 · LICENSED PROFESSIONAL ENGINEER
1/20/2021

TITLE
COVER SHEET
BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR
D.B. WILSON GENERATING STATION

Big Rivers ELECTRIC CORPORATION — Your Touchstone Energy® Cooperative

SCALE: AS SHOWN	DES: JCV	
DWG TYPE: .DWG	DFTR: JCV	
JOB NO: 60620035	CHKD: DS	
DATE: 01/20/2021	ENGR: MBC	
FILENAME:	APPD: MBC	
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	**BGR-WCP-000**	**A**

REV. A

LEGEND

CCR LANDFILL BOUNDARY

PHASE 1 CCR LANDFILL BOUNDARY (APPROXIMATE)

N

0 250 500 750

GRAPHIC SCALE (IN FEET)

AECOM

TITLE

EXISTING CONDITIONS AERIAL

BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

STATE OF KENTUCKY — MICHAEL BRIAN CLAY — 28970 — LICENSED PROFESSIONAL ENGINEER — 1/27/2021

Big Rivers ELECTRIC CORPORATION — Your Touchstone Energy® Cooperative

	SCALE: AS SHOWN	DES:	JCV
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REV. A

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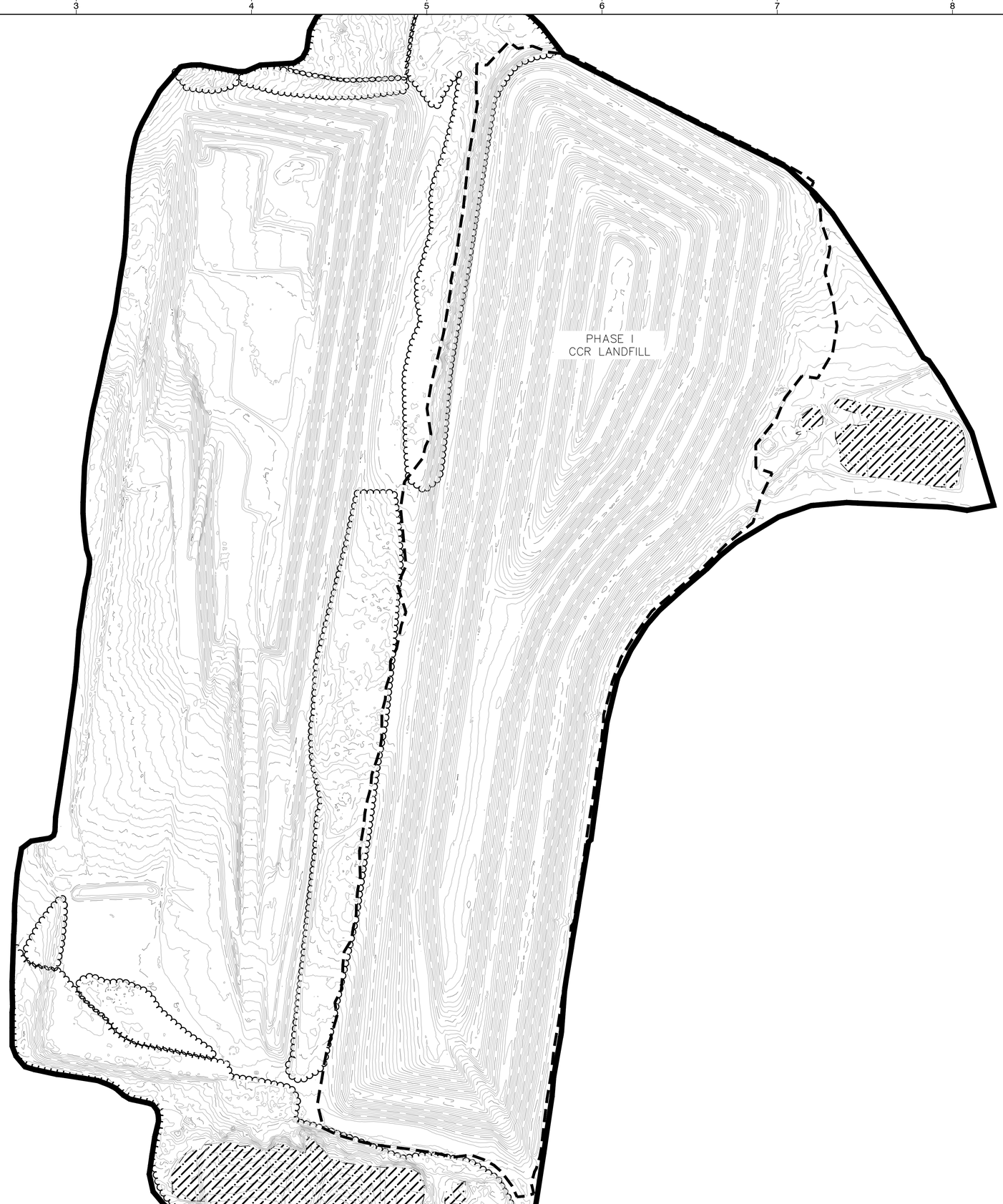

LEGEND

- EXISTING MAJOR TOPOGRAPHY
- EXISTING MINOR TOPOGRAPHY
- CCR LANDFILL BOUNDARY
- PHASE 1 CCR LANDFILL BOUNDARY (APPROXIMATE)
- EXISTING VEGETATION
- EXISTING POND

NOTES

N

0 200 400 600

GRAPHIC SCALE (IN FEET)

AECOM

TITLE

EXISTING CONDITIONS OVERALL

BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

STATE OF KENTUCKY — MICHAEL BRIAN ROSE — 29981 — LICENSED PROFESSIONAL ENGINEER
1/20/2021

Big Rivers ELECTRIC CORPORATION

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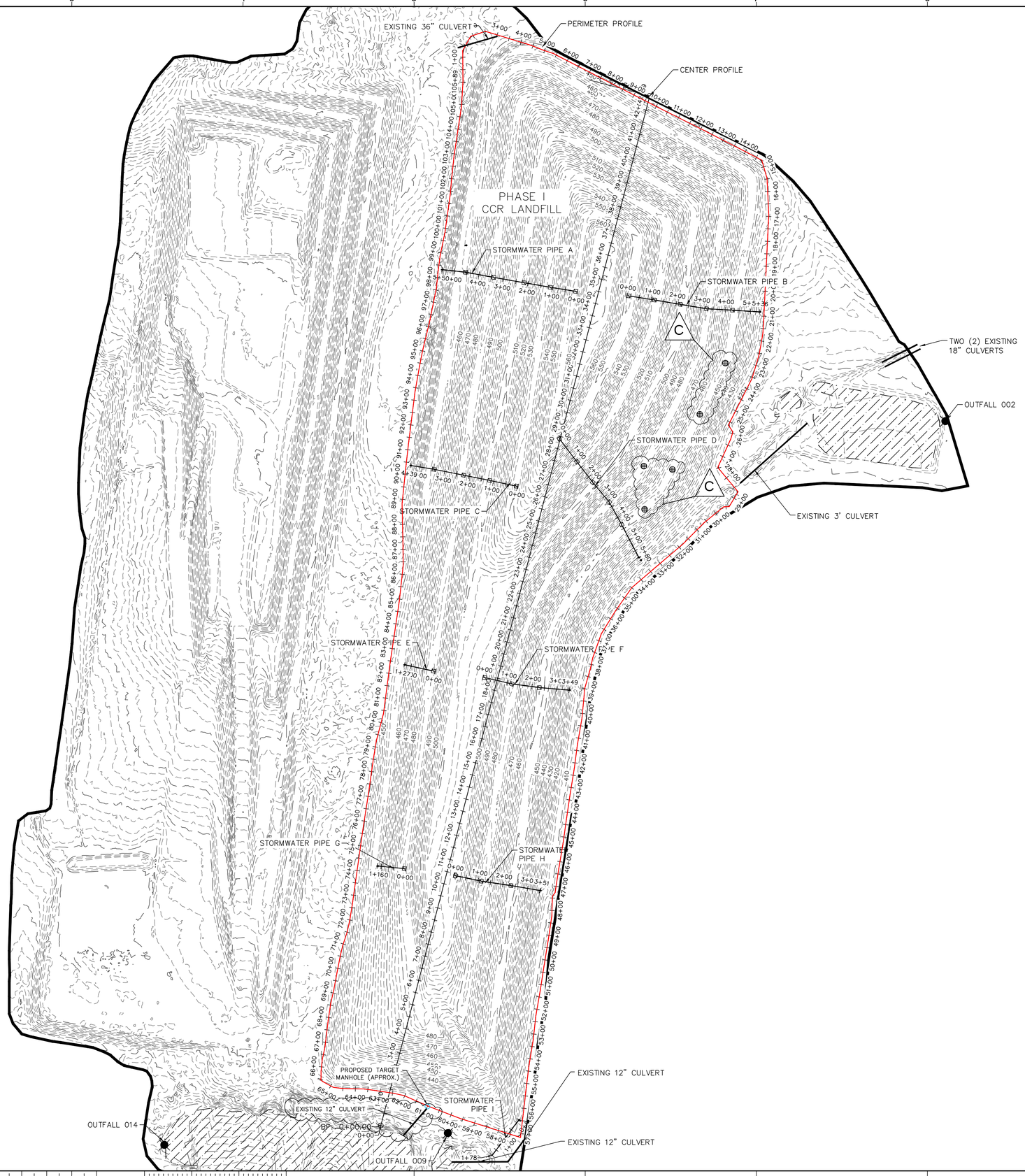

LEGEND

- PHASE 1 CCR LANDFILL BOUNDARY (APPROXIMATE)
- CCR LANDFILL BOUNDARY
- EXISTING MAJOR TOPOGRAPHY
- EXISTING MINOR TOPOGRAPHY
- EXISTING POND
- EXISTING STORMWATER PIPE
- EXISTING STORMWATER CATCH BASIN
- EXISTING OUTFALL (APPROX. LOCATION)
- EXISTING PIEZOMETER LOCATION

NOTES

1. EXISTING STORMWATER PIPES SHALL BE REMOVED.

REVISIONS			
REV NO	DATE	INITIALS	DESCRIPTION
B	11/18/2020	ECM	ADDED EXISTING CULVERTS
C	11/23/2020	ECM	ADDED EXISTING BORING LOCATIONS

N

0 200 400 600

GRAPHIC SCALE (IN FEET)

0 INCHES 1 2 3

TENTHS 10 20 30

AECOM

TITLE

EXISTING CONDITIONS PROFILE PLAN

BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

STATE OF KENTUCKY · MICHAEL BRIAN CROSS · 28670 · LICENSED PROFESSIONAL ENGINEER · 12/21/20

Big Rivers ELECTRIC CORPORATION

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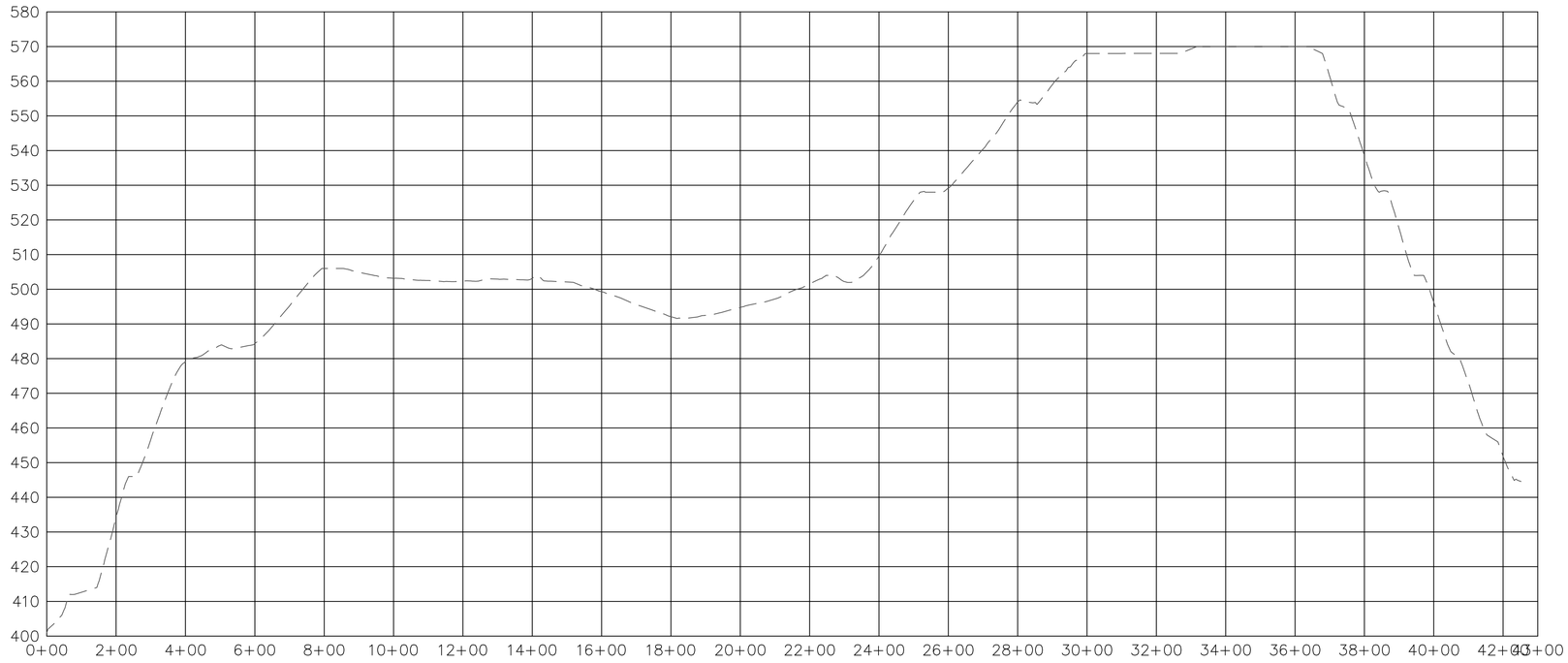
REV. C

REV. B



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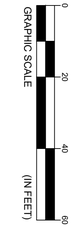

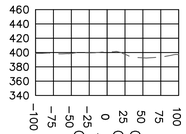

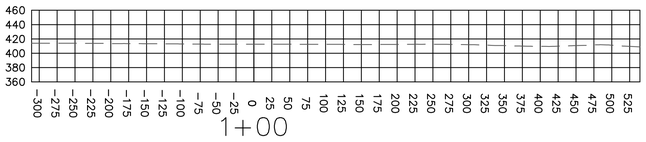

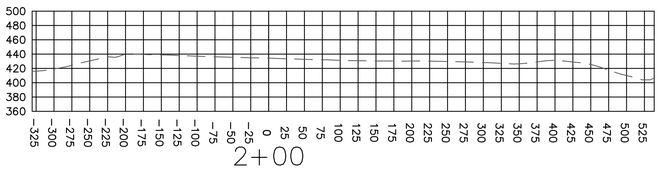

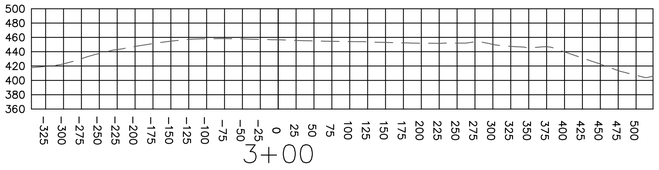

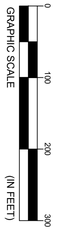

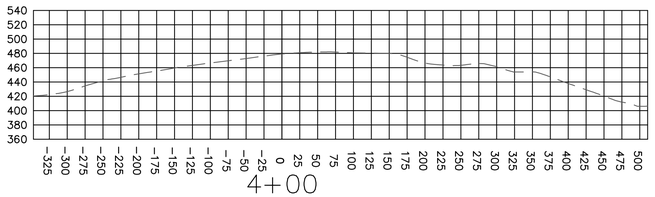

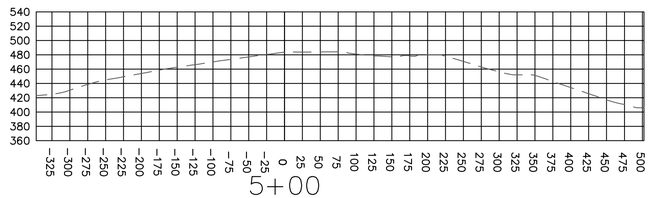

REVISION TABLE

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B	UPDATED STATIONING TEXT FOR CLARITY.	6/1/2021

AECOM

TITLE

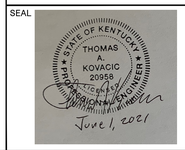
CENTER PROFILE AND CROSS SECTIONS

BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL



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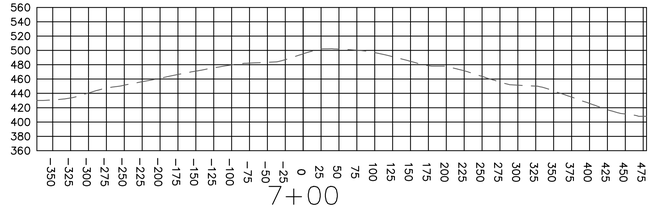
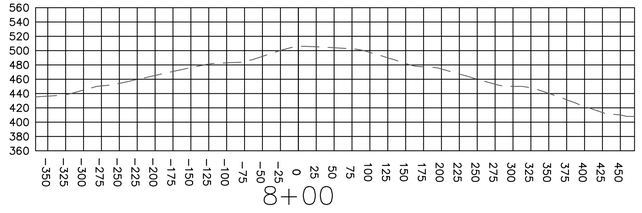
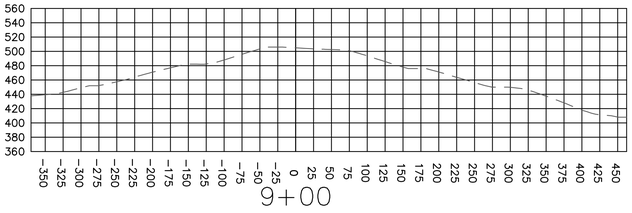
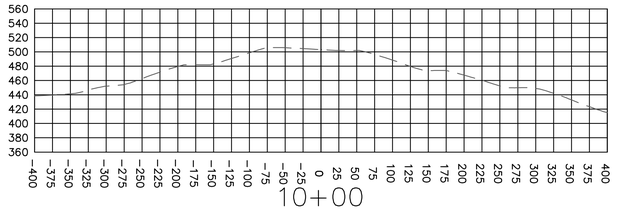
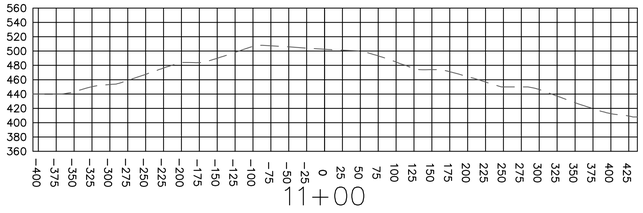
REV. B

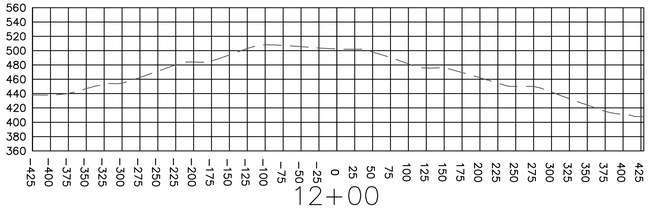


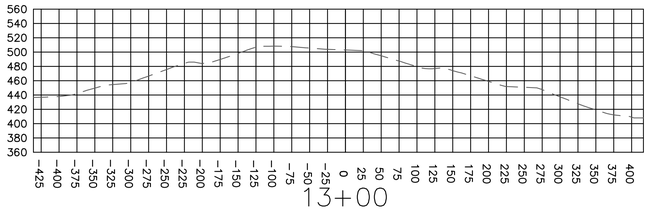


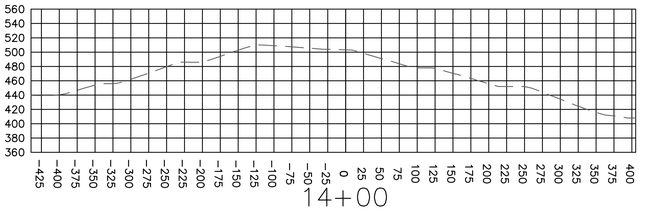


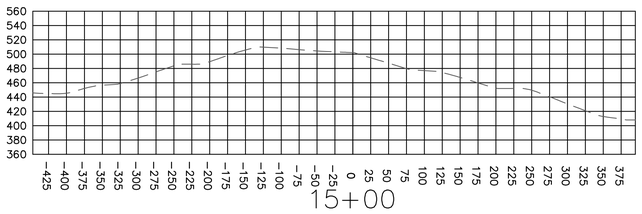












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GRAPHIC SCALE (IN FEET)

0 100 200 300

AECOM

TITLE

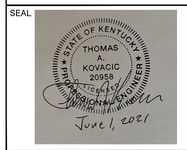
CENTER CROSS SECTIONS

BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL



Big Rivers ELECTRIC CORPORATION

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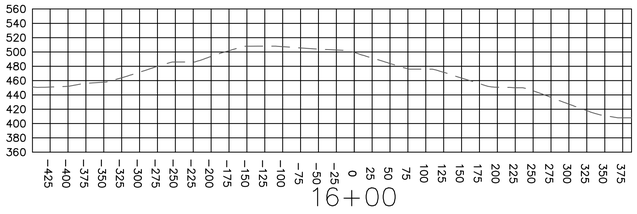
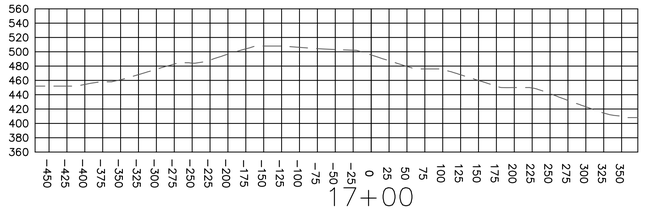
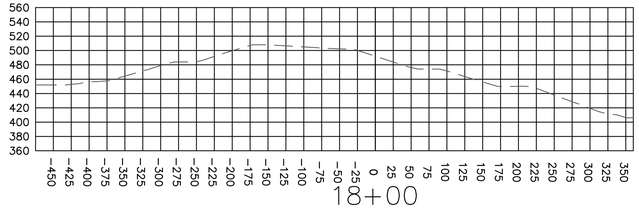
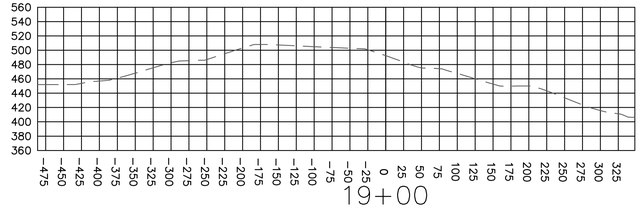
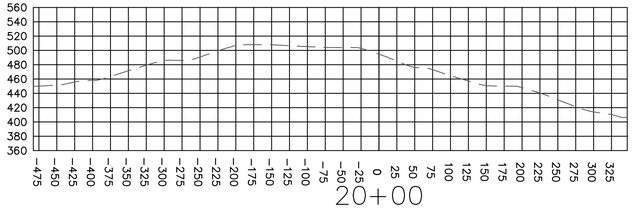
REV. B

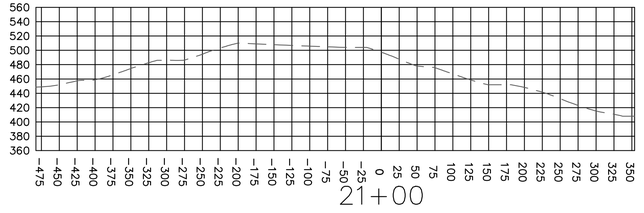


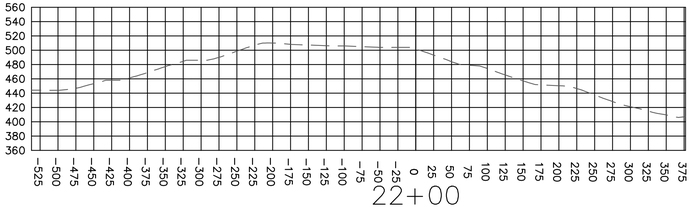


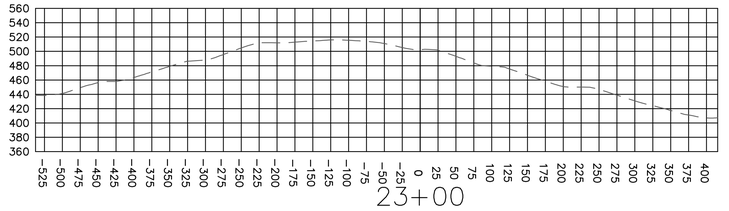


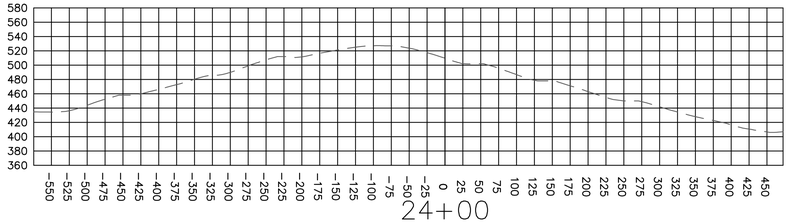






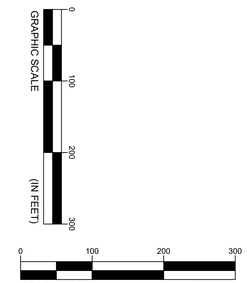






REVISION TABLE

NO.	DESCRIPTION	DATE
B	UPDATED STATIONING TEXT FOR CLARITY.	6/1/2021



AECOM

TITLE

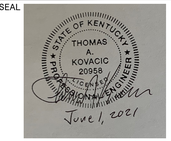
CENTER CROSS SECTIONS (CONT.)

BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL



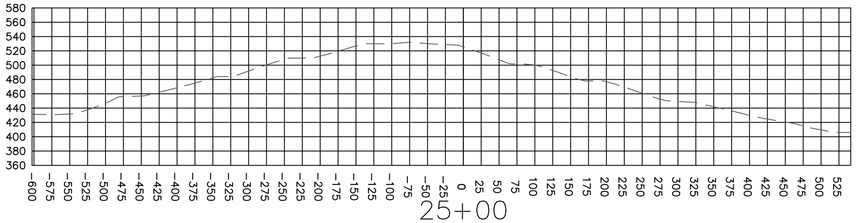
Big Rivers ELECTRIC CORPORATION
Your Touchstone Energy® Cooperative

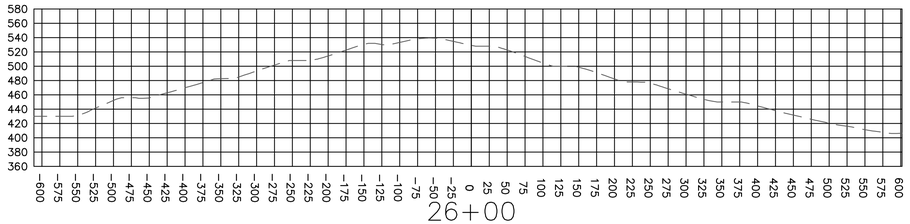
SCALE: AS SHOWN	DES: JCV
DWG TYPE: .DWG	DFTR: JCV
JOB NO: 60620035	CHKD: DS
DATE: 06/01/2021	ENGR: MBC
FILENAME:	APPD: MBC

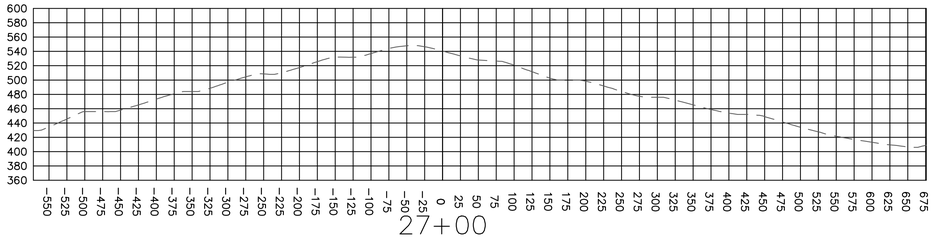
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-105	B

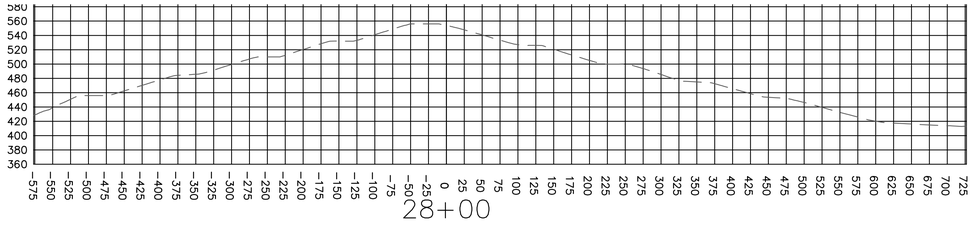
REV. B

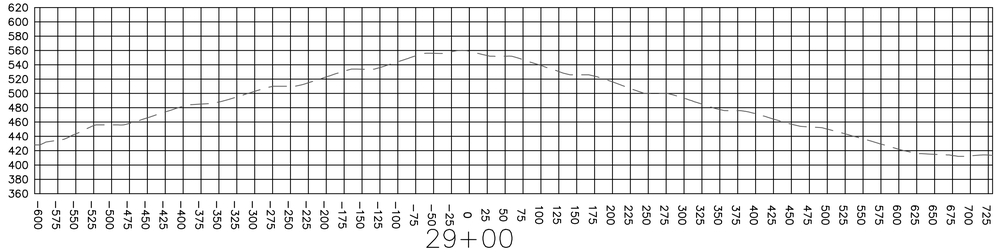
0 INCHES 1 2 3 TENTHS 10 20 30

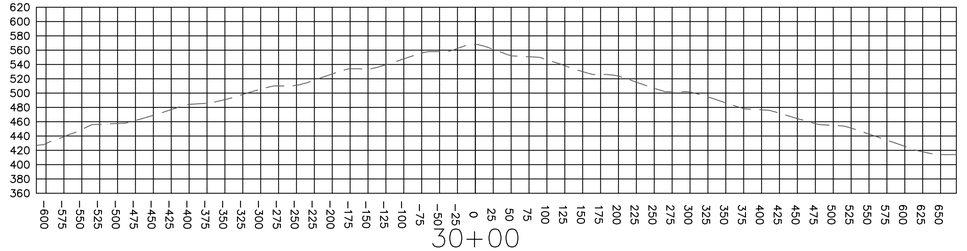


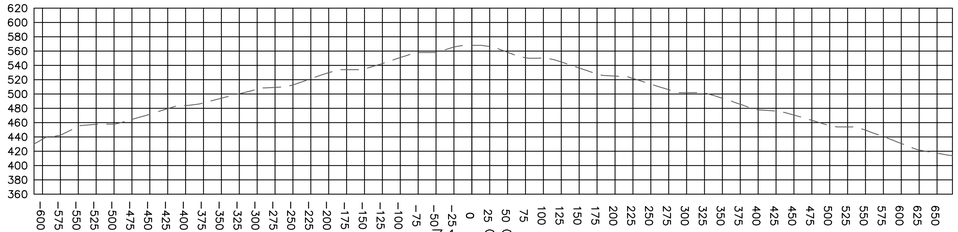


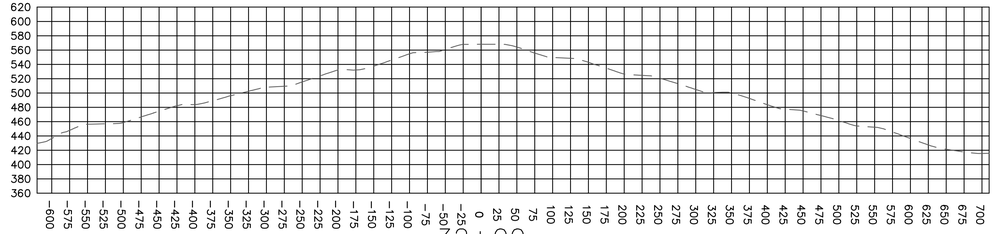


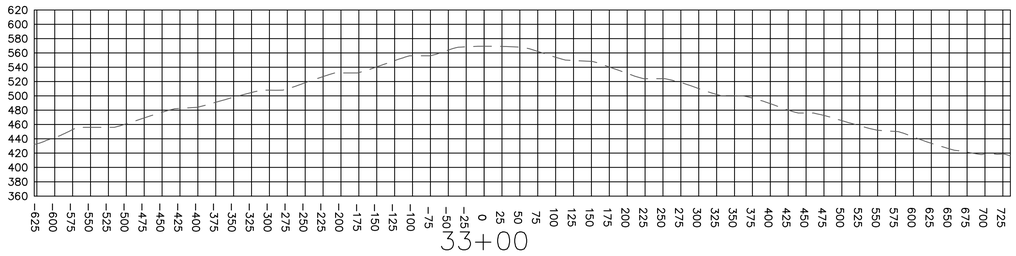






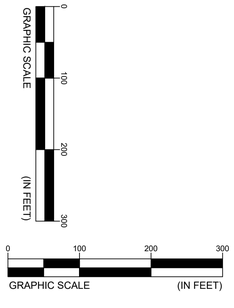






REVISION TABLE

NO.	DESCRIPTION	DATE
B	UPDATED STATIONING TEXT FOR CLARITY.	6/1/2021



AECOM

TITLE

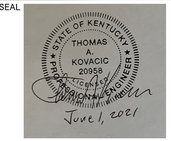
CENTER CROSS SECTIONS (CONT.)

BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL



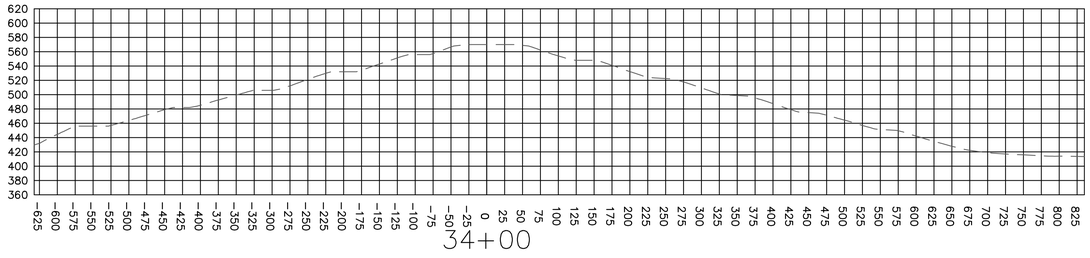
Big Rivers ELECTRIC CORPORATION

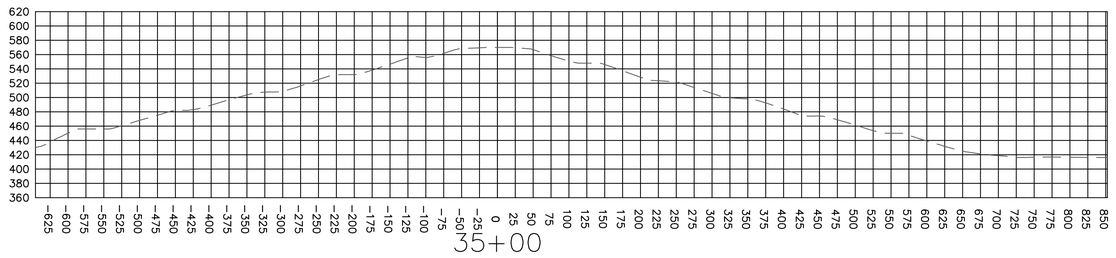
SCALE: AS SHOWN		DES: JCV	
DWG TYPE: .DWG		DFTR: JCV	
JOB NO: 60620035		CHKD: DS	
DATE: 06/01/2021		ENGR: MBC	
FILENAME:		APPD: MBC	
DWG SIZE	DRAWING NO.	REVISION	
Arch D 24.0"x36.0"	BGR-WCP-106	B	

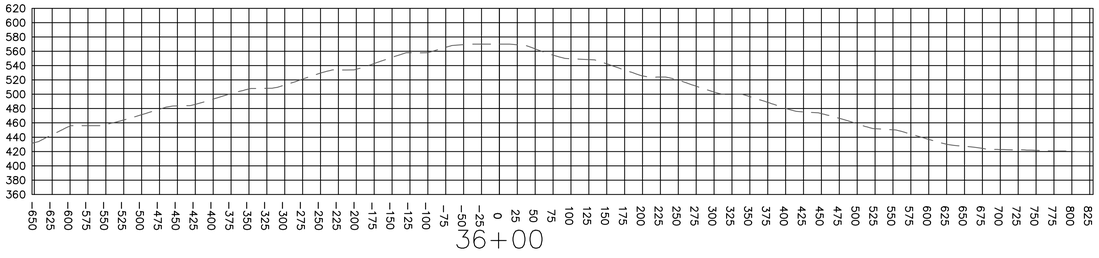
REV. B

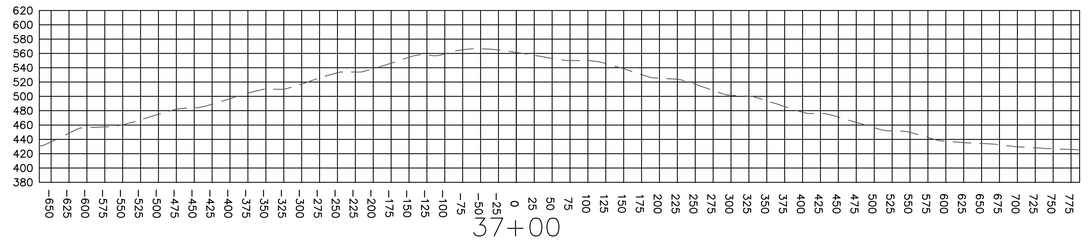
0 INCHES 1 2 3

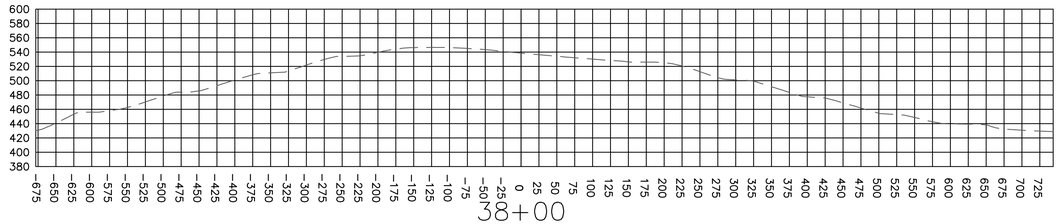
TENTHS 10 20 30

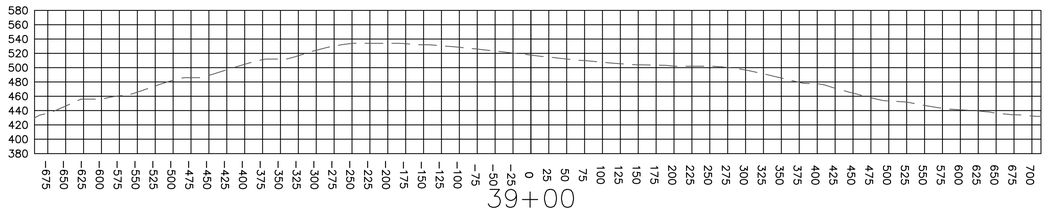


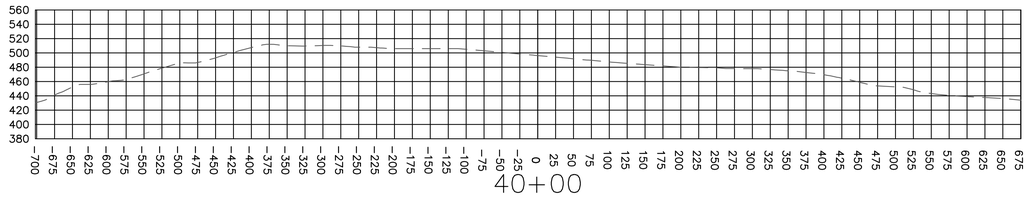


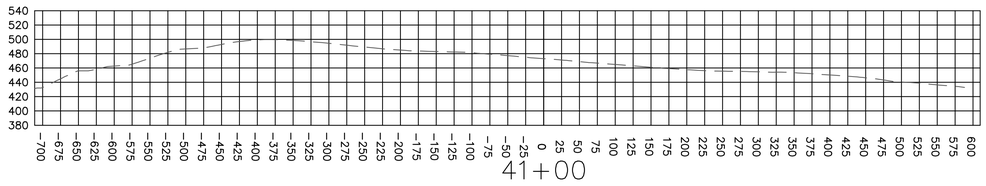


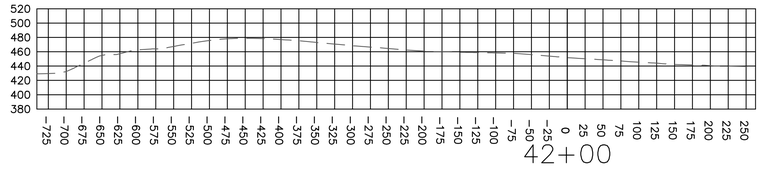












REVISION TABLE

NO.	DESCRIPTION	DATE
B	UPDATED STATIONING TEXT FOR CLARITY.	6/1/2021

GRAPHIC SCALE (IN FEET) 0 100 200 300

GRAPHIC SCALE (IN FEET) 0 100 200 300

AECOM

TITLE
CENTER CROSS SECTIONS (CONT.)
BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR
D.B. WILSON GENERATING STATION

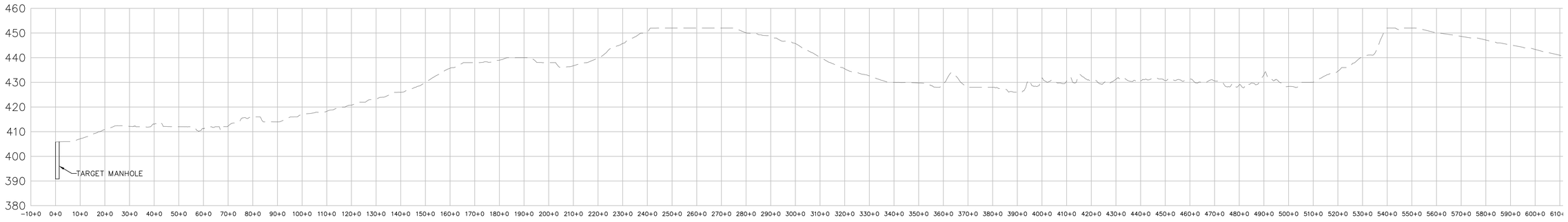
SEAL
STATE OF KENTUCKY
THOMAS A. KOVACIC 20958
LICENSED PROFESSIONAL ENGINEER
June 1, 2021

Big Rivers ELECTRIC CORPORATION

SCALE: AS SHOWN		DES: JCV	
DWG TYPE: .DWG		DFTR: JCV	
JOB NO: 60620035		CHKD: DS	
DATE: 06/01/2021		ENGR: MBC	
FILENAME:		APPD: MBC	
DWG SIZE	DRAWING NO.	REVISION	
Arch D 24.0"x36.0"	BGR-WCP-107	B	

REV. B

0 INCHES 1 2 3 TENTHS 10 20 30



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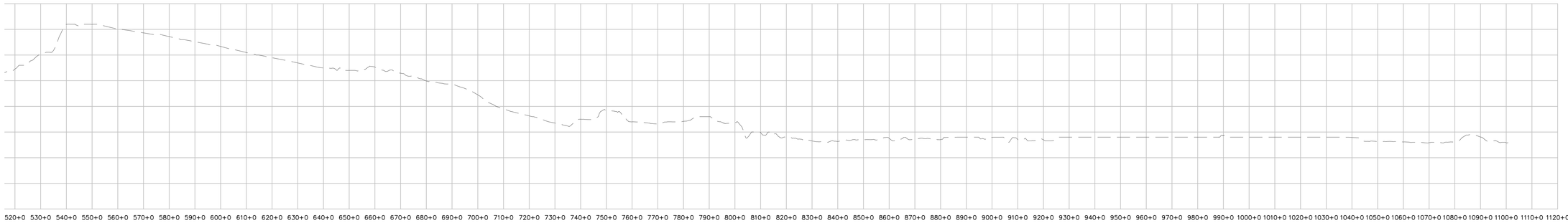
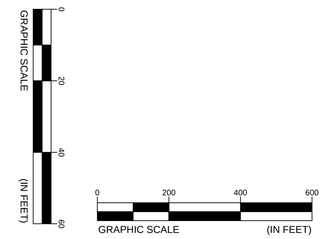


Perimeter Profile



AECOM

TITLE

PERIMETER PROFILE

BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

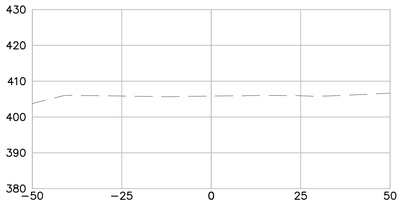
SEAL

STATE OF KENTUCKY — MICHAEL BRIAN COLE — 29993 — LICENSED PROFESSIONAL ENGINEER — 1/20/2021

Big Rivers ELECTRIC CORPORATION — Your Touchstone Energy® Cooperative

SCALE: AS SHOWN		DES: JCV
DWG TYPE: .DWG		DFTR: JCV
JOB NO: 60620035		CHKD: DS
DATE: 01/20/2021		ENGR: MBC
FILENAME:		APPD: MBC
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-108	A

REV. A



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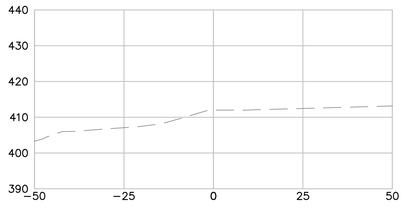

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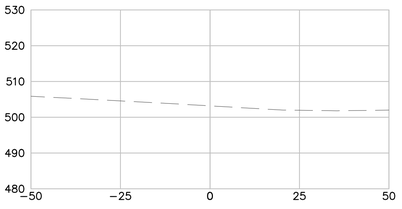

