

NSP Phase 3 Thornwood Park Project
Wilmette, Illinois

**VIBRATION
MONITORING
REPORT-8**

Mike Zika
Berger Excavating
1205 Garland Rd
Wauconda, IL 60084

September 12, 2022

Cti



4262 Old Grand Ave
Suite 102
Chicago, IL 60031

GEOTECHNICAL AND
STRUCTURAL
INSTRUMENTATION
847-244-5108

September 12, 2022

Mike Zika
Berger Excavating
1205 Garland Rd
Wauconda, IL 60084

RE: **Report 8:** - *Ground Vibration Monitoring for the Wilmette NSP Phase 3 Thornwood Park Project located in Wilmette, Illinois.*

Mr. Zika,

Construction Testing and Instrumentation, Inc. (CTI) have prepared this vibration monitoring report to evaluate vibrations during all construction activities. This report summarizes the results of ground vibration monitoring for three seismographs, all located around the surrounding project site (see attached location diagram). This summary report covers the monitoring period from **August 30, 2022 through September 12, 2022.**

The vibration equipment at the site are Geosonic seismographs that have the capacity to record peak particle velocity (PPV) and frequency (Hertz). The maximum allowable peak particle velocity is 0.50 inches per second (IPS), which is based upon the specifications established by the U.S Bureau of Mines (USBM) and a typical threshold for construction vibration monitoring. The seismographs are set to trigger whenever vibration levels exceed 0.003 in/s lowest (PPV) and continuously monitor vibrations during all construction activities.

All vibration recordings during this report period have been below the 0.50-inch per second threshold limit. The maximum PPV for the monitoring period are below.

September 2, 2022	Southwest Corner of Park	Unit #3734	T	0.133 (in/s)
August 31, 2022	2345 Thornwood Avenue	Unit #3733	T	0.478 (in/s)
August 31, 2022	East Side of Park – Colgate St.	Unit #3647	L	0.108 (in/s)


V- Vertical Vibration
T- Transversal Vibration
L- Longitudinal Vibration

Sincerely,

Daniel W. McCarthy
Senior Instrumentation Engineer

NSP Phase 3 Thornwood Park Seismograph Locations



 Seismograph Location

SN: 3734 v3.22
Date: 08/30/2022 **Time:** 12:55:00
Event: 98
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.055	0.103	0.063
FREQ (Hz)	10.0	16.1	13.9
Peak Air Pressure:	106 db		