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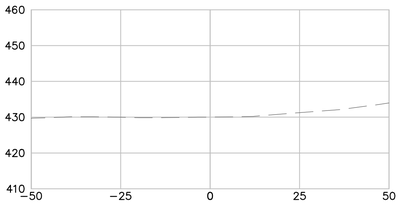

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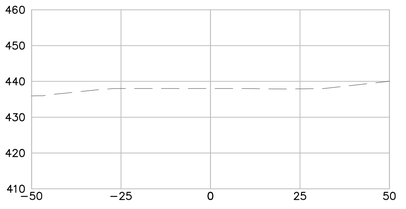

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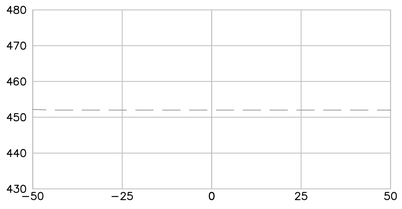

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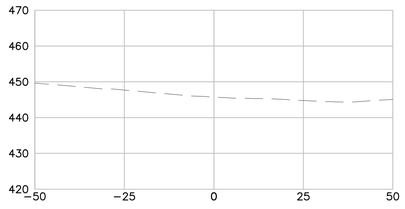

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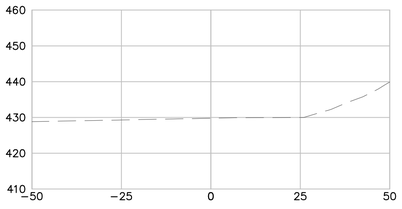

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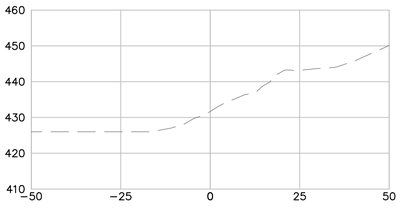

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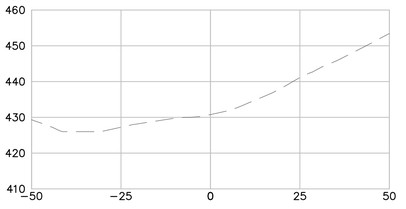

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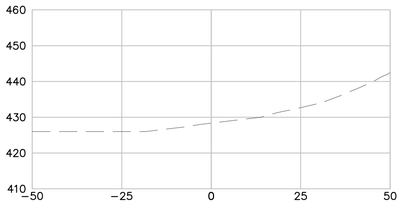

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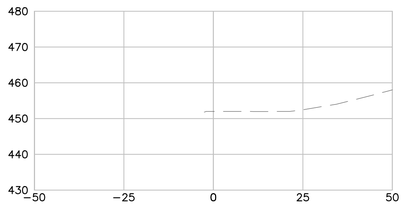

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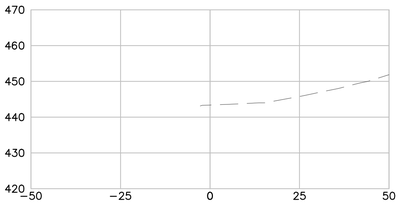

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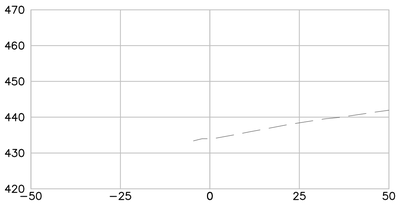

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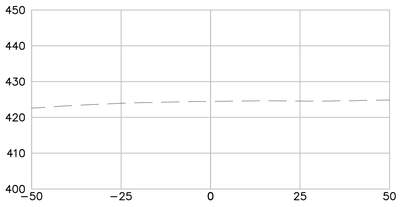

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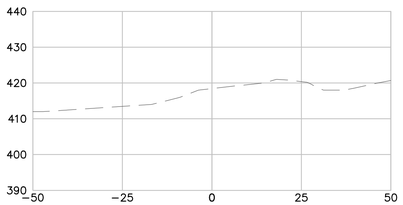

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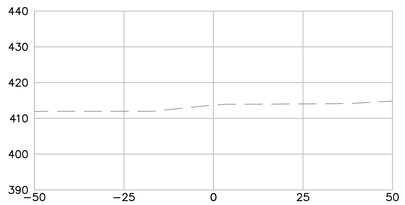

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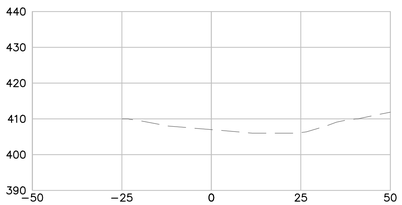

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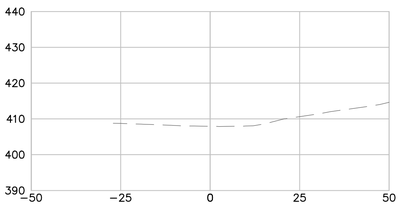

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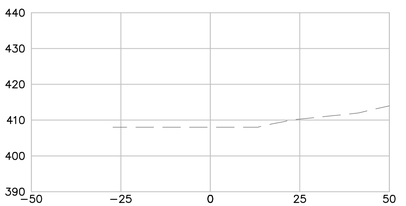

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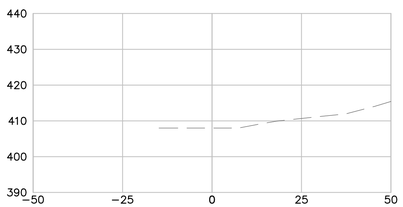

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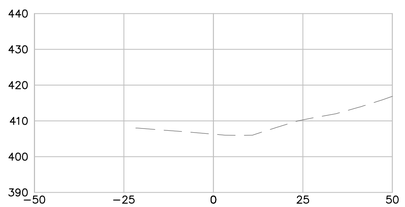

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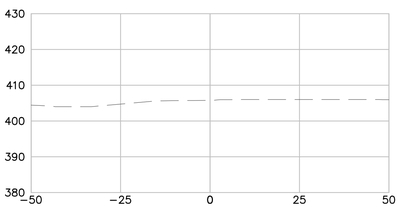

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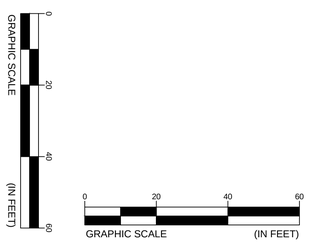


AECOM

TITLE

PERIMETER SECTIONS

BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

Big Rivers ELECTRIC CORPORATION
Your Touchstone Energy® Cooperative

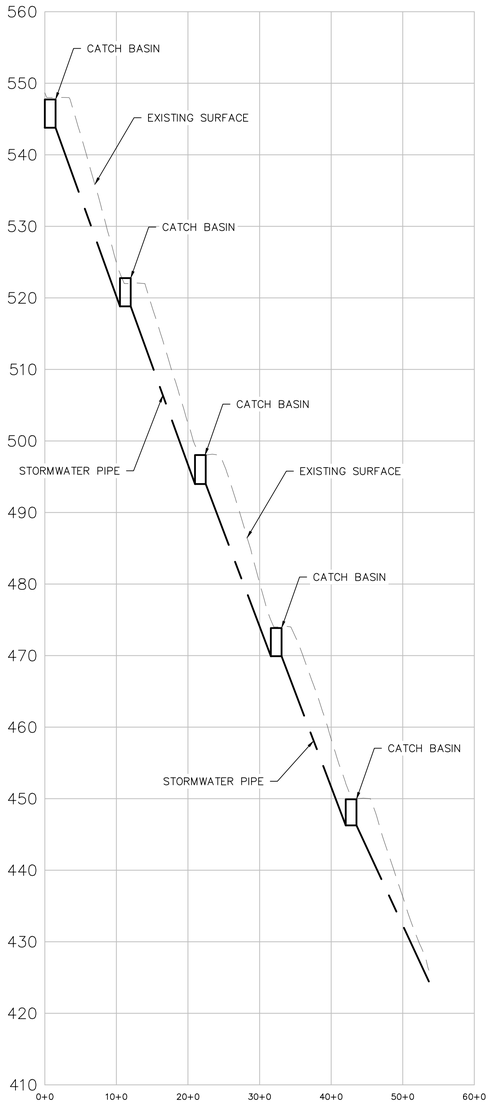
SCALE: AS SHOWN	DES: JCV
DWG TYPE: .DWG	DFTR: JCV
JOB NO: 60620035	CHKD: DS
DATE: 01/20/2021	ENGR: MBC
FILENAME:	APPD: MBC

DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-109	A

REV. A

0 INCHES 1 2 3
TENTHS 10 20 30

STORMWATER PIPE A



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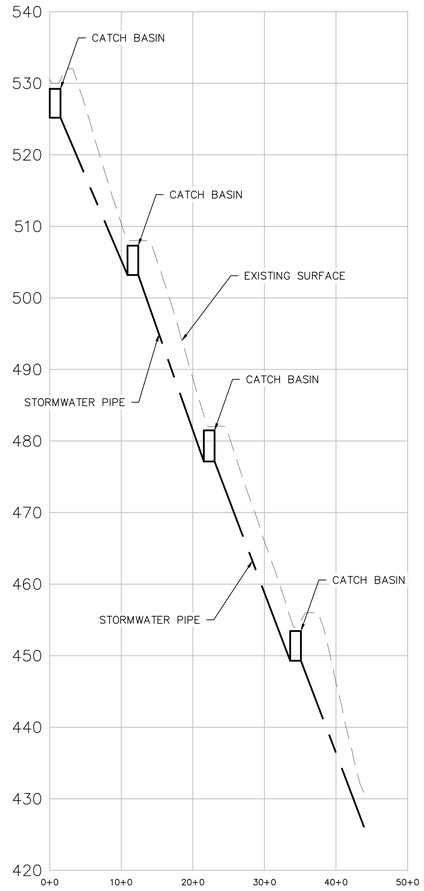

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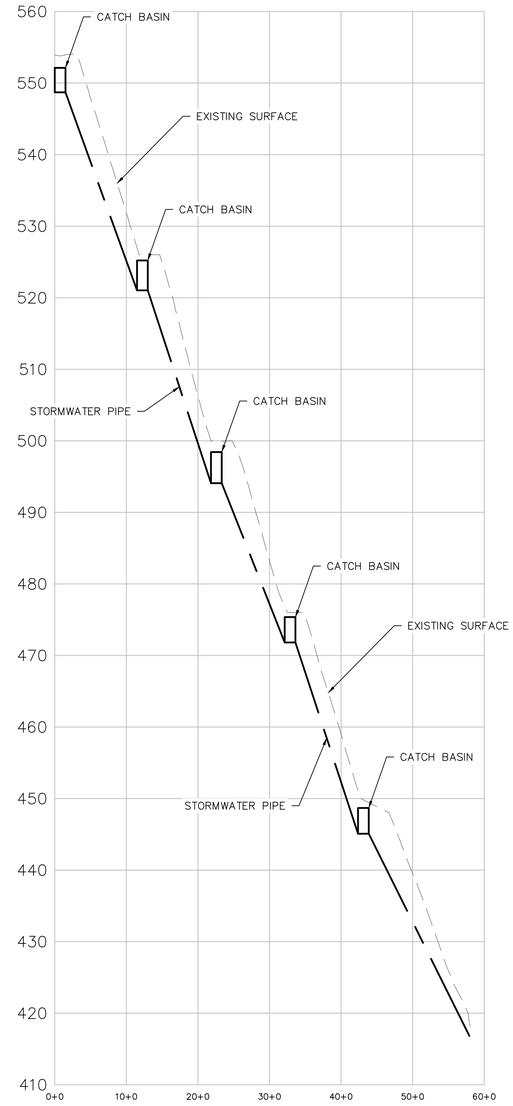

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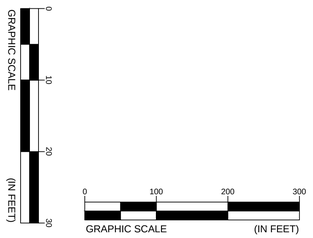

AECOM

TITLE

STORMWATER PIPE PROFILES A-D

BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

Big Rivers ELECTRIC CORPORATION

SCALE: AS SHOWN		DES: JCV
DWG TYPE: .DWG		DFTR: JCV
JOB NO: 60620035		CHKD: DS
DATE: 01/20/2021		ENGR: MBC
FILENAME:		APPD: MBC
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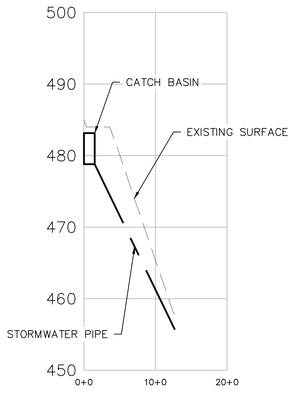
Arch D 24.0"x36.0"	BGR-WCP-110	A

REV. A



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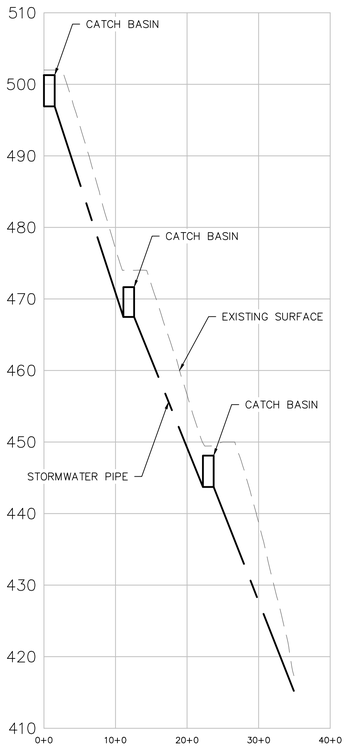

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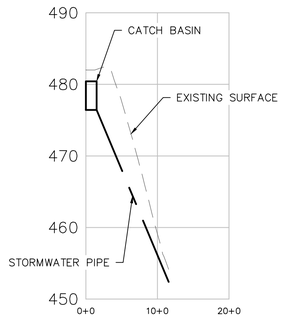

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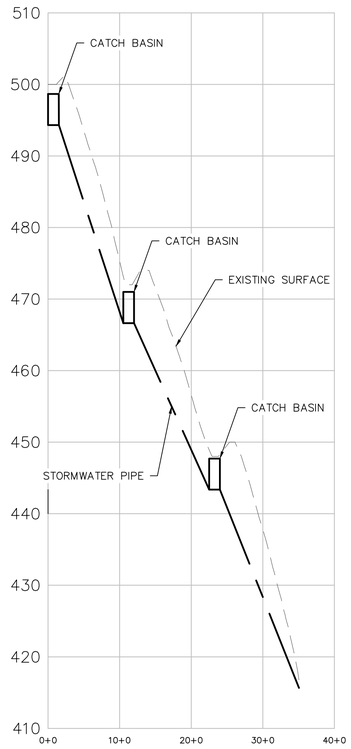

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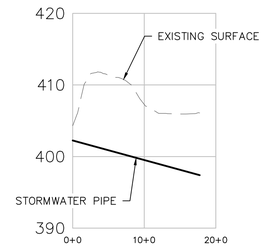
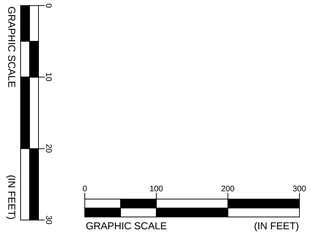


STORMWATER PIPE I



AECOM

TITLE

STORMWATER PIPE PROFILES E-I

BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

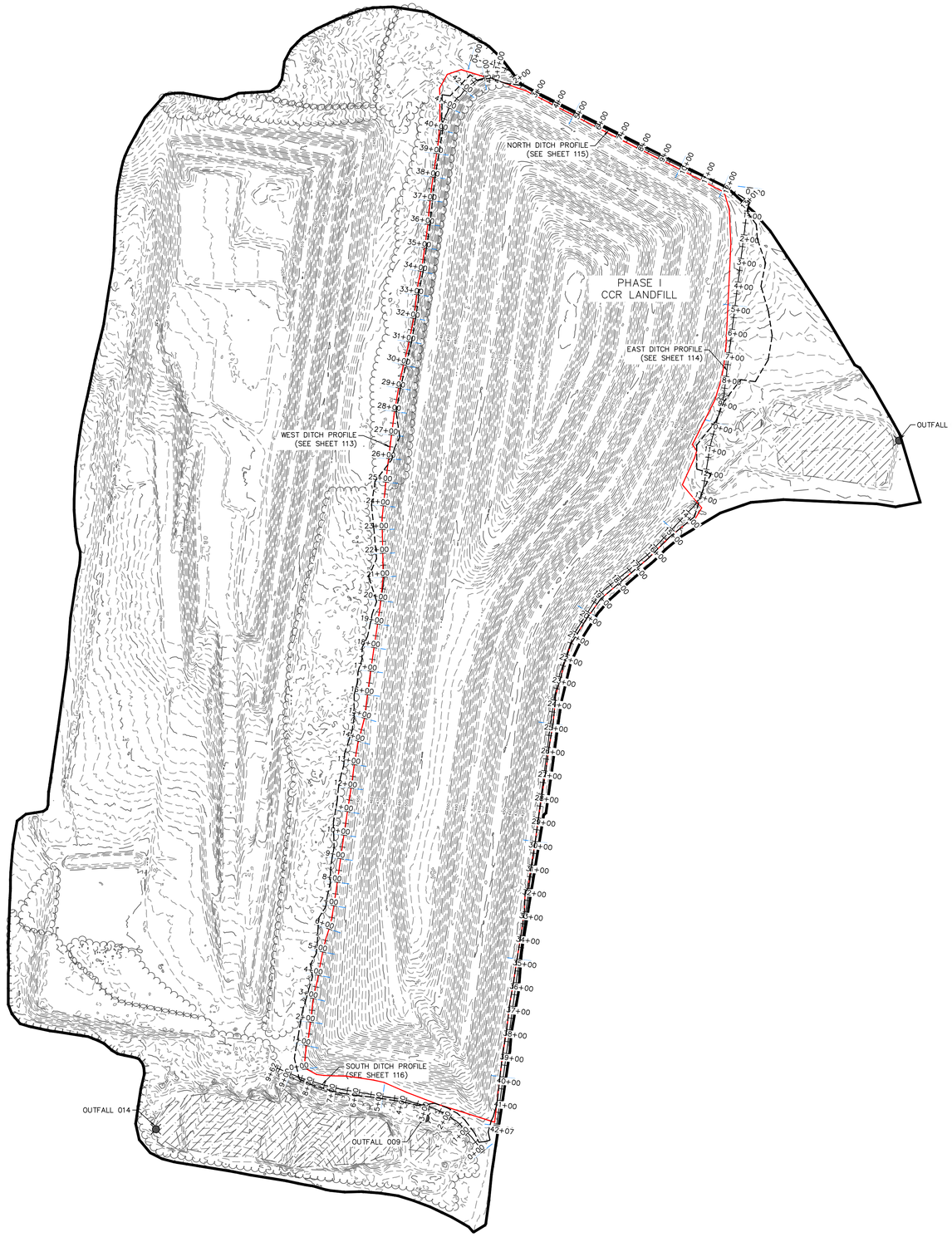
STATE OF KENTUCKY
MICHAEL BRIAN CROSS
29972
LICENSED
PROFESSIONAL ENGINEER
1/20/2021

Big Rivers ELECTRIC CORPORATION
Your Touchstone Energy® Cooperative

SCALE: AS SHOWN		DES: JCV
DWG TYPE: .DWG		DFTR: JCV
JOB NO: 60620035		CHKD: DS
DATE: 01/20/2021		ENGR: MBC
FILENAME:		APPD: MBC
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-111	A

REV. A

0 INCHES 1 2 3
TENTHS 10 20 30



LEGEND

- CCR LANDFILL BOUNDARY
- PHASE 1 CCR LANDFILL BOUNDARY (APPROXIMATE)
- EXISTING MAJOR TOPOGRAPHY
- EXISTING MINOR TOPOGRAPHY
- EXISTING VEGETATION
- EXISTING POND
- EXISTING OUTFALL (APPROX. LOCATION)

NOTES

1. GRASS SHALL BE REMOVED FROM THE LANDFILL SURFACE AND STOCKPILED FOR FUTURE USE.
2. A CLOSURE TURF SYSTEM SHALL BE INSTALLED OVER THE SOIL, CONSISTING OF A 50-MIL GEOMEMBRANE, 1.5 INCHES OF TURF, AND SAND INFILL PER MANUFACTURER'S RECOMMENDATIONS.
3. SEEPAGE FROM THE CAPPED LANDFILL SHALL BE DIRECTED FROM TOE DRAIN VIA BOOTED PIPE PENETRATIONS TO TARGET MANHOLES, FOR FUTURE PUMPING OF SEEPAGE TO THE TREATMENT PLAN ON THE EAST SIDE OF PHASE I.

REVISION TABLE

NO.	DESCRIPTION	DATE
B	UPDATED STATIONING TEXT FOR CLARITY.	6/1/2021

N

0 250 500 750
GRAPHIC SCALE (IN FEET)

AECOM

TITLE
EXISTING CONDITIONS DITCH PLAN
BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR
D.B. WILSON GENERATING STATION

SEAL
STATE OF KENTUCKY
THOMAS A. KOVACIC 20958
LICENSED PROFESSIONAL ENGINEER
June 1, 2021

Big Rivers ELECTRIC CORPORATION
Your Touchstone Energy® Cooperative

SCALE: AS SHOWN		DES: JCV
DWG TYPE: .DWG		DFTR: JCV
JOB NO: 60620035		CHKD: DS
DATE: 06/01/2021		ENGR: MBC
FILENAME:		APPD: MBC
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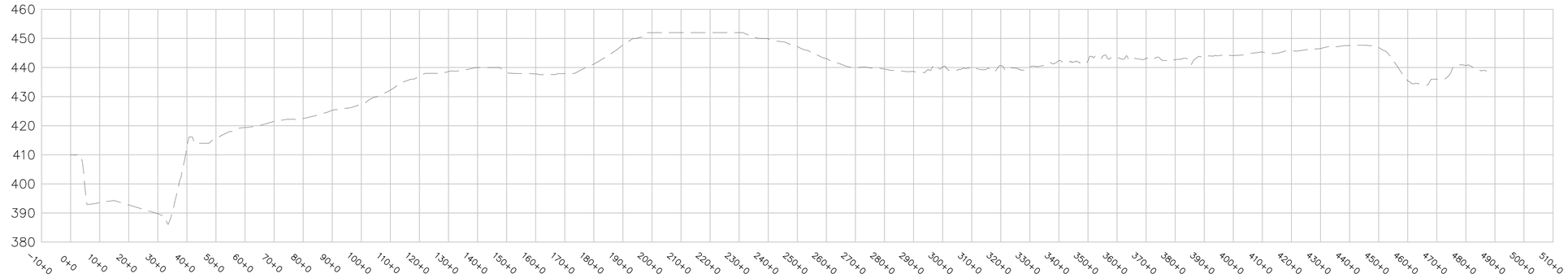
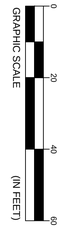
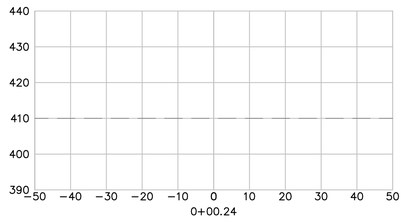
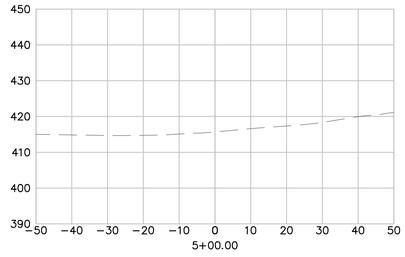
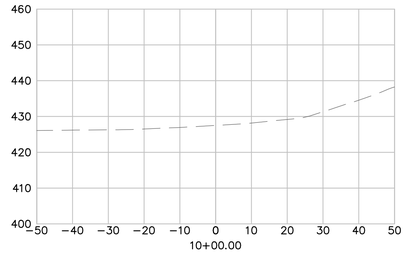


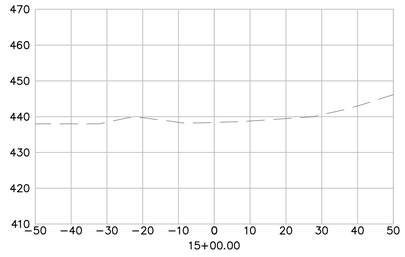
WEST DITCH PROFILE

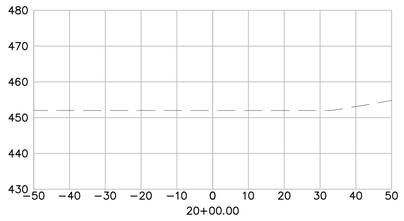


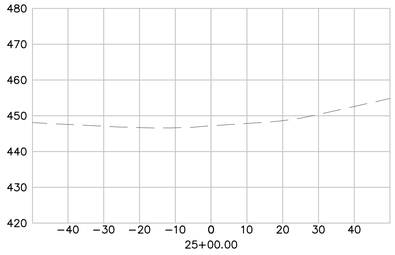


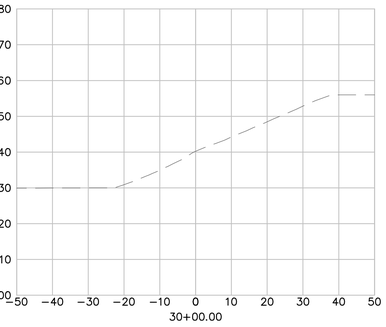


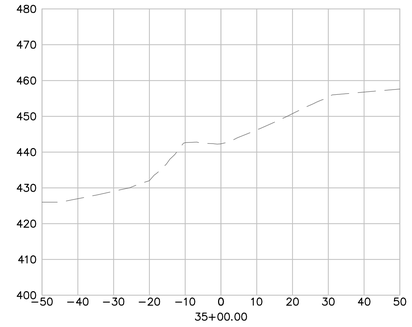


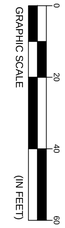


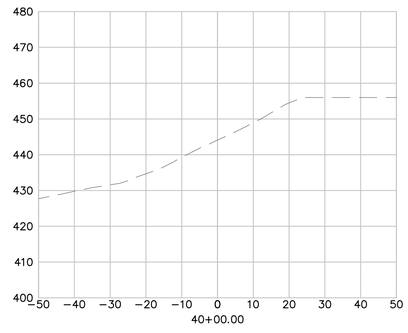


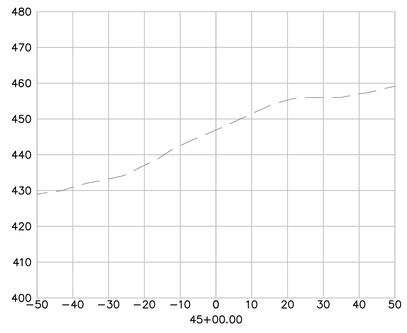


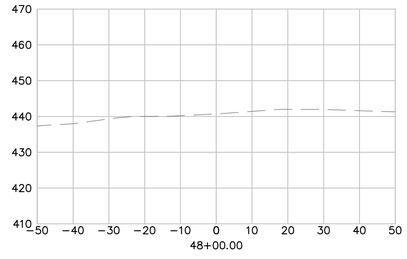












AECOM

TITLE

WEST DITCH PROFILE AND SECTIONS

BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

FOR

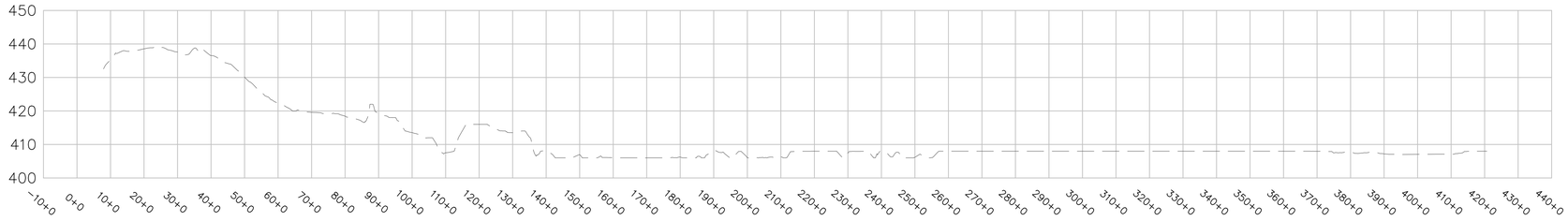
D.B. WILSON GENERATING STATION

SEAL

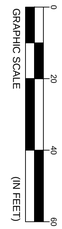
Big Rivers ELECTRIC CORPORATION — Your Touchstone Energy® Cooperative	SCALE: AS SHOWN	DES: JCV
	DWG TYPE: .DWG	DFTR: JCV
	JOB NO: 60620035	CHKD: DS
	DATE: 01/20/2021	ENGR: MBC
FILENAME:		APPD: MBC

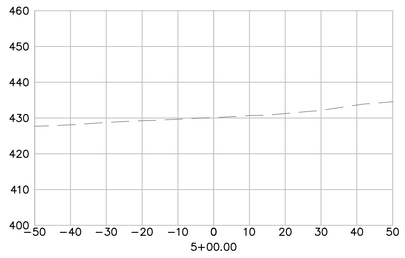
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-113	A

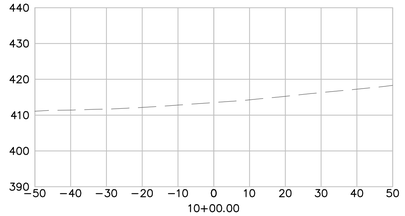
0 INCHES 1 2 3 — TENTHS 10 20 30

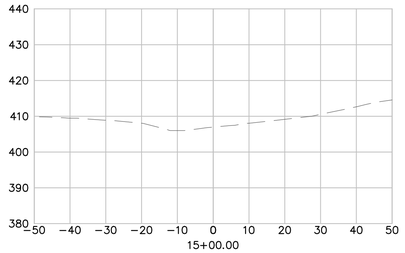


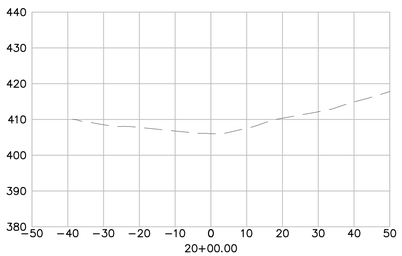
EAST DITCH PROFILE

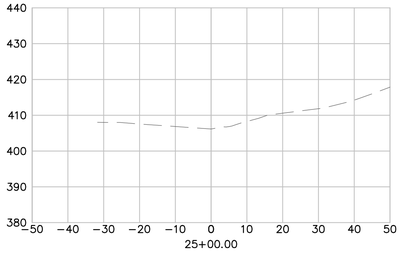


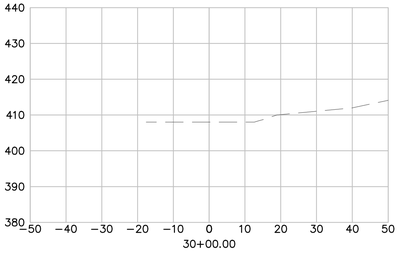


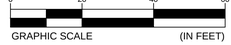


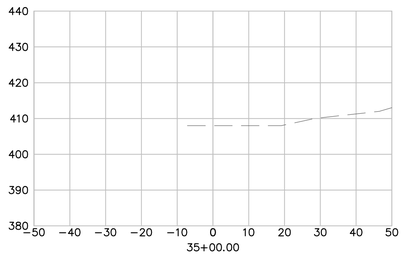


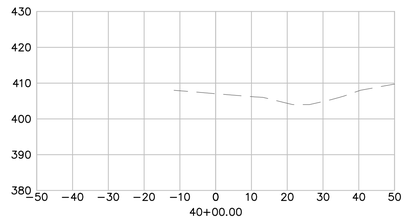


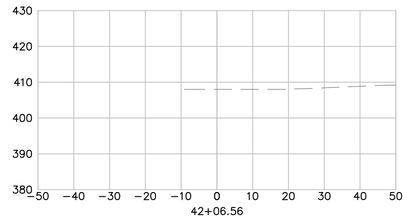












AECOM

TITLE

EAST DITCH
PROFILE AND SECTIONS
BIG RIVERS
WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN
OHIO COUNTY, KENTUCKY

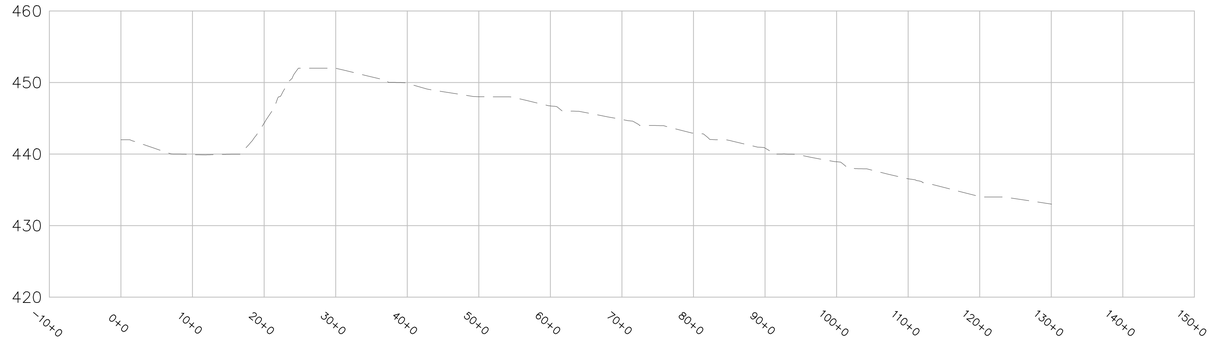
FOR

D.B. WILSON GENERATING STATION

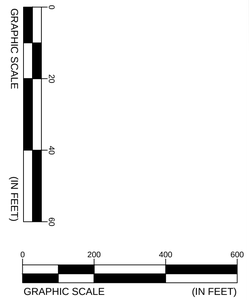
SEAL

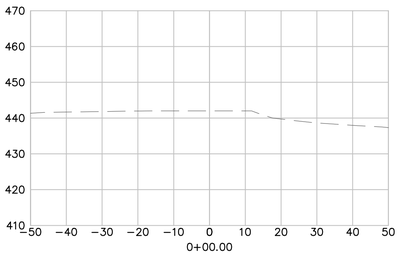
Big Rivers ELECTRIC CORPORATION

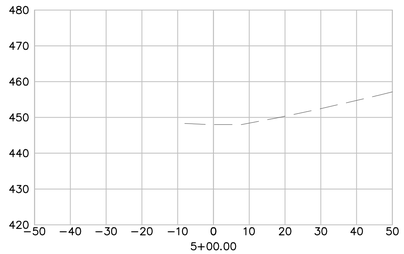
SCALE: AS SHOWN		DES: JCV
DWG TYPE: .DWG		DFTR: JCV
JOB NO: 60620035		CHKD: DS
DATE: 01/20/2021		ENGR: MBC
FILENAME:		APPD: MBC
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-114	A

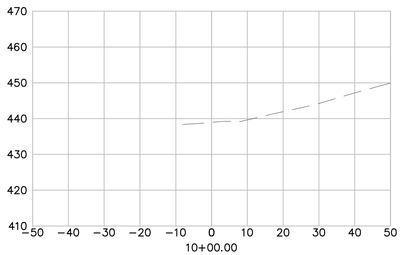


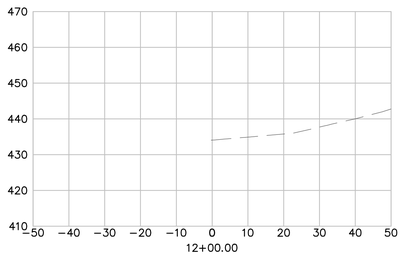
NORTH DITCH PROFILE

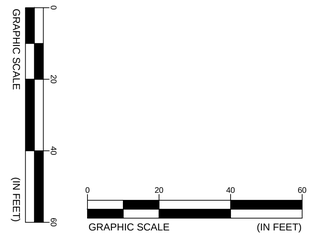












AECOM

TITLE

NORTH DITCH PROFILE AND SECTIONS

BIG RIVERS

WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN

OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

Big Rivers ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

SCALE: AS SHOWN		DES: JCV
DWG TYPE: .DWG		DFTR: JCV
JOB NO: 60620035		CHKD: DS
DATE: 01/20/2021		ENGR: MBC
FILENAME:		APPD: MBC
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-115	A

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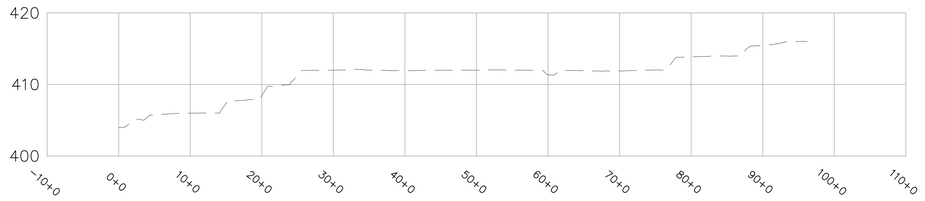
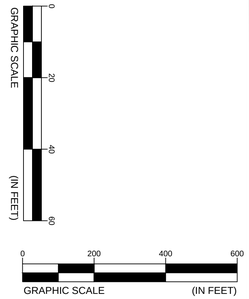
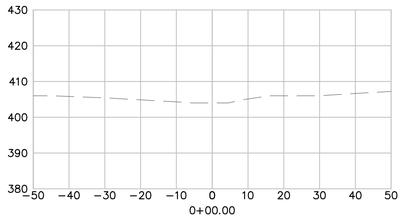
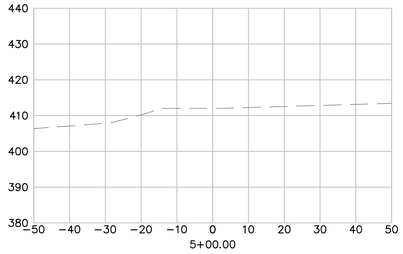
TENTHS 10 20 30

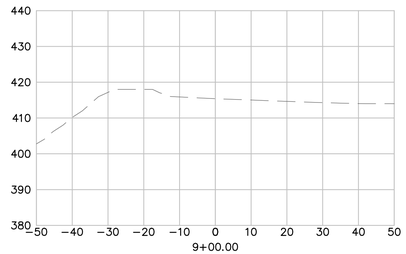


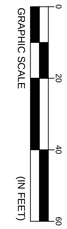
SOUTH DITCH PROFILE











AECOM

TITLE

SOUTH DITCH PROFILE AND SECTIONS

BIG RIVERS

WILSON REVISED SPECIAL WASTE LANDFILL CLOSURE PLAN

OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

SEAL

Big Rivers ELECTRIC CORPORATION

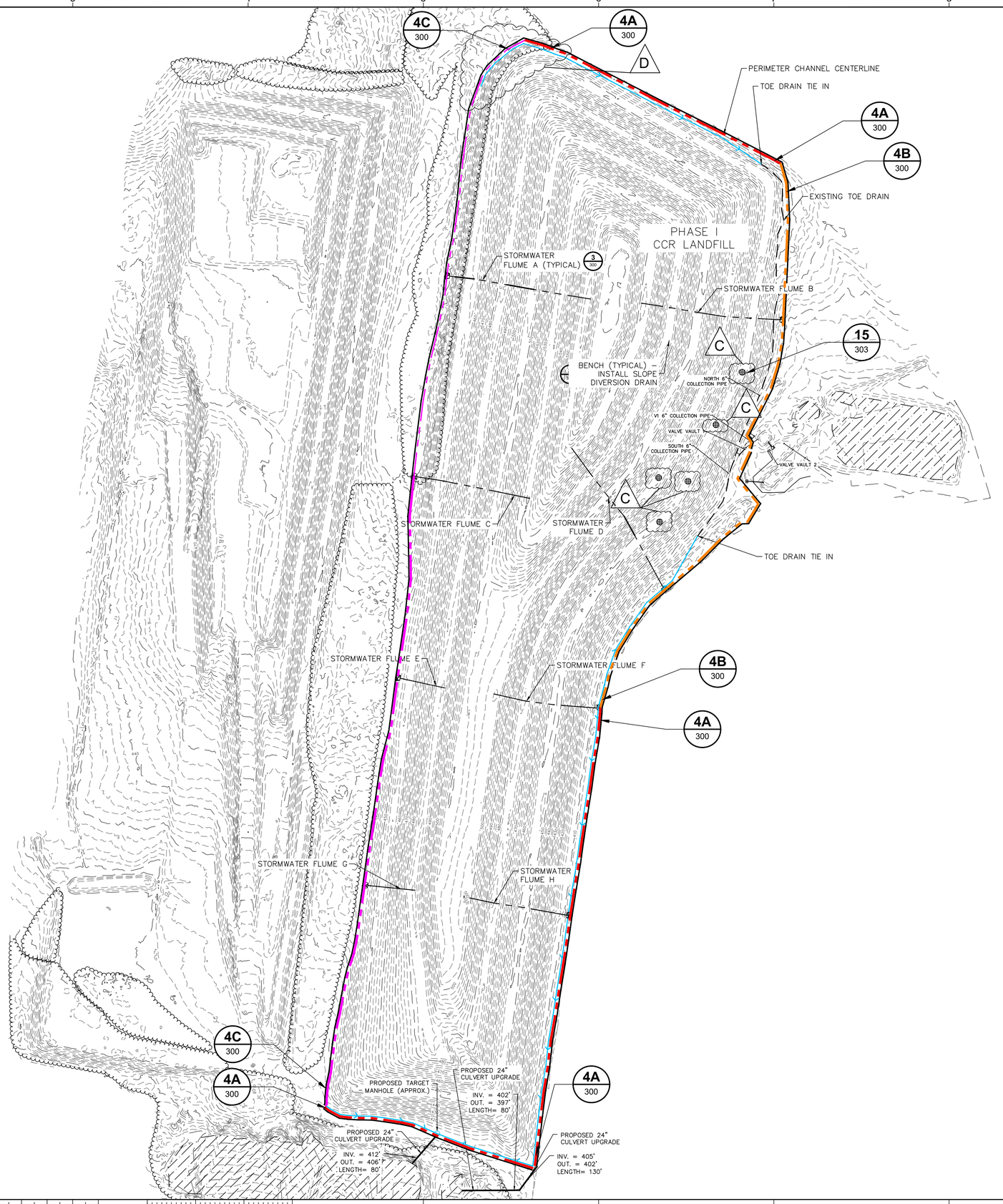
	SCALE: AS SHOWN	DES:	JCV
	DWG TYPE: .DWG	DFTR:	JCV
	JOB NO: 60620035	CHKD:	DS
	DATE: 01/20/2021	ENGR:	MBC
FILENAME:		APPD:	MBC

DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-116	A

REV. A

0 INCHES 1 2 3

TENTHS 10 20 30



LEGEND

- EXISTING MAJOR TOPOGRAPHY
- EXISTING MINOR TOPOGRAPHY
- EXISTING VEGETATION
- EXISTING POND
- EXISTING TOE DRAIN
- PROPOSED APPROXIMATE FLUME LOCATION
- PROPOSED TOE DRAIN
- PROPOSED ANCHOR TRENCH
- PROPOSED PERIMETER CHANNEL CENTERLINE
- PROPOSED PERIMETER CHANNEL CENTERLINE (4A / 300)
- PROPOSED PERIMETER CHANNEL CENTERLINE (4B / 300)
- PROPOSED TARGET MANHOLE (4C / 300)
- PROPOSED RIPRAP DISSIPATER (SEE DETAIL 7 ON SHEET 301)
- EXISTING PIEZOMETER LOCATION C

NOTES

1. GRASS SHALL BE REMOVED FROM THE LANDFILL SURFACE AND STOCKPILED FOR FUTURE USE.
2. A CLOSURE TURF SYSTEM SHALL BE INSTALLED OVER THE SOIL, CONSISTING OF A 50-MIL GEOMEMBRANE, 1.5 INCHES OF TURF AND SAND INFILL PER MANUFACTURER'S RECOMMENDATION.
3. SEEPAGE FROM THE CAPPED LANDFILL SHALL BE DIRECTED FROM TOE DRAIN VIA BOOTED PIPE PENETRATIONS TO THE TARGET MANHOLE, FOR FUTURE PUMPING OF SEEPAGE TO THE TREATMENT PLAN ON THE EAST SIDE OF PHASE I.
4. EXISTING STORMWATER PIPES SHALL BE REMOVED AND CONVERTED TO FLUMES TO CONVEY STORMWATER.

REVISIONS			
REV NO	DATE	INITIALS	DESCRIPTION
B	11/18/2020	ECM	UPDATED PERIMETER CHANNEL CENTERLINE AND ADDED CULVERT UPGRADES
C	11/23/2020	ECM	ADDED BORING LOCATIONS
D	8/4/2021	NSF	REVISED TOE DRAIN AND PERIMETER CHANNEL IN NORTHEAST CORNER

N

0 200 400 600
GRAPHIC SCALE (IN FEET)

AECOM

TITLE
PROPOSED CONDITIONS OVERALL
BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR
D.B. WILSON GENERATING STATION

SEAL
STATE OF KENTUCKY · THOMAS A. KOVACIC · 20958 · LICENSED PROFESSIONAL ENGINEER

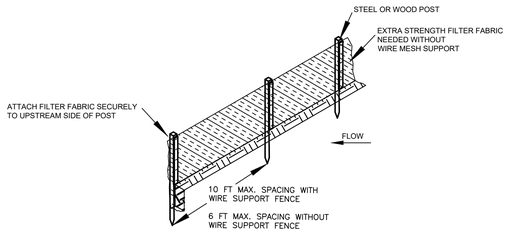
Big Rivers ELECTRIC CORPORATION

SCALE: AS SHOWN		DES: JCV	
DWG TYPE: .DWG		DFTR: NSF	
JOB NO: 60620035		CHKD: DS	
DATE: 08/04/2021		ENGR: MBC	
FILENAME:		APPD: MBC	
DWG SIZE	DRAWING NO.	REVISION	
Arch D 24.0"x36.0"	BGR-WCP-200	D	

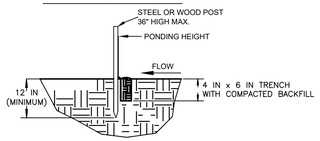
REV. B

REV. D

SILT FENCE INSTALLATION



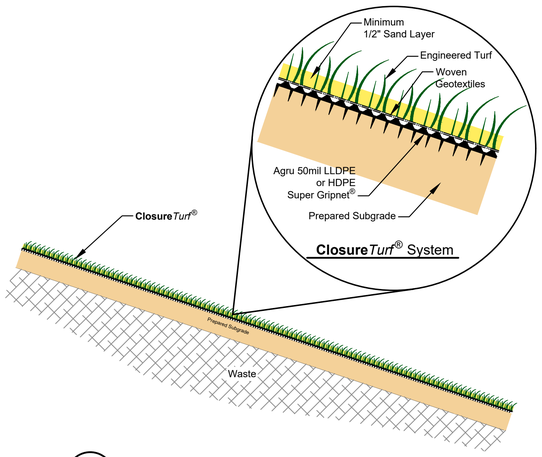
TRENCH DETAIL



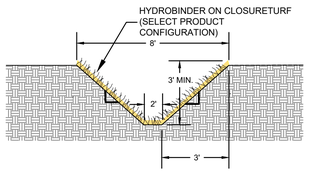
1 / 300 SILT FENCE DETAIL
NOT TO SCALE

SILT FENCE - GENERAL NOTES

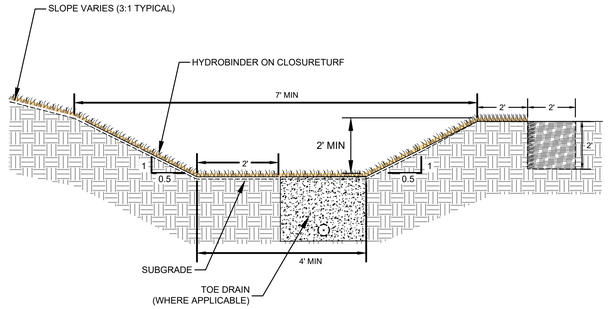
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.



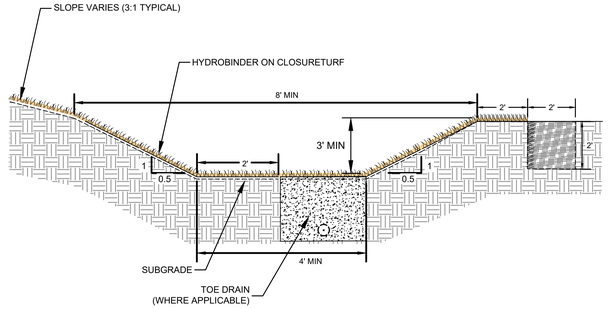
2 / 300 CLOSURE *TURF* TYPICAL SLOPE
NOT TO SCALE



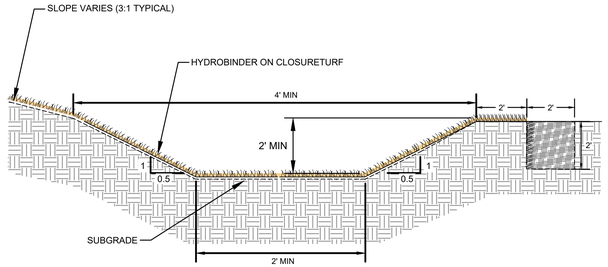
3 / 300 CLOSURE TURF FLUME DETAIL
NOT TO SCALE



4A / 300 TYPICAL PERIMETER CHANNEL SECTION
NOT TO SCALE

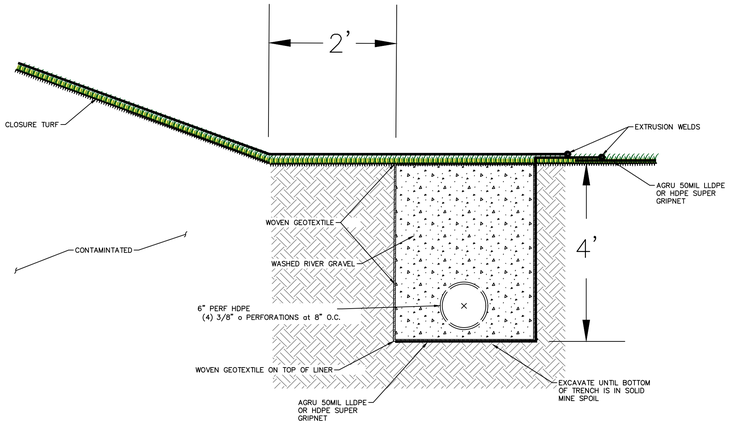


4B / 300 TYPICAL PERIMETER CHANNEL SECTION
NOT TO SCALE



4C / 300 TYPICAL PERIMETER CHANNEL SECTION
NOT TO SCALE

1



5 / 300 TOE DRAIN
NOT TO SCALE

LINER INSTALLATION NOTES:

1. INSTALL LINER INTO THE TRENCH AND HAVE IT OVERLAP OUTSIDE THE TRENCH APPROXIMATELY TWO TO FOUR FEET. COMPLETE INSTALLATION OF THE TOE DRAIN.
2. FINISH INSTALLING THE LINER DOWN THE SLOPE. CUT AND WELD LINER TO THE FLAP. WELD AND CONTINUE LINER TO ANCHOR TRENCH.

REVISIONS

REV NO	DATE	INITIALS	DESCRIPTION
1	10/19/2020	ECM	ADDED TWO NEW PERIMETER SECTIONS AND UPDATED ORIGINAL

AECOM

TITLE

DETAILS I

BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR

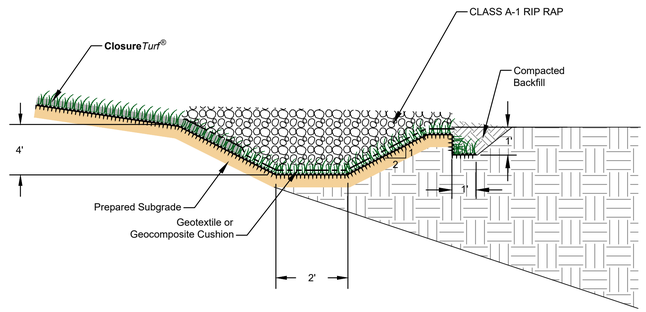
D.B. WILSON GENERATING STATION

SEAL

Big Rivers ELECTRIC CORPORATION

SCALE: AS SHOWN	DES: JCV	
DWG TYPE: .DWG	DFTR: JCV	
JOB NO: 60620035	CHKD: DS	
DATE: 01/20/2020	ENGR: MBC	
FILENAME:	APPD: MBC	

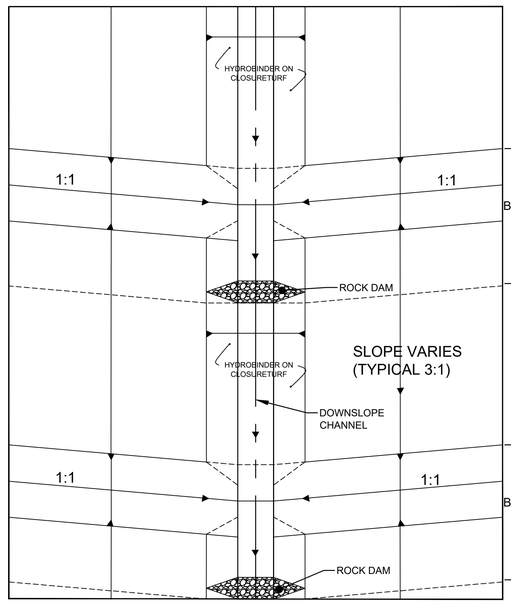
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-300	B



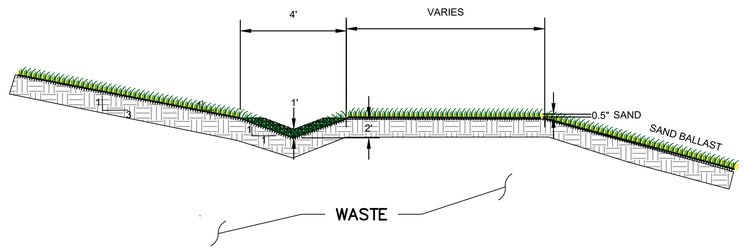
GENERAL NOTES

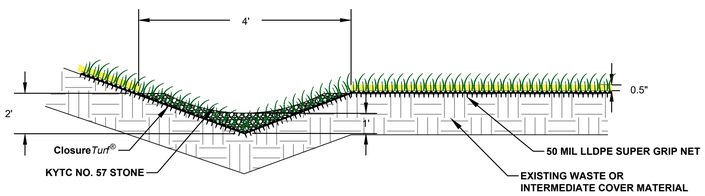
1. RIPRAP DISSIPATERS SHALL BE PLACED AT TOE OF EACH FLUME.

6 / 301 CLOSURETURF WITH RIPRAP
NOT TO SCALE



7 / 301 HYDROBINDER DOWNSLOPE CHANNELS PLAN
NOT TO SCALE





GENERAL NOTES

1. SLOPE DIVERSTION TRENCH SHALL BE INSTALLED AT THE FLOW LINE OF EACH BENCH.
2. CRUSHED #57 STONE IS TO BE MINIMUM 12" OVER CLOSURETURF

8 / 301 TYPICAL SLOPE DIVERSION SWALE
NOT TO SCALE

REVISIONS			
REV NO	DATE	INITIALS	DESCRIPTION
B	11/18/2020	ECM	UPDATED ALL DETAILS

AECOM

TITLE

DETAILS II

BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR

D.B. WILSON GENERATING STATION

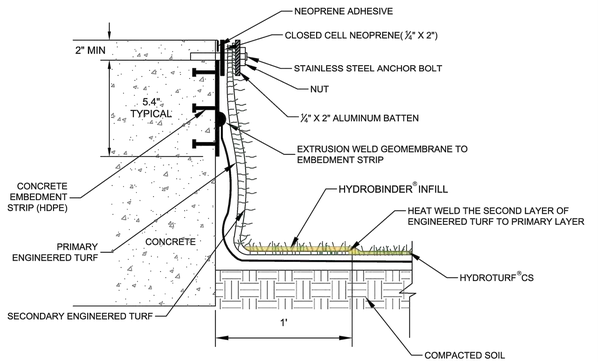
SEAL

STATE OF KENTUCKY · MICHAEL BRIAN BOLE · 29911 · LICENSED PROFESSIONAL ENGINEER
11/2/2021

Big Rivers ELECTRIC CORPORATION

SCALE: AS SHOWN		DES: JCV
DWG TYPE: .DWG		DFTR: JCV
JOB NO: 60620035		CHKD: DS
DATE: 01/20/2021		ENGR: MBC
FILENAME:		APPD: MBC
DWG SIZE	DRAWING NO.	REVISION
Arch D 24.0"x36.0"	BGR-WCP-301	B

REV. B



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WatershedGeo® Unearthing Solutions®

PRODUCT HydroTurf®

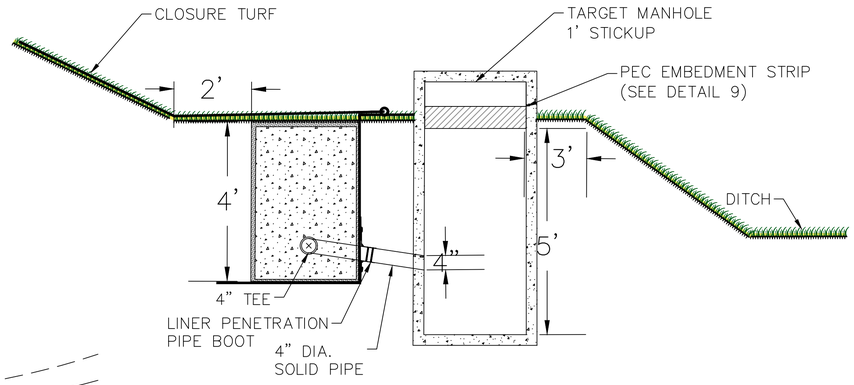
TITLE HYDROTURF® CS CONNECTION WITH CONCRETE EMBEDMENT STRIP

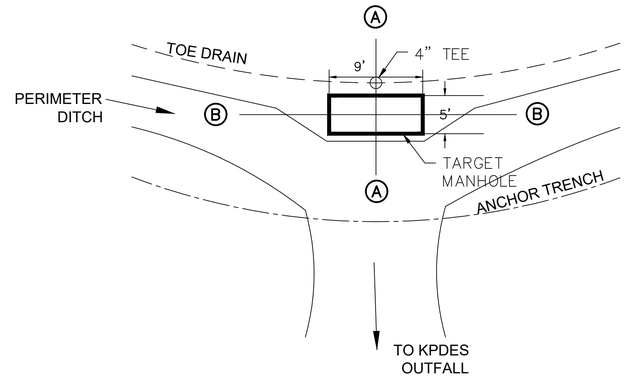
File #	HTTR-04-R00	
Rev #	Scale	Date
0	NTS	2/8/2017

FIGURE 1

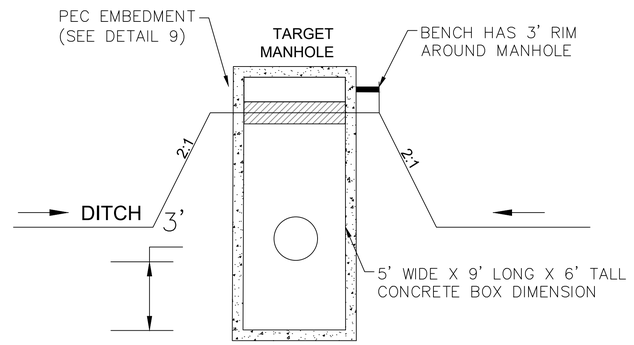
9 / 302 HYDROTURF CS CONNECTION WITH CONCRETE EMBEDMENT STRIP
NOT TO SCALE

TARGET MANHOLE SECTION A-A

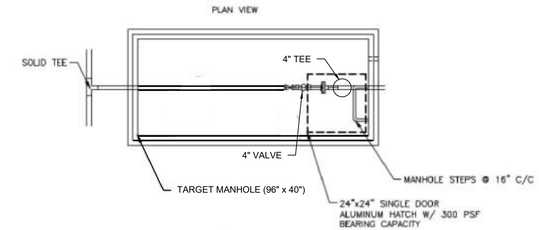




10 / 302 TARGET MANHOLE DETAILS
NOT TO SCALE



TARGET MANHOLE SECTION B-B



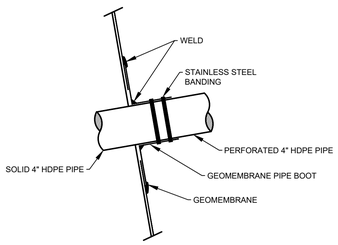
11 / 302 TARGET MANHOLE DETAIL
NOT TO SCALE

NOTE:

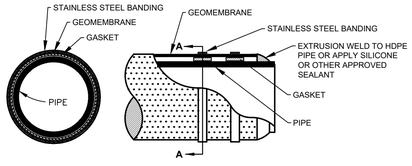
1. COAT INTERIOR OF MANHOLE WITH EPOXY.
2. HYDROSTATIC TESTING SHALL BE CONDUCTED ON THE TARGET MANHOLE.

STEPS NOTES:

1. STEPS SHALL BE ASPHALT COATED CAST IRON OR POLYPROPYLENE PLASTIC COATED STEEL ROD OR OF A TYPE AND SIZE APPROVED BY THE ENGINEER.
2. STEPS SHALL BE SPACED APPROXIMATELY 12" TO 16" O.C. VERTICALLY SO AS TO FORM A CONTINUOUS LADDER.
3. STEPS SHALL BE REQUIRED IN MANHOLES WHEN THE STRUCTURE IS 4 FEET AND GREATER IN DEPTH. (MEASURE FROM FLOW LINE OF LOWEST PIPE TO TOP OF STRUCTURE).
4. THE TREADS OF ALL STEPS SHALL HAVE ANTI-SKID PROPERTIES FOR HAND AND FOOT GRIPS.



12 / 302 PIPE PENETRATION DETAIL
NOT TO SCALE



SECTION A-A

13 / 302 PIPE BOOT DETAIL
NOT TO SCALE

AECOM

TITLE
DETAILS III
BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

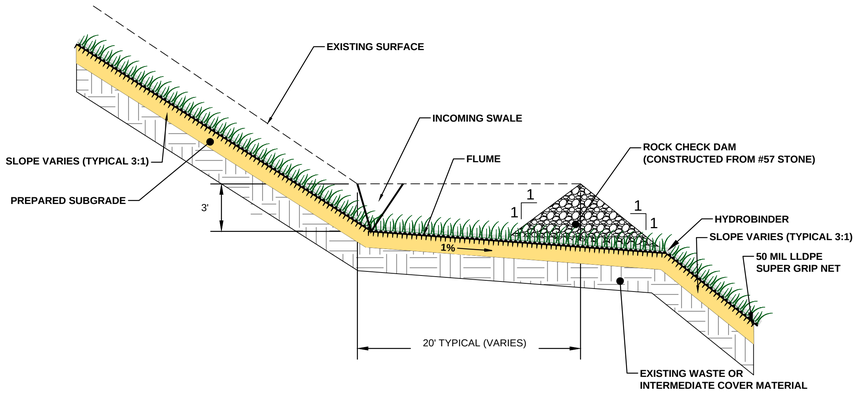
FOR
D.B. WILSON GENERATING STATION

SEAL
STATE OF KENTUCKY · MICHAEL BRIAN BOLE OWEN · LICENSED PROFESSIONAL ENGINEER
11/2/2021

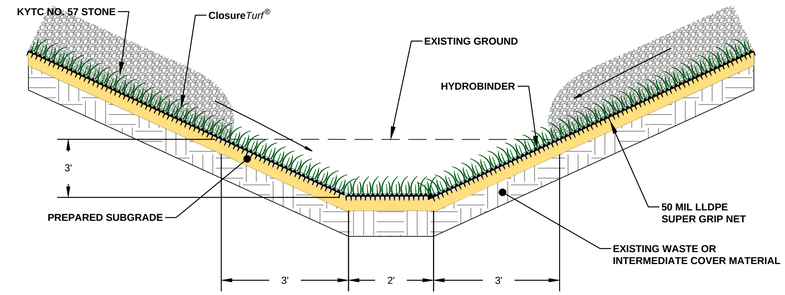
Big Rivers ELECTRIC CORPORATION

SCALE: AS SHOWN		DES: JCV	
DWG TYPE: .DWG		DFTR: JCV	
JOB NO: 60620035		CHKD: DS	
DATE: 01/20/2021		ENGR: MBC	
FILENAME:		APPD: MBC	
DWG SIZE	DRAWING NO.	REVISION	
Arch D 24.0"x36.0"	BGR-WCP-302	B	

REV. B



A-A 303 TYPICAL FLUME PROFILE
NOT TO SCALE

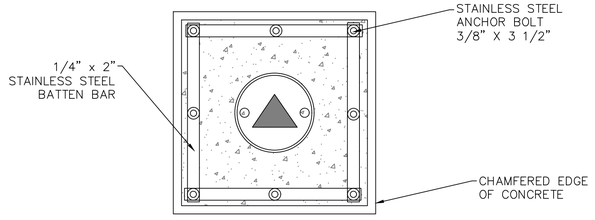


GENERAL NOTES

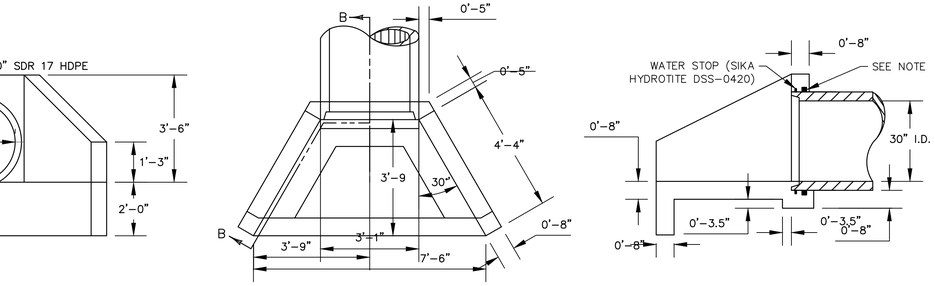
1. GRAVEL TO BE KYTC NO.57 LIMESTONE
2. 6" OVERLAP BENEATH STONE
3. HYDROBINDER TO BE PLACED PRIOR TO STONE

B-B 303 TYPICAL FLUME SECTION AT BENCH
NOT TO SCALE

1



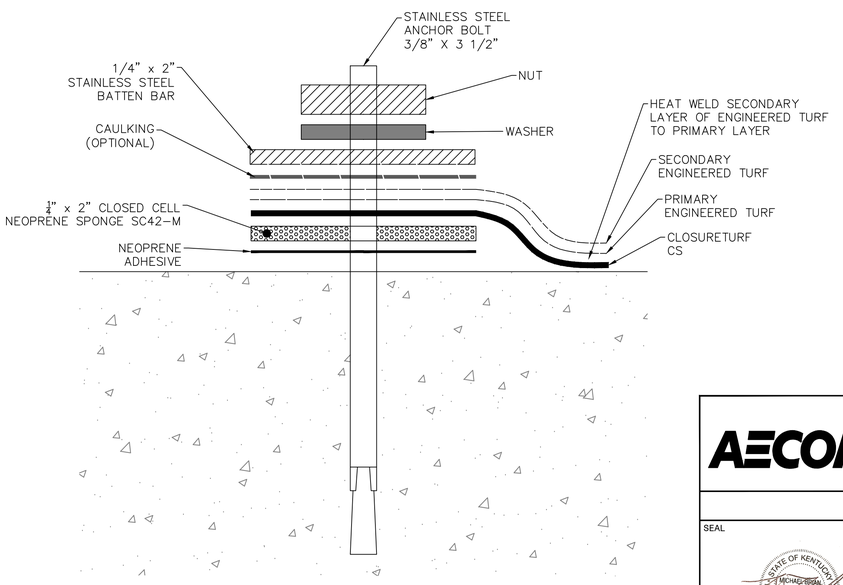
BATTEN BAR PLAN VIEW



14 200 303 **KYTC 30-INCH CIRCULAR PIPE HEADWALL**
NOT TO SCALE

NOTES:

1. REFER TO KYTC STD. DWG. RDH-110-02 FOR ADDITIONAL DIMENSIONS AND STEEL REINFORCEMENT
2. ATTACH ELECTROFUSION RESTRAINT DEVICES (MODEL 5754072 AS MANUFACTURED BY ISCO) AROUND CIRCUMFERENCE OF 30" ID SDR17 HDPE PIPE



15 303 BATTEN BAR CONNECTION
NOT TO SCALE

REVISIONS			
REV NO	DATE	INITIALS	DESCRIPTION
1	10/19/2020	ECM	ADDED FLUME PROFILE & SECTION AND HEADWALL DETAIL

AECOM

TITLE
DETAILS IV
BIG RIVERS
WILSON PHASE 1 LANDFILL CLOSURE CAP
OHIO COUNTY, KENTUCKY

FOR
D.B. WILSON GENERATING STATION

SEAL

STATE OF KENTUCKY · MICHAEL BRIAN CALE · 29900 · LICENSED PROFESSIONAL ENGINEER
1/20/2021

Big Rivers ELECTRIC CORPORATION
Your Touchstone Energy® Cooperative

SCALE: AS SHOWN	DES: JCV	
DWG TYPE: .DWG	DFTR: JCV	
JOB NO: 60620035	CHKD: DS	
DATE: 01/20/2021	ENGR: MBC	
FILENAME:	APPD: MBC	
DWG SIZE: Arch D 24.0"x36.0"	DRAWING NO.: BGR-WCP-303	REVISION: C

ATTACHMENT 2 - REVISED POST-CLOSURE PLAN

AECOM Imagine it. Delivered.

Big Rivers ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

DB Wilson Station Phase I

Special Waste Landfill Postclosure Plan

January 20, 2021

Introduction

Big Rivers Electric Corporation (BREC) operated a special waste landfill in Ohio County, Kentucky. The special waste landfill was used for the disposal of fly ash, bottom ash and stabilized scrubber wastes. These wastes met the definition of "coal combustion by-products" given in 401 KAR 45:010 and "special waste" given in KRS 224.50-760(1) (a). These wastes are generated by the 440-megawatt D.B. Wilson Power Plant. The landfill is separated into two phases, Phase 1 and Phase 2. Both phases of the special waste landfill are situated on a reclaimed surface mine. It is the intention of BREC to close Phase 1 of the D.B. Wilson Station Special Waste Landfill. Following the closure of the Phase 1 Landfill, a Postclosure Plan lasting a five (5) year period of maintenance and monitoring is being submitted.

The purpose of this Postclosure Plan is to meet the requirements given in 401 KAR 45:110. These regulations set certain criteria for the postclosure care of a special waste landfill. This Postclosure Plan addresses these care criteria performed by BREC to ensure no adverse effects occur to human health and the environment. The scope of the plan will include:

- Groundwater Monitoring Scheduling
- Maintenance Scheduling
- Projected postclosure cost estimate
- Postclosure plan conformance.

1. Written Postclosure Plan

As per 401 KAR 45:110:

(i) A post closure plan shall be submitted by the owner or operator of the special waste landfill that includes a monitoring and maintenance schedule for the landfill and a postclosure cost estimate in accordance with Section 3 of 401 KAR 45:080.

(ii) Upon completion of the implementation of an approved closure plan, a special waste landfill shall be maintained under its postclosure plan for a minimum of five (5) years in a manner that complies with 401 KAR 30:031.

(iii) At the conclusion of the five (5) year postclosure monitoring period, the owner or operator of the special waste landfill shall submit a certification that closure and postclosure of the site is complete in accordance with the approved closure and postclosure plans, and that the site is in conformance with the terms of this chapter and 401 KAR 30:031. The cabinet shall review the certification, conduct a site visit and review the permit records to determine if the site is closed in accordance with this chapter, 401 KAR 30:031, and KRS Chapter 224. If the certification of closure is accurate and there is no outstanding environmental violations at the site, the cabinet shall accept the certification of closure and, within

180 days of accepting the certification, release any remaining financial assurance executed under 401 KAR 45:080.

(iv) Any necessary environmental remediation steps or corrective action for groundwater contamination required under 401 KAR 45:160 shall be performed before the special waste landfill postclosure is certified as complete and financial assurance is released.

1.1 Final Cover System

Following the closure of the DB Wilson Phase I Landfill, visual inspections of the site and the Closure Turf cap will be completed on an annual basis for the duration of the postclosure period, five (5) years. Maintenance or any other corrective measures that are needed to prevent the deterioration of the closure system will be identified during the inspections.

The cap system will be maintained for a minimum of 5 years following final closure of the DB Wilson Phase I Landfill. The effectiveness of the cap system will be maintained by infilling sand to uphold the integrity of the turf cap, as well as any other necessary repairs to the cap.

1.2 Leachate Collection and Removal System

Big Rivers will maintain the integrity and effectiveness of the leachate collection and treatment system. Maintenance and monitoring of the leachate collection system during the postclosure period will include inspecting of the open channel flumes that will be installed in place of the current downspout pipes. Also due to the potential migration of the leachate, groundwater monitoring will be a part of the postclosure plan.

1.3 Groundwater Monitoring System

Big Rivers will handle the groundwater monitoring and analysis for the postclosure period. Groundwater monitoring locations will be inspected annually, and repairs will be made as needed.

1.4 Postclosure Cost Estimation

Based on Groundwater Monitoring, Leachate Treatment, and Operation and Maintenance cost projections an estimated Post Closure Care Total cost was calculated to be $117,270 annually, with a cost per year per acre of $1,339.

The Postclosure Cost Estimate can be found in **Attachment 4.**

1.5 Certification of Postclosure Plan

There is a written certification provided by a qualified professional engineer that states that the post closure plan has met the requirements of 401 KAR 45:110.

1.6 Notification of Completion of Post Closure Care Period

No later than 180 days following the completion of the postclosure period of five years, the owner or operator must prepare a notification verifying that the postclosure care has been completed. The notification must include a certification by a qualified professional engineer verifying that postclosure care has been completed in accordance with the postclosure plan and requirements of 401 KAR 30:031.

ATTACHMENT 3 - TRANSITION INFORMATION

Professional Engineer Certifications

40 CFR 257.91 Groundwater Monitoring System

40 CFR 257.93 Statistical Method

40 CFR 257.80 Fugitive Dust Control Plan

40 CFR 257.81 Landfill Run-on and Run-off Control Plan

D.B. Wilson Station CCR Landfill
Groundwater Monitoring System and Statistical Methods
Professional Engineer Certification [Per 40 CFR §257.91 and §257.93]

I hereby certify that myself or an agent under my review has prepared this Groundwater Monitoring System and Statistical Method Assessment and being familiar with the provisions of the final rule to regulate the disposal of coal combustion residuals (CCR) as solid waste under subtitle D of the Resource Conservation and Recovery Act (RCRA), attest that:

- The Groundwater Monitoring System meets the requirements of § 257.91 as specified below:

  (f) The owner or operator must obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of this section. If the groundwater monitoring system includes the minimum number of monitoring wells specified in paragraph (c)(1) of this section, the certification must document the basis supporting this determination.

- The Statistical Method meets the requirements of § 257.93 as specified below:

  (f)(6) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area. The certification must include a narrative description of the statistical method selected to evaluate the groundwater monitoring data.

David A. Lamb P.E.

State of Kentucky License No. 17822

Date: 6/28/2016

Amended (2/1/18)

Certification Statement 40 CFR § 257.93(f)(6) – Statistical Method for the Evaluation of Groundwater Monitoring Data for the CCR Management Area

CCR Landfill Information

Name: D.B. Wilson CCR Landfill
Operator: D.B. Wilson Generating Station
Address: 5663 State Route 85 West, Centertown, KY 42328

I, Michael Brian Cole, PE, being a Registered Professional Engineer in good standing in the Commonwealth of Kentucky, do hereby certify, to the best of my knowledge, information, and belief that the information contained in this certification is prepared in accordance with the accepted practice of engineering. I certify, for the above-referenced CCR Unit, that the statistical method selected for the groundwater monitoring system as included in the 2016-2017 Annual Groundwater Monitoring and Corrective Action Report for the Wilson Phase II Landfill dated 1/29/2017 is appropriate for evaluating the groundwater monitoring data for the CCR Unit. The statistical method selected to evaluate the groundwater monitoring data for the CCR Unit is identified in the 2016-2017 Annual Groundwater Monitoring and Corrective Action Report, Section 3.4, Attachment C dated 1/29/2017 for the Wilson Phase II Landfill.

Michael Brian Cole, PE
Printed Name

2/1/2018
Date

Professional Engineer Certification

Professional Engineer Certification [40 CFR Part 257.80 Air Criteria]

I hereby certify that myself or an agent under my review has prepared this Fugitive Dust Control Plan (Plan), and being familiar with the provisions of the final rule to regulate the disposal of coal combustion residuals (CCR) as solid waste under subtitle D of the Resource Conservation and Recovery Act (RCRA), attest that this Plan has been prepared in accordance with good engineering practices and meets the intent of 40 CFR Part 257.80. To the best of my knowledge and belief, the information contained in this Plan is true, complete, and accurate; therefore, the Plan shall be implemented as herein described.

This certification in no way relieves the owner or operator of the facility of their duty to fully implement this Plan in accordance with the requirements of the stated regulation. This Plan is valid only to the extent that the facility owner or operator follows the provisions prescribed herein.

David A. Lamb, PE

David A. Lamb, P.E.
State of Kentucky License No. 17822

Seal:

Date: 10/5/2017

Professional Engineer Certification [Per 40 CFR § 257.81]
D.B. Wilson CCR Landfill Run-on and Run-off Control System Plan

I hereby certify that myself or an agent under my review has prepared this Run-on and Run-off Control System Plan (Plan), and being familiar with the provisions of the final rule to regulate the disposal of coal combustion residuals (CCR) as solid waste under subtitle D of the Resource Conservation and Recovery Act (RCRA), attest that this Plan has been prepared in accordance with good engineering practices and meets the intent of 40 CFR Part 257.81. To the best of my knowledge and belief, the information contained in this Plan is true, complete, and accurate.

David A. Lamb P.E.

State of Kentucky License No. 17822

STATE OF KENTUCKY
DAVID A. LAMB
17822
LICENSED PROFESSIONAL ENGINEER

Date: 8/6/18

ATTACHMENT 4 - UPDATED CLOSURE AND POST-CLOSURE COST ESTIMATES

DB WILSON PHASE I LANDFILL CAP

POST CLOSURE CARE COST ESTIMATE - ENTIRE FOOTPRINT - TOTAL PC PERIOD

Consideration	Post Closure Care Cost 2020 Dollars
Ground Water Monitoring	$ 8,000
Leachate Treatment	$ 93,000
Operation and Maintenance (Sand Maintenance, Inspections, etc.)	$ 18,000
Engineering Design / Utilities (10%)	$ 5,950
Contingency (10%)	$ 13,000
ANNUAL POST CLOSURE CARE TOTAL =	**$ 137,950**
PER ACRE COST =	**$ 1,339.32**
TOTAL COST =	**$ 689,750.00**

CALCULATION SHEET	PROJECT **DB Wilson Phase I Landfill**		SHEET 1	REV. NO.
	SUBJECT Annual Post Closure Care Cost Estimate		CLIENT PROJECT #	
	ACTIVITY **Post Closure Plan Cost Estimate**	LAST UPDATED BY: MBC	DATE LAST MODIFIED 1/11/2021	REVIEWED BY: MBC

BASIS OF THE ESTMATE		
YEAR COST BASIS	2020	
TOTAL AREA OF DISTURBANCE (FACILITY AREA)	103	Acres

	TASK	ITEM	UNIT	ESTIMATED ANNUAL QUANTITY	ESTIMATED UNIT COST	ESTIMATED ENTIRE COST	NOTES
GROUND WATER MONITORING	**GROUND WATER MONITORING**						
	1	GROUND WATER MONITORING SAMPLING & ANALYTICAL	WELLS	5	$1,500.00	$ 7,500	Unit cost is based on 2 sampling events per year for 2-person team at 16 hours each.
LEACHATE TREATMENT	**SURFACE WATER MONITORING**						
	2	TREATMENT REAGENTS	GALLONS	400,000	$0.075	$ 30,000	Geomembrane cap should drop the volume over time considerably. Average value of 10 GPAD used.
	3	TREATMENT SUPPLIES & SUPPORT	GALLONS	400,000	$0.156	$ 62,400	Primary labor support is provided by existing BREC employees
OPERATION AND MAINENANCE	**OPERATION AND MAINENANCE**						
	4	SITE INSPECTION	PERSON-HOURS	32	$60.00	$ 1,920	Assume one inspection per year for 2-person team at 16 hours each.
	5	SAND INFILL MAINTENANCE	ACRES	103	$150.00	$ 15,450	Annual maintenance, includes Hydrobinder in perimeter ditches

TOTAL	**$ 117,270**	Per year

AECOM CALCULATION SHEET	PROJECT: **DB WILSON PHASE I LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASE I	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** MBC	**DATE LAST MODIFIED:** 01/12/21	**REVIEWED BY:** MBC

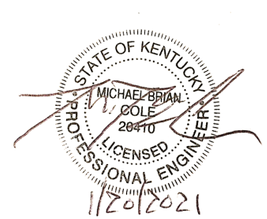
BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	103		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
MOBILIZATION/ SITE PREP	**MOBILIZATION / SITE PREP**							
	1	MOBILIZATION	LS	1	$350,000	$350,000		Mob/Demob & insurance: (2.5% of closure tasks) includes administration (mtgs, health & safety, trailer, phone/fax/electricity, temporary facilities, utilities, roll off boxes, waste disposal, and cleanup).
							$350,000	
DEWATERING / EARTHWORK / SUBGRADE PREP	**EARTHWORK / SUBGRADE PREP**							
	2	STRIP AND STOCKPILE 3 INCHES OF SOIL COVER/ VEGETATION	ACRE	103	$2,500	$257,500		Need to strip vegetation for proper long-term friction interface. Includes perimeter ditches, which will also be lined.
							$257,500	
CLOSURE SYSTEM CONSTRUCTION	**CLOSURE SYSTEM CONSTRUCTION**							
	3	ANCHOR TRENCH INSTALLATION	L.F.	11,280	$5	$56,400		Linear feet around the perimeter of landfill.
	4	TOTAL INSTALLED CLOSURE TURF	SQ. FT.	4,573,800	$2.84	$12,989,592		Baseed on quote from Watershed Geo. Acreage includes perimeter ditches, which will be lined.
	5	MANUFACTURED SAND INFILL	TONS	12,600	$35.00	$441,000		Baseed on quote from Watershed Geo
	6	TOE DRAIN BENEATH GEOMEMBRANE	L.F.	7,280	$40.00	$291,200		Toe drain not proposed on west side of landfill. Price includes cost of target manhole, but no conveyance to wastewater treatment plant.
							$13,778,192	
HYDROTURF/ STORMWATER DRAINAGE	**HYDROTURF/STORMWATER DRAINAGE**							
	7	PERIMETER CHANNEL	SQ. FT.	67,680	$4.40	$297,792		Based on 6' wide ditch around perimeter of the entire landfill being lined with HydroBinder. Assumes no need for major improvement of existing ditch.
	8	BENCH FLOWLINES	L.F.	27,400	$36.00	$986,400		Based on 4' wide x 2' deep rock drain being installed along bench flow lines to minimize trampolining of geomembrane and erosion of sand infill
	9	DEMOLITION OF EXISTING DOWNSPOUT PIPES & SHAPING FLUMES	L.F.	3,500	$30.00	$105,000		
	10	FLUME LINING	SQ. FT.	27,960	$4.40	$123,024		Based on 4' wide flumes being installed where all existing downspout pipes are located and lining with HydroBinder.
	11	FLUME RIP RAP LANDINGS	TONS	160	$150.00	$24,000		Based on truckload of rip rap being placed at toe of each flume for velocity dissipation
							$1,536,216	

CALCULATION SHEET	PROJECT: DB WILSON PHASE I LANDFILL CLOSURE COST ESTIMATE	PLANT NAME: DB WILSON	CLOSURE TYPE: CAP IN PLACE	SHEET: 1	REV. NO.: 1
	SUBJECT: Preliminary Project Costs Sheets	UNIT NAME: PHASE I	CLOSURE METHOD: CAP IN PLACE	CLOSURE YEAR: 2021	AECOM JOB NO.: 60631499
	ACTIVITY: Close-in-Place Costs	CLOSURE OPTION: CAP IN PLACE	LAST UPDATED BY: MBC	DATE LAST MODIFIED: 01/12/21	REVIEWED BY: MBC

BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	103		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
	MOBILIZATION / SITE PREP							
STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION	**STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION**							
	12	SILT FENCING	L.F.	11,280	$2	$22,560		Assume total area to be restored will require site erosion and sediment control. Assumes one row of silt fence around the entire landfill.
							$22,560	
DESIGN & CONSTRUCTION QUALITY ASSURANCE	**DESIGN & CONSTRUCTION QUALITY ASSURANCE**							
	13	SURVEYING, DESIGN PACKAGE, CONSTRUCTION OVERSIGHT	LS	1	$100,000	$100,000		
							$100,000	
		TOTAL					$16,044,468	

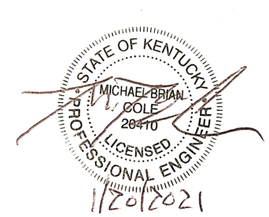


ASSUMPTION SHEET	PROJECT: **DB WILSON PHASE I LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASE I	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** MBC	**DATE LAST MODIFIED:** 01/12/21	**REVIEWED BY:** MBC

KEY ASSUMPTIONS

The following key assumptions and limitations are associated with the project design, implementation and performance:

1	The cost estimates were prepared using 2020 dollars and do not include any escalation.
2	No costs to improve the existing sediment basins or to regrade the perimeter ditch have been included.
3	The unit rate costs are based on AECOM experience, RS Means, and recent quotes from Watershed Geo on a hypothetical project of this size.
4	No costs to convey seepage to existing treatment system have been included.
5	It is assumed that the existing perimeter ditch profile provides adequate drainage, and no significant improvements are required.
6	Abandonment of existing structures/piping includes the demolition of existing pipes and inlets/outlet structures, and converting the resulting trench into a rip rap flume. There may be some grouting of outlet pipes that extend beyond the limits of waste.
7	Cap cross section for the CCR landfill will consist of (from bottom to top): cover soil / geomembrane / closure turf / sand infill.
8	Statements of Probable Construction Cost prepared by AECOM represent AECOM's judgment as a design professional familiar with the construction industry. It is recognized, however, that neither AECOM nor the Owner has control over the cost of labor, materials or equipment nor over the contractor's methods of determining the bid price or other competitive bidding, market, or negotiating conditions. Accordingly, AECOM cannot and does not warrant or represent that proposals, bids or actual construction costs will not vary from any statement of Probable Construction Cost or other estimates or evaluations prepared by AECOM.



DB WILSON PHASE II LANDFILL CAP

POST CLOSURE CARE COST ESTIMATE - ENTIRE FOOTPRINT - WHOLE PC PERIOD

Consideration	Post Closure Care Cost 2020 Dollars
Ground Water Monitoring	$ 24,000
Leachate Treatment	$ 80,000
Operation and Maintenance (Sand Maintenance, Inspections, etc.)	$ 18,000
Engineering Design / Utilities (10%)	$ 6,100
Contingency (10%)	$ 13,000
ANNUAL POST CLOSURE CARE TOTAL =	**$ 141,100**
PER ACRE COST =	**$ 1,397.03**
TOTAL COST =	**$ 4,233,000.00**

CALCULATION SHEET	PROJECT **DB Wilson Phase II Landfill**		SHEET 1	REV. NO.
	SUBJECT Annual Post Closure Care Cost Estimate		CLIENT PROJECT #	
	ACTIVITY **Post Closure Plan Cost Estimate**	LAST UPDATED BY: MBC	DATE LAST MODIFIED 1/11/2021	REVIEWED BY: MBC

BASIS OF THE ESTMATE		
YEAR COST BASIS	2020	
TOTAL AREA OF DISTURBANCE (FACILITY AREA)	101	Acres

	TASK	ITEM	UNIT	ESTIMATED ANNUAL QUANTITY	ESTIMATED UNIT COST	ESTIMATED ENTIRE COST	NOTES
GROUND WATER MONITORING	**GROUND WATER MONITORING**						
	1	GROUND WATER MONITORING SAMPLING & ANALYTICAL	WELLS	16	$1,500.00	$ 24,000	Unit cost is based on 2 sampling events per year. Assumes 4 new assessment wells, and 2 sampling events per year for 2-person team at 16 hours each.
LEACHATE TREATMENT	**SURFACE WATER MONITORING**						
	2	TREATMENT REAGENTS	GALLONS	345,000	$0.075	$ 25,875	Geomembrane cap should drop the volume over time considerably. Average value of 10 GPAD used.
	3	TREATMENT SUPPLIES & SUPPORT	GALLONS	345,000	$0.156	$ 53,820	Labor is primarily provided by existing BREC employees
OPERATION AND MAINENANCE	**OPERATION AND MAINENANCE**						
	4	SITE INSPECTION	PERSON-HOURS	32	$60.00	$ 1,920	Assume one inspection per year for 2-person team at 16 hours each.
	5	SAND INFILL MAINTENANCE	ACRES	101	$150.00	$ 15,150	Annual maintenance, includes Hydrobinder in perimeter ditches

TOTAL	**$ 120,765**	Per year

AECOM CALCULATION SHEET	PROJECT: DB WILSON PHASE II LANDFILL CLOSURE COST ESTIMATE	PLANT NAME: DB WILSON	CLOSURE TYPE: CAP IN PLACE	SHEET: 1	REV. NO.: 1
	SUBJECT: Preliminary Project Costs Sheets	UNIT NAME: PHASE II	CLOSURE METHOD: CAP IN PLACE	CLOSURE YEAR: 2021	60631499
	ACTIVITY: Close-in-Place Costs	CLOSURE OPTION: CAP IN PLACE	LAST UPDATED BY: MBC	DATE LAST MODIFIED: 01/12/21	REVIEWED BY: MBC

BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	101		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
MOBILIZATION/ SITE PREP	MOBILIZATION / SITE PREP							
	1	MOBILIZATION	LS	1	$350,000	$350,000		Mob/Demob & insurance: (2.5% of closure tasks) includes administration (mtgs, health & safety, trailer, phone/fax/electricity, temporary facilities, utilities, roll off boxes, waste disposal, and cleanup).
							$350,000	
DEWATERING / EARTHWORK / SUBGRADE PREP	EARTHWORK / SUBGRADE PREP							
	2	STRIP AND STOCKPILE 3 INCHES OF SOIL COVER/ VEGETATION	ACRE	101	$2,500	$252,500		Need to strip vegetation for proper long-term friction interface. Includes perimeter ditches, which will be lined as well.
							$252,500	
CLOSURE SYSTEM CONSTRUCTION	CLOSURE SYSTEM CONSTRUCTION							
	3	ANCHOR TRENCH INSTALLATION	L.F.	9,600	$5	$48,000		Linear feet around the perimeter of landfill.
	4	TOTAL INSTALLED CLOSURE TURF	SQ. FT.	4,399,560	$2.84	$12,494,750		Baseed on quote from Watershed Geo. Acreage includes perimeter ditches, which will be lined.
	5	MANUFACTURED SAND INFILL	TONS	12,120	$35.00	$424,200		Baseed on quote from Watershed Geo
	6	TOE DRAIN BENEATH GEOMEMBRANE	L.F.	9,600	$40.00	$384,000		Toe drain not proposed on west side of landfill. Price includes cost of target manhole, but no conveyance to wastewater treatment plant.
							$13,350,950	
HYDROTURF/ STORMWATER DRAINAGE	HYDROTURF/STORMWATER DRAINAGE							
	7	PERIMETER CHANNEL	SQ. FT.	57,600	$4.40	$253,440		Based on 6' wide ditch around perimeter of the entire landfill being lined with HydroBinder. Assumes no need for major improvement of existing ditch.
	8	BENCH FLOWLINES	L.F.	25,000	$36.00	$900,000		Based on 4' wide x 2' deep rock drain being installed along bench flow lines to minimize trampolining of geomembrane and erosion of sand infill
	9	DEMOLITION OF EXISTING DOWNSPOUT PIPES & SHAPING FLUMES	L.F.	3,500	$30.00	$105,000		
	10	FLUME LINING	SQ. FT.	27,960	$4.40	$123,024		Based on 4' wide flumes being installed where all existing downspout pipes are located and lining with HydroBinder.
	11	FLUME RIP RAP LANDINGS	TONS	160	$150.00	$24,000		Based on truckload of rip rap being placed at toe of each flume for velocity dissipation
							$1,405,464	
STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION	STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION							
	12	SILT FENCING	L.F.	10,000	$2	$20,000		Assume total area to be restored will require site erosion and sediment control. Assumes one row of silt fence around the entire landfill.
							$20,000	
DESIGN & CONSTRUCTION QUALITY ASSURANCE	DESIGN & CONSTRUCTION QUALITY ASSURANCE							
	13	SURVEYING, DESIGN PACKAGE, CONSTRUCTION OVERSIGHT	LS	1	$100,000	$100,000		
							$100,000	
		TOTAL					$15,478,914	

AECOM CALCULATION SHEET	PROJECT: DB WILSON PHASE II LANDFILL CLOSURE COST ESTIMATE	PLANT NAME: DB WILSON	CLOSURE TYPE: CAP IN PLACE	SHEET: 1	REV. NO.: 1
	SUBJECT: Preliminary Project Costs Sheets	UNIT NAME: PHASE II	CLOSURE METHOD: CAP IN PLACE	CLOSURE YEAR: 2021	60631499
	ACTIVITY: Close-in-Place Costs	CLOSURE OPTION: CAP IN PLACE	LAST UPDATED BY: MBC	DATE LAST MODIFIED: 01/12/21	REVIEWED BY: MBC

BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	101		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
	MOBILIZATION / SITE PREP							

AECOM ASSUMPTION SHEET	PROJECT: **DB WILSON PHASE II LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASE II	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** MBC	**DATE LAST MODIFIED:** 01/12/21	**REVIEWED BY:** MBC

KEY ASSUMPTIONS

The following key assumptions and limitations are associated with the project design, implementation and performance:

1	The cost estimates were prepared using 2020 dollars and do not include any escalation.
2	No costs to improve the existing sediment basins or to regrade the perimeter ditch have been included.
3	The unit rate costs are based on AECOM experience, RS Means, and recent quotes from Watershed Geo on a hypothetical project of this size.
4	No costs to convey seepage to existing treatment system have been included.
5	It is assumed that the existing perimeter ditch profile provides adequate drainage, and no significant improvements are required.
6	Abandonment of existing structures/piping includes the demolition of existing pipes and inlets/outlet structures, and converting the resulting trench into a rip rap flume. There may be some grouting of outlet pipes that extend beyond the limits of waste.
7	Cap cross section for the CCR landfill will consist of (from bottom to top): cover soil / geomembrane / closure turf / sand infill.
8	Statements of Probable Construction Cost prepared by AECOM represent AECOM's judgment as a design professional familiar with the construction industry. It is recognized, however, that neither AECOM nor the Owner has control over the cost of labor, materials or equipment nor over the contractor's methods of determining the bid price or other competitive bidding, market, or negotiating conditions. Accordingly, AECOM cannot and does not warrant or represent that proposals, bids or actual construction costs will not vary from any statement of Probable Construction Cost or other estimates or evaluations prepared by AECOM.

DB WILSON SITEWIDE LANDFILL CAP

POST CLOSURE CARE COST ESTIMATE - ENTIRE FOOTPRINT - TOTAL PC PERIOD

Consideration	Phase I Post Closure Care Cost 2020 Dollars	Phase II Post Closure Care Cost 2020 Dollars
Ground Water Monitoring	$ 8,000	$ 24,000
Leachate Treatment	$ 93,000	$ 79,695
Operation and Maintenance (Sand Maintenance, Inspections, etc.)	$ 18,000	$ 17,070
Engineering Design / Utilities (10%)	$ 5,950	$ 6,038
Subtotal	$ 124,950	$ 126,803
Contingency (10%)	$ 13,000	$ 13,000
ANNUAL POST CLOSURE CARE TOTAL =	**$ 262,900**	**$ 266,607**
Number of years	**$ 5**	**$ 30**
PER ACRE ANNUAL COST =	**$ 2,552.43**	**$ 2,639.67**
TOTAL POST CLOSURE COST =	**$ 1,314,500.00**	**$ 7,998,195.00**

CALCULATION SHEET	PROJECT **DB Wilson Phase I Landfill**		SHEET 1	REV. NO.
	SUBJECT Annual Post Closure Care Cost Estimate		CLIENT PROJECT #	
	ACTIVITY **Post Closure Plan Cost Estimate**	LAST UPDATED BY: MBC	DATE LAST MODIFIED 1/11/2021	REVIEWED BY: MBC

BASIS OF THE ESTMATE		
YEAR COST BASIS	2020	
TOTAL AREA OF DISTURBANCE (FACILITY AREA)	103	Acres

	TASK	ITEM	UNIT	ESTIMATED ANNUAL QUANTITY	ESTIMATED UNIT COST	ESTIMATED ENTIRE COST	NOTES
GROUND WATER MONITORING	**GROUND WATER MONITORING**						
	1	GROUND WATER MONITORING SAMPLING & ANALYTICAL	WELLS	5	$1,500.00	$ 7,500	Unit cost is based on 2 sampling events per year for 2-person team at 16 hours each.
LEACHATE TREATMENT	**SURFACE WATER MONITORING**						
	2	TREATMENT REAGENTS	GALLONS	400,000	$0.075	$ 30,000	Geomembrane cap should drop the volume over time considerably. Average value of 10 GPAD used.
	3	TREATMENT SUPPLIES & SUPPORT	GALLONS	400,000	$0.156	$ 62,400	Primary labor support is provided by existing BREC employees
OPERATION AND MAINENANCE	**OPERATION AND MAINENANCE**						
	4	SITE INSPECTION	PERSON-HOURS	32	$60.00	$ 1,920	Assume one inspection per year for 2-person team at 16 hours each.
	5	SAND INFILL MAINTENANCE	ACRES	103	$150.00	$ 15,450	Annual maintenance, includes Hydrobinder in perimeter ditches

TOTAL	**$ 117,270**	Per year

CALCULATION SHEET	PROJECT		SHEET	REV. NO.
	DB Wilson Phase II Landfill		1	
	SUBJECT		CLIENT PROJECT #	
	Annual Post Closure Care Cost Estimate			
	ACTIVITY	LAST UPDATED BY:	DATE LAST MODIFIED	REVIEWED BY:
	Post Closure Plan Cost Estimate	MBC	1/11/2021	MBC

BASIS OF THE ESTMATE		
YEAR COST BASIS	2020	
TOTAL AREA OF DISTURBANCE (FACILITY AREA)	101	Acres

	TASK	ITEM	UNIT	ESTIMATED ANNUAL QUANTITY	ESTIMATED UNIT COST	ESTIMATED ENTIRE COST	NOTES
GROUND WATER MONITORING	**GROUND WATER MONITORING**						
	1	GROUND WATER MONITORING SAMPLING & ANALYTICAL	WELLS	16	$1,500.00	$ 24,000	Unit cost is based on 2 sampling events per year. Assumes 4 new assessment wells, and 2 sampling events per year for 2-person team at 16 hours each.
LEACHATE TREATMENT	**SURFACE WATER MONITORING**						
	2	TREATMENT REAGENTS	GALLONS	345,000	$0.075	$ 25,875	Geomembrane cap should drop the volume over time considerably. Average value of 10 GPAD used.
	3	TREATMENT SUPPLIES & SUPPORT	GALLONS	345,000	$0.156	$ 53,820	Labor is primarily provided by existing BREC employees
OPERATION AND MAINENANCE	**OPERATION AND MAINENANCE**						
	4	SITE INSPECTION	PERSON-HOURS	32	$60.00	$ 1,920	Assume one inspection per year for 2-person team at 16 hours each.
	5	SAND INFILL MAINTENANCE	ACRES	101	$150.00	$ 15,150	Annual maintenance, includes Hydrobinder in perimeter ditches

TOTAL	**$ 120,765**	Per year

CALCULATION SHEET	PROJECT: **DB WILSON SITEWIDE LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASES I AND II	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** MBC	**DATE LAST MODIFIED:** 01/12/21	**REVIEWED BY:** MBC

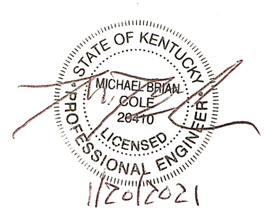
BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	204		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
MOBILIZATION/ SITE PREP	**MOBILIZATION / SITE PREP**							
	1	MOBILIZATION	LS	1	$700,000	$700,000		Mob/Demob & insurance: (2.5% of closure tasks) includes administration (mtgs, health & safety, trailer, phone/fax/electricity, temporary facilities, utilities, roll off boxes, waste disposal, and cleanup).
							$700,000	
DEWATERING / EARTHWORK / SUBGRADE PREP	**EARTHWORK / SUBGRADE PREP**							
	2	STRIP AND STOCKPILE 3 INCHES OF SOIL COVER/ VEGETATION	ACRE	204	$2,500	$510,000		Need to strip vegetation for proper long-term friction interface. Includes perimeter ditches, which will also be lined.
							$510,000	
CLOSURE SYSTEM CONSTRUCTION	**CLOSURE SYSTEM CONSTRUCTION**							
	3	ANCHOR TRENCH INSTALLATION	L.F.	20,880	$5	$104,400		Linear feet around the perimeter of each landfill phase.
	4	TOTAL INSTALLED CLOSURE TURF	SQ. FT.	8,886,240	$2.84	$25,236,922		Baseed on Phase I quote from Watershed Geo. Acreage includes perimeter ditches, which will be lined.
	5	MANUFACTURED SAND INFILL	TONS	24,480	$35.00	$856,800		Baseed on Phase I quote from Watershed Geo
	6	TOE DRAIN BENEATH GEOMEMBRANE	L.F.	16,880	$40.00	$675,200		Toe drain not proposed on west side of either landfill. Price includes cost of target manholes, but no conveyance to wastewater treatment plant.
							$26,873,322	
HYDROTURF/ STORMWATER DRAINAGE	**HYDROTURF/STORMWATER DRAINAGE**							
	7	PERIMETER CHANNEL	SQ. FT.	125,280	$4.40	$551,232		Based on 6' wide ditch around perimeter of both landfill phases being lined with HydroBinder. Assumes no need for major improvement of existing ditch.
	8	BENCH FLOWLINES	L.F.	52,400	$36.00	$1,886,400		Based on 4' wide x 2' deep rock drain being installed along bench flow lines to minimize trampolining of geomembrane and erosion of sand infill
	9	DEMOLITION OF EXISTING DOWNSPOUT PIPES & SHAPING FLUMES	L.F.	7,000	$30.00	$210,000		
	10	FLUME LINING	SQ. FT.	55,920	$4.40	$246,048		Based on 4' wide flumes being installed where all existing downspout pipes are located and lining with HydroBinder.
	11	FLUME RIP RAP LANDINGS	TONS	320	$150.00	$48,000		Based on truckload of rip rap being placed at toe of each flume for velocity dissipation
							$2,941,680	

AECOM CALCULATION SHEET	PROJECT: DB WILSON SITEWIDE LANDFILL CLOSURE COST ESTIMATE	PLANT NAME: DB WILSON	CLOSURE TYPE: CAP IN PLACE	SHEET: 1	REV. NO.: 1
	SUBJECT: Preliminary Project Costs Sheets	UNIT NAME: PHASES I AND II	CLOSURE METHOD: CAP IN PLACE	CLOSURE YEAR: 2021	AECOM JOB NO.: 60631499
	ACTIVITY: Close-in-Place Costs	CLOSURE OPTION: CAP IN PLACE	LAST UPDATED BY: MBC	DATE LAST MODIFIED: 01/12/21	REVIEWED BY: MBC

BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	204		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
	MOBILIZATION / SITE PREP							
STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION	**STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION**							
	12	SILT FENCING	L.F.	21,280	$2	$42,560		Assume total area to be restored will require site erosion and sediment control. Assumes one row of silt fence around both landfill phases.
							$42,560	
DESIGN & CONSTRUCTION QUALITY ASSURANCE	**DESIGN & CONSTRUCTION QUALITY ASSURANCE**							
	13	SURVEYING, DESIGN PACKAGE, CONSTRUCTION OVERSIGHT	LS	1	$150,000	$150,000		
							$150,000	
		TOTAL					$31,217,562	

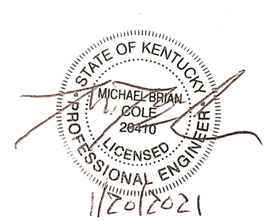


ASSUMPTION SHEET	PROJECT: **DB WILSON SITEWIDE LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASES I AND II	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** MBC	**DATE LAST MODIFIED:** 01/12/21	**REVIEWED BY:** MBC

KEY ASSUMPTIONS

The following key assumptions and limitations are associated with the project design, implementation and performance:

1	The cost estimates were prepared using 2020 dollars and do not include any escalation.
2	No costs to improve the existing sediment basins or to regrade the perimeter ditch have been included.
3	The unit rate costs are based on AECOM experience, RS Means, and recent quotes from Watershed Geo on a hypothetical project of this size.
4	No costs to convey seepage to existing treatment system have been included.
5	It is assumed that the existing perimeter ditch profile provides adequate drainage, and no significant improvements are required.
6	Abandonment of existing structures/piping includes the demolition of existing pipes and inlets/outlet structures, and converting the resulting trench into a rip rap flume. There may be some grouting of outlet pipes that extend beyond the limits of waste.
7	Cap cross section for the CCR landfill will consist of (from bottom to top): cover soil / geomembrane / closure turf / sand infill.
8	Statements of Probable Construction Cost prepared by AECOM represent AECOM's judgment as a design professional familiar with the construction industry. It is recognized, however, that neither AECOM nor the Owner has control over the cost of labor, materials or equipment nor over the contractor's methods of determining the bid price or other competitive bidding, market, or negotiating conditions. Accordingly, AECOM cannot and does not warrant or represent that proposals, bids or actual construction costs will not vary from any statement of Probable Construction Cost or other estimates or evaluations prepared by AECOM.



Interface Direct Shear Testing Results

January 26, 2021

Travis Sneed
Big Rivers Electric Corporation
5663 State Route 85 W
Centertown, KY 42328

Via Email: travis.sneed@bigrivers.com

Subject: Interface Shear Test Results Submittal
ClosureTurf® Final Cover System
Wilson Station Phase 1 Landfill Closure Cap, Centertown, KY

Dear Mr. Sneed,

As required by the Construction Quality Assurance (CQA) Plan for the above referenced project, Watershed Geosynthetics LLC has enclosed third party (TRI Environmental, Austin, TX) interface shear test results documenting the interface shear performance between the geomembrane component of the ClosureTurf® Final Cover System and the underlying subgrade soil.

Should you require addition information, please do not hesitate to contact me at (502) 209-0325. Thank you for your business.

Respectfully,

Steven M. Mayes, P.E.
Northeast & Midwest Region Market Director

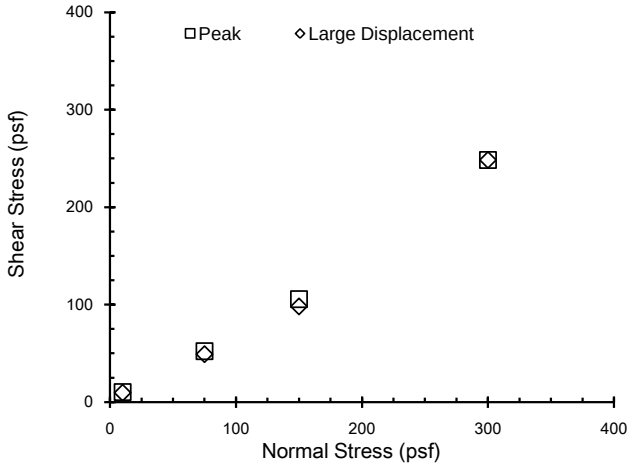
11400 Atlantis Place, Ste 200
Alpharetta, GA 30022
770-777-0386
www.watershedgeo.com

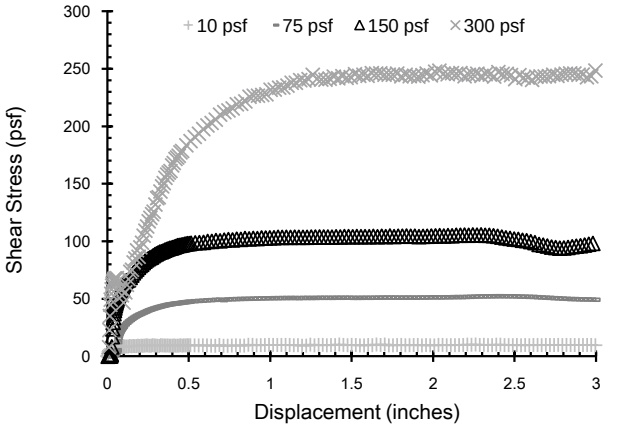
Shear Strength of Soil-Geosynthetic Interface by Direct Shear (ASTM D5321)

Client: Watershed Geo
Project: Big Rivers LF Phase 1 Closure Cap

TRI Log #: 60016-2
Jeffrey A. Kuhn, Ph.D., P.E., 11/20/2020
Analysis & Quality Review/Date

Landfill Sample vs.
Agru 50 MIL LLDPE Super Gripnet (GTB0064040171)





Test Results, Linear Regression			
Mohr-Coulomb Parameters		Peak	Large Displacement
Friction Angle	Degrees	Negative Intercept Refer to per-normal-stress secant angles	
Y-intercept or Adhesion	psf		
Minimum Secant Angle	Degrees	34.8	33.2

Note - Large Displacement Values Reported for 3.0 inches of Displacement

Test Conditions		
Upper Box	Landfill Sample [Tamped in Place]	
Lower Box	Agru 50 MIL LLDPE Super Gripnet (GTB0064040171)	
Conditioning	Wet - Loading applied and Interface flooded for a minimum of 1 hour prior to shear.	
Shearing Rate	inches/minute	0.04

Test Notes

Shearing occurred at the interface at all stresses.

Specimen No.		-	1	2	3	4
Normal Stress		psf	10	75	150	300
Box Edge Dimension		in	12	12	12	12
Bearing Slide Resistance		lbs	0	0	0	11
Peak	Shear Stress	psf	10	52	106	248
	Secant Angle	deg.	45.7	34.8	35.1	39.6
Large Displacement	Shear Stress	psf	10	49	98	248
	Secant Angle	deg.	43.8	33.2	33.2	39.6
Asperity Height, Avg. of 5 Meas.		mils	203	199	201	203

The testing herein is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.

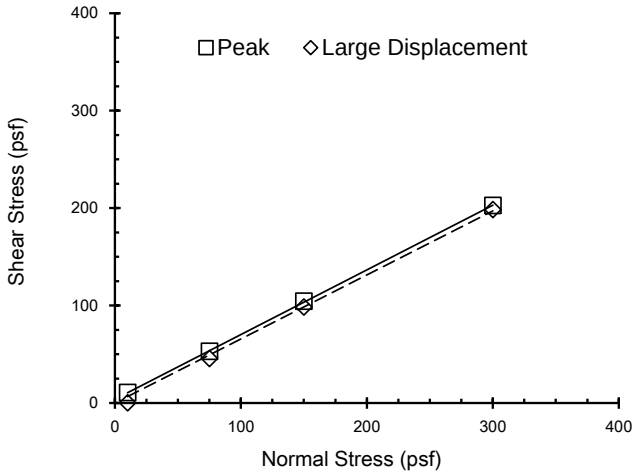
TRI ENVIRONMENTAL, INC.
9063 BEE CAVES RD. - AUSTIN, TX 78733 - USA | PH: 800.880.TEST OR 512.263.2101

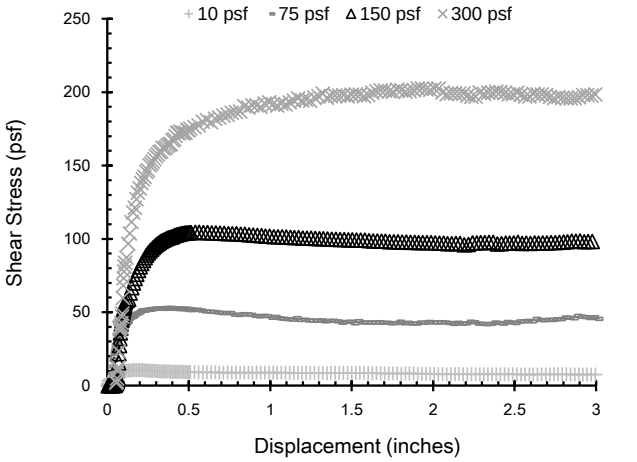
Shear Strength of Soil-Geosynthetic Interface by Direct Shear (ASTM D5321)

Client: Watershed Geo
Project: Big Rivers LF Phase 1 Closure Cap

TRI Log #: 60016-3
Richard S. Lacey, P.E. 1/6/2021
Analysis & Quality Review/Date

Landfill Sample vs.
Agru SGN 50 mil LLDPE (GTB0064040032)





Test Results, Linear Regression			
Mohr-Coulomb Parameters		Peak	Large Displacement
Friction Angle	Degrees	33.6	32.8
Y-intercept or Adhesion	psf	4	0
Minimum Secant Angle	Degrees	34.0	31.3

Note - Large Displacement Values Reported for 3.0 inches of Displacement

Test Conditions		
Upper Box	Landfill Sample Tamped in place.	
Lower Box	Agru SGN 50 mil LLDPE (GTB0064040032)	
Conditioning	Wet - Loading applied and Interface flooded for a minimum of 1 hour prior to shear.	
Shearing Rate	inches/minute	0.04

Test Notes

Shearing occurred at the interface at all stresses.

Specimen No.		-	1	2	3	4
Normal Stress		psf	10	75	150	300
Box Edge Dimension		in	12	12	12	12
Bearing Slide Resistance		lbs	0	0	0	11
Peak	Shear Stress	psf	10.6	53	105	203
	Secant Angle	deg.	46.6	35.2	34.9	34.0
Large Displacement	Shear Stress	psf	8	46	98	198
	Secant Angle	deg.	37.1	31.3	33.2	33.5
Asperity Height, Avg. of 5 Meas.		mils	169	172	177	179

The testing herein is based upon accepted industry practice as well as the test method listed. Test results reported herein do not apply to samples other than those tested. TRI neither accepts responsibility for nor makes claim as to the final use and purpose of the material. TRI observes and maintains client confidentiality. TRI limits reproduction of this report, except in full, without prior approval of TRI.

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Rev. 8-26-2021

DB WILSON PHASE I LANDFILL CAP

POST CLOSURE CARE COST ESTIMATE - ENTIRE FOOTPRINT - TOTAL PC PERIOD

Consideration	Post Closure Care Cost 2020 Dollars
Ground Water Monitoring	$ 8,000
Leachate Treatment	$ 93,000
Operation and Maintenance (Sand Maintenance, Inspections, etc.)	$ 18,000
Engineering Design / Utilities (5%)	$ 5,950
Subtotal	$ 124,950
Contingency (10%)	$ 13,000
ANNUAL POST CLOSURE CARE TOTAL =	**$ 137,950**
PER ACRE COST =	**$ 1,339.32**
TOTAL COST =	**$ 689,750.00**

CALCULATION SHEET	PROJECT **DB Wilson Phase I Landfill**		SHEET 1	REV. NO.
	SUBJECT Annual Post Closure Care Cost Estimate		CLIENT PROJECT #	
	ACTIVITY **Post Closure Plan Cost Estimate**	LAST UPDATED BY: AGH	DATE LAST MODIFIED 8/26/2021	REVIEWED BY: TAK

BASIS OF THE ESTMATE		
YEAR COST BASIS	2020	
TOTAL AREA OF DISTURBANCE (FACILITY AREA)	103	Acres

	TASK	ITEM	UNIT	ESTIMATED ANNUAL QUANTITY	ESTIMATED UNIT COST	ESTIMATED ENTIRE COST	NOTES
GROUND WATER MONITORING	**GROUND WATER MONITORING**						
	1	GROUND WATER MONITORING SAMPLING & ANALYTICAL	WELLS	5	$1,500.00	$ 7,500	Unit cost is based on 2 sampling events per year for 2-person team at 16 hours each.
LEACHATE TREATMENT	**SURFACE WATER MONITORING**						
	2	TREATMENT REAGENTS	GALLONS	400,000	$0.075	$ 30,000	Geomembrane cap should drop the volume over time considerably. Average value of 10 GPAD used.
	3	TREATMENT SUPPLIES & SUPPORT	GALLONS	400,000	$0.156	$ 62,400	Primary labor support is provided by existing BREC employees
OPERATION AND MAINENANCE	**OPERATION AND MAINENANCE**						
	4	SITE INSPECTION	PERSON-HOURS	32	$60.00	$ 1,920	Assume one inspection per year for 2-person team at 16 hours each.
	5	SAND INFILL MAINTENANCE	ACRES	103	$150.00	$ 15,450	Annual maintenance, includes Hydroturf in perimeter ditches

TOTAL	**$ 117,270**	Per year

AECOM CALCULATION SHEET	PROJECT: **DB WILSON PHASE I LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASE I	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** AGH	**DATE LAST MODIFIED:** 08/06/21	**REVIEWED BY:** TAK

BASIS OF THE ESTIMATE			
YEAR COST BASIS	**2020**		**DOLLARS**
TOTAL LANDFILL AREA (AC)	**103**		**ACRES**

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	**ITEM**	**UNIT**	**QUANTITY**	**INSTALLED UNIT COST**	**SUBTOTAL**	**TOTAL**	**NOTES**
MOBILIZATION/ SITE PREP	**MOBILIZATION / SITE PREP**							
	1	MOBILIZATION	LS	1	$350,000	$350,000		Mob/Demob & insurance: (2.5% of closure tasks) includes administration (mtgs, health & safety, trailer, phone/fax/electricity, temporary facilities, utilities, roll off boxes, waste disposal, and cleanup).
							$350,000	
DEWATERING / EARTHWORK / SUBGRADE PREP	**EARTHWORK / SUBGRADE PREP**							
	2	STRIP AND STOCKPILE 3 INCHES OF SOIL COVER/ VEGETATION	ACRE	103	$2,500	$257,500		Need to strip vegetation for proper long-term friction interface. Includes perimeter ditches, which will also be lined.
							$257,500	
CLOSURE SYSTEM CONSTRUCTION	**CLOSURE SYSTEM CONSTRUCTION**							
	3	ANCHOR TRENCH INSTALLATION	L.F.	11,280	$5	$56,400		Linear feet around the perimeter of landfill.
	4	TOTAL INSTALLED CLOSURE TURF	SQ. FT.	4,486,680	$2.84	$12,742,171		Baseed on quote from Watershed Geo. Acreage includes perimeter ditches, which will be lined.
	5	MANUFACTURED SAND INFILL	TONS	12,360	$35.00	$432,600		Baseed on quote from Watershed Geo
	6	TOE DRAIN BENEATH GEOMEMBRANE	L.F.	7,280	$40.00	$291,200		Toe drain not proposed on west side of landfill. Price includes cost of target manhole, but no conveyance to wastewater treatment plant.
							$13,522,371	
HYDROTURF/ STORMWATER DRAINAGE	**HYDROTURF/STORMWATER DRAINAGE**							
	7	PERIMETER CHANNEL	SQ. FT.	67,680	$4.40	$297,792		Based on 6' wide ditch around perimeter of the entire landfill being lined with HydroBinder. Assumes no need for major improvement of existing ditch.
	8	BENCH FLOWLINES	L.F.	27,400	$36.00	$986,400		Based on 4' wide x 2' deep rock drain being installed along bench flow lines to minimize trampolining of geomembrane and erosion of sand infill
	9	DEMOLITION OF EXISTING DOWNSPOUT PIPES & SHAPING FLUMES	L.F.	3,500	$30.00	$105,000		
	10	FLUME LINING	SQ. FT.	27,960	$4.40	$123,024		Based on 4' wide flumes being installed where all existing downspout pipes are located and lining with HydroBinder.
	11	FLUME RIP RAP LANDINGS	TONS	160	$150.00	$24,000		Based on truckload of rip rap being placed at toe of each flume for velocity dissipation
							$1,536,216	
STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION	**STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION**							
	12	SILT FENCING	L.F.	11,280	$2	$22,560		Assume total area to be restored will require site erosion and sediment control. Assumes one row of silt fence around the entire landfill.
							$22,560	
DESIGN & CONSTRUCTION QUALITY ASSURANCE	**DESIGN & CONSTRUCTION QUALITY ASSURANCE**							
	13	SURVEYING, DESIGN PACKAGE, CONSTRUCTION OVERSIGHT	LS	1	$100,000	$100,000		
							$100,000	
		TOTAL					$15,788,647	

AECOM ASSUMPTION SHEET	PROJECT: **DB WILSON PHASE I LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASE I	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** AGH	**DATE LAST MODIFIED:** 08/26/21	**REVIEWED BY:** TAK

KEY ASSUMPTIONS

The following key assumptions and limitations are associated with the project design, implementation and performance:

1	The cost estimates were prepared using 2020 dollars and do not include any escalation.
2	No costs to improve the existing sediment basins or to regrade the perimeter ditch have been included.
3	The unit rate costs are based on AECOM experience, RS Means, and recent quotes from Watershed Geo on a hypothetical project of this size.
4	No costs to convey seepage to existing treatment system have been included.
5	It is assumed that the existing perimeter ditch profile provides adequate drainage, and no significant improvements are required.
6	Abandonment of existing structures/piping includes the demolition of existing pipes and inlets/outlet structures, and converting the resulting trench into a rip rap flume. There may be some grouting of outlet pipes that extend beyond the limits of waste.
7	Cap cross section for the CCR landfill will consist of (from bottom to top): cover soil / geomembrane / closure turf / sand infill.
8	Statements of Probable Construction Cost prepared by AECOM represent AECOM's judgment as a design professional familiar with the construction industry. It is recognized, however, that neither AECOM nor the Owner has control over the cost of labor, materials or equipment nor over the contractor's methods of determining the bid price or other competitive bidding, market, or negotiating conditions. Accordingly, AECOM cannot and does not warrant or represent that proposals, bids or actual construction costs will not vary from any statement of Probable Construction Cost or other estimates or evaluations prepared by AECOM.

Rev. 8-26-2021

DB WILSON PHASE II LANDFILL CAP

POST CLOSURE CARE COST ESTIMATE - ENTIRE FOOTPRINT - WHOLE PC PERIOD

Consideration	Post Closure Care Cost 2020 Dollars
Ground Water Monitoring	$ 24,000
Leachate Treatment	$ 80,000
Operation and Maintenance (Sand Maintenance, Inspections, etc.)	$ 18,000
Engineering Design / Utilities (5%)	$ 6,100
Subtotal	$ 128,100
Contingency (10%)	$ 13,000
ANNUAL POST CLOSURE CARE TOTAL =	**$ 141,100**
PER ACRE COST =	**$ 1,397.03**
TOTAL COST =	**$ 4,233,000.00**

CALCULATION SHEET	PROJECT **DB Wilson Phase II Landfill**		SHEET 1	REV. NO.
	SUBJECT Annual Post Closure Care Cost Estimate		CLIENT PROJECT #	
	ACTIVITY **Post Closure Plan Cost Estimate**	LAST UPDATED BY: AGH	DATE LAST MODIFIED 8/26/2021	REVIEWED BY: TAK

BASIS OF THE ESTMATE		
YEAR COST BASIS	2020	
TOTAL AREA OF DISTURBANCE (FACILITY AREA)	101	Acres

	TASK	ITEM	UNIT	ESTIMATED ANNUAL QUANTITY	ESTIMATED UNIT COST	ESTIMATED ENTIRE COST	NOTES
GROUND WATER MONITORING	**GROUND WATER MONITORING**						
	1	GROUND WATER MONITORING SAMPLING & ANALYTICAL	WELLS	16	$1,500.00	$ 24,000	Unit cost is based on 2 sampling events per year. Assumes 4 new assessment wells, and 2 sampling events per year for 2-person team at 16 hours each.
LEACHATE TREATMENT	**SURFACE WATER MONITORING**						
	2	TREATMENT REAGENTS	GALLONS	345,000	$0.075	$ 25,875	Geomembrane cap should drop the volume over time considerably. Average value of 10 GPAD used.
	3	TREATMENT SUPPLIES & SUPPORT	GALLONS	345,000	$0.156	$ 53,820	Labor is primarily provided by existing BREC employees
OPERATION AND MAINENANCE	**OPERATION AND MAINENANCE**						
	4	SITE INSPECTION	PERSON-HOURS	32	$60.00	$ 1,920	Assume one inspection per year for 2-person team at 16 hours each.
	5	SAND INFILL MAINTENANCE	ACRES	101	$150.00	$ 15,150	Annual maintenance, includes Hydroturf in perimeter ditches

TOTAL	**$ 120,765**	Per year

AECOM	PROJECT: DB WILSON PHASE II LANDFILL CLOSURE COST ESTIMATE	PLANT NAME: DB WILSON	CLOSURE TYPE: CAP IN PLACE	SHEET: 1	REV. NO.: 1
CALCULATION SHEET	SUBJECT: Preliminary Project Costs Sheets	UNIT NAME: PHASE II	CLOSURE METHOD: CAP IN PLACE	CLOSURE YEAR: 2021	60631499
	ACTIVITY: Close-in-Place Costs	CLOSURE OPTION: CAP IN PLACE	LAST UPDATED BY: AGH	DATE LAST MODIFIED: 08/26/21	REVIEWED BY: TAK

BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	101		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS								
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
MOBILIZATION/ SITE PREP	**MOBILIZATION / SITE PREP**							
	1	MOBILIZATION	LS	1	$350,000	$350,000		Mob/Demob & insurance: (2.5% of closure tasks) includes administration (mtgs, health & safety, trailer, phone/fax/electricity, temporary facilities, utilities, roll off boxes, waste disposal, and cleanup).
							$350,000	
DEWATERING / EARTHWORK / SUBGRADE PREP	**EARTHWORK / SUBGRADE PREP**							
	2	STRIP AND STOCKPILE 3 INCHES OF SOIL COVER/ VEGETATION	ACRE	101	$2,500	$252,500		Need to strip vegetation for proper long-term friction interface. Includes perimeter ditches, which will be lined as well.
							$252,500	
CLOSURE SYSTEM CONSTRUCTION	**CLOSURE SYSTEM CONSTRUCTION**							
	3	ANCHOR TRENCH INSTALLATION	L.F.	9,600	$5	$48,000		Linear feet around the perimeter of landfill.
	4	TOTAL INSTALLED CLOSURE TURF	SQ. FT.	4,399,560	$2.84	$12,494,750		Baseed on quote from Watershed Geo. Acreage includes perimeter ditches, which will be lined.
	5	MANUFACTURED SAND INFILL	TONS	12,120	$35.00	$424,200		Baseed on quote from Watershed Geo
	6	TOE DRAIN BENEATH GEOMEMBRANE	L.F.	9,600	$40.00	$384,000		Toe drain not proposed on west side of landfill. Price includes cost of target manhole, but no conveyance to wastewater treatment plant.
							$13,350,950	
HYDROTURF/ STORMWATER DRAINAGE	**HYDROTURF/STORMWATER DRAINAGE**							
	7	PERIMETER CHANNEL	SQ. FT.	57,600	$4.40	$253,440		Based on 6' wide ditch around perimeter of the entire landfill being lined with HydroBinder. Assumes no need for major improvement of existing ditch.
	8	BENCH FLOWLINES	L.F.	25,000	$36.00	$900,000		Based on 4' wide x 2' deep rock drain being installed along bench flow lines to minimize trampolining of geomembrane and erosion of sand infill
	9	DEMOLITION OF EXISTING DOWNSPOUT PIPES & SHAPING FLUMES	L.F.	3,500	$30.00	$105,000		
	10	FLUME LINING	SQ. FT.	27,960	$4.40	$123,024		Based on 4' wide flumes being installed where all existing downspout pipes are located and lining with HydroBinder.
	11	FLUME RIP RAP LANDINGS	TONS	160	$150.00	$24,000		Based on truckload of rip rap being placed at toe of each flume for velocity dissipation
							$1,405,464	
STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION	**STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION**							
	12	SILT FENCING	L.F.	10,000	$2	$20,000		Assume total area to be restored will require site erosion and sediment control. Assumes one row of silt fence around the entire landfill.
							$20,000	
DESIGN & CONSTRUCTION QUALITY	**DESIGN & CONSTRUCTION QUALITY ASSURANCE**							
	13	SURVEYING, DESIGN PACKAGE, CONSTRUCTION OVERSIGHT	LS	1	$100,000	$100,000		
							$100,000	
		TOTAL					$15,478,914	

AECOM ASSUMPTION SHEET	PROJECT: **DB WILSON PHASE II LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASE II	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** AGH	**DATE LAST MODIFIED:** 08/26/21	**REVIEWED BY:** TAK

KEY ASSUMPTIONS

The following key assumptions and limitations are associated with the project design, implementation and performance:

1	The cost estimates were prepared using 2020 dollars and do not include any escalation.
2	No costs to improve the existing sediment basins or to regrade the perimeter ditch have been included.
3	The unit rate costs are based on AECOM experience, RS Means, and recent quotes from Watershed Geo on a hypothetical project of this size.
4	No costs to convey seepage to existing treatment system have been included.
5	It is assumed that the existing perimeter ditch profile provides adequate drainage, and no significant improvements are required.
6	Abandonment of existing structures/piping includes the demolition of existing pipes and inlets/outlet structures, and converting the resulting trench into a rip rap flume. There may be some grouting of outlet pipes that extend beyond the limits of waste.
7	Cap cross section for the CCR landfill will consist of (from bottom to top): cover soil / geomembrane / closure turf / sand infill.
8	Statements of Probable Construction Cost prepared by AECOM represent AECOM's judgment as a design professional familiar with the construction industry. It is recognized, however, that neither AECOM nor the Owner has control over the cost of labor, materials or equipment nor over the contractor's methods of determining the bid price or other competitive bidding, market, or negotiating conditions. Accordingly, AECOM cannot and does not warrant or represent that proposals, bids or actual construction costs will not vary from any statement of Probable Construction Cost or other estimates or evaluations prepared by AECOM.

Rev. 8-26-2021

DB WILSON SITEWIDE LANDFILL CAP

POST CLOSURE CARE COST ESTIMATE - ENTIRE FOOTPRINT - TOTAL PC PERIOD

Consideration	Phase I Post Closure Care Cost 2020 Dollars	Phase II Post Closure Care Cost 2020 Dollars
Ground Water Monitoring	$ 8,000	$ 24,000
Leachate Treatment	$ 93,000	$ 80,000
Operation and Maintenance (Sand Maintenance, Inspections, etc.)	$ 18,000	$ 18,000
Engineering Design / Utilities (5%)	$ 5,950	$ 6,100
Subtotal	$ 124,950	$ 128,100
Contingency (10%)	$ 13,000	$ 13,000
ANNUAL POST CLOSURE CARE TOTAL =	**$ 137,950**	**$ 141,100**
Number of years	**$ 5**	**$ 30**
PER ACRE ANNUAL COST =	**$ 1,339.32**	**$ 1,397.03**
TOTAL POST CLOSURE COST =	**$ 689,750.00**	**$ 4,233,000.00**

AECOM	PROJECT:	PLANT NAME:	CLOSURE TYPE:	SHEET:	REV. NO.:
	DB WILSON SITEWIDE LANDFILL CLOSURE COST ESTIMATE	DB WILSON	CAP IN PLACE	1	1
	SUBJECT:	UNIT NAME:	CLOSURE METHOD:	CLOSURE YEAR:	AECOM JOB NO.:
	Preliminary Project Costs Sheets	PHASES I AND II	CAP IN PLACE	2021	60631499
	ACTIVITY:	CLOSURE OPTION:	LAST UPDATED BY:	DATE LAST MODIFIED:	REVIEWED BY:
	Close-in-Place Costs	CAP IN PLACE	AGH	08/26/21	TAK

BASIS OF THE ESTIMATE			
YEAR COST BASIS	2020		DOLLARS
TOTAL LANDFILL AREA (AC)	204		ACRES

	CLOSE-IN-PLACE ESTIMATED COSTS							
	TASK	ITEM	UNIT	QUANTITY	INSTALLED UNIT COST	SUBTOTAL	TOTAL	NOTES
MOBILIZATION/ SITE PREP	**MOBILIZATION / SITE PREP**							
	1	MOBILIZATION	LS	1	$700,000	$700,000		Mob/Demob & insurance: (2.5% of closure tasks) Includes administration (mtgs, health & safety, trailer, phone/fax/electricity, temporary facilities, utilities, roll off boxes, waste disposal, and cleanup).
							$700,000	
DEWATERING / EARTHWORK / SUBGRADE PREP	**EARTHWORK / SUBGRADE PREP**							
	2	STRIP AND STOCKPILE 3 INCHES OF SOIL COVER/ VEGETATION	ACRE	204	$2,500	$510,000		Need to strip vegetation for proper long-term friction interface. Includes perimeter ditches, which will also be lined.
							$510,000	
CLOSURE SYSTEM CONSTRUCTION	**CLOSURE SYSTEM CONSTRUCTION**							
	3	ANCHOR TRENCH INSTALLATION	L.F.	20,880	$5	$104,400		Linear feet around the perimeter of each landfill phase.
	4	TOTAL INSTALLED CLOSURE TURF	SQ. FT.	8,886,240	$2.84	$25,236,922		Baseed on Phase I quote from Watershed Geo. Acreage includes perimeter ditches, which will be lined.
	5	MANUFACTURED SAND INFILL	TONS	24,480	$35.00	$856,800		Baseed on Phase I quote from Watershed Geo
	6	TOE DRAIN BENEATH GEOMEMBRANE	L.F.	16,880	$40.00	$675,200		Toe drain not proposed on west side of either landfill. Price includes cost of target manholes, but no conveyance to wastewater treatment plant.
							$26,873,322	
HYDROTURF/ STORMWATER DRAINAGE	**HYDROTURF/STORMWATER DRAINAGE**							
	7	PERIMETER CHANNEL	SQ. FT.	125,280	$4.40	$551,232		Based on 6' wide ditch around perimeter of both landfill phases being lined with HydroBinder. Assumes no need for major improvement of existing ditch.
	8	BENCH FLOWLINES	L.F.	52,400	$36.00	$1,886,400		Based on 4' wide x 2' deep rock drain being installed along bench flow lines to minimize trampolining of geomembrane and erosion of sand infill
	9	DEMOLITION OF EXISTING DOWNSPOUT PIPES & SHAPING FLUMES	L.F.	7,000	$30.00	$210,000		
	10	FLUME LINING	SQ. FT.	55,920	$4.40	$246,048		Based on 4' wide flumes being installed where all existing downspout pipes are located and lining with HydroBinder.
	11	FLUME RIP RAP LANDINGS	TONS	320	$150.00	$48,000		Based on truckload of rip rap being placed at toe of each flume for velocity dissipation
							$2,941,680	
STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION	**STORMWATER MANAGEMENT / E&S CONTROLS / SITE RESTORATION**							
	12	SILT FENCING	L.F.	21,280	$2	$42,560		Assume total area to be restored will require site erosion and sediment control. Assumes one row of silt fence around both landfill phases.
							$42,560	
DESIGN & CONSTRUCTION QUALITY	**DESIGN & CONSTRUCTION QUALITY ASSURANCE**							
	13	SURVEYING, DESIGN PACKAGE, CONSTRUCTION OVERSIGHT	LS	2	$100,000	$200,000		
							$200,000	
		TOTAL					$31,267,562	

AECOM ASSUMPTION SHEET	PROJECT: **DB WILSON SITEWIDE LANDFILL CLOSURE COST ESTIMATE**	**PLANT NAME:** DB WILSON	**CLOSURE TYPE:** CAP IN PLACE	**SHEET:** 1	**REV. NO.:** 1
	SUBJECT: Preliminary Project Costs Sheets	**UNIT NAME:** PHASES I AND II	**CLOSURE METHOD:** CAP IN PLACE	**CLOSURE YEAR:** 2021	**AECOM JOB NO.:** 60631499
	ACTIVITY: **Close-in-Place Costs**	**CLOSURE OPTION:** CAP IN PLACE	**LAST UPDATED BY:** AGH	**DATE LAST MODIFIED:** 08/26/21	**REVIEWED BY:** TAK

KEY ASSUMPTIONS

The following key assumptions and limitations are associated with the project design, implementation and performance:

1	The cost estimates were prepared using 2020 dollars and do not include any escalation.
2	No costs to improve the existing sediment basins or to regrade the perimeter ditch have been included.
3	The unit rate costs are based on AECOM experience, RS Means, and recent quotes from Watershed Geo on a hypothetical project of this size.
4	No costs to convey seepage to existing treatment system have been included.
5	It is assumed that the existing perimeter ditch profile provides adequate drainage, and no significant improvements are required.
6	Abandonment of existing structures/piping includes the demolition of existing pipes and inlets/outlet structures, and converting the resulting trench into a rip rap flume. There may be some grouting of outlet pipes that extend beyond the limits of waste.
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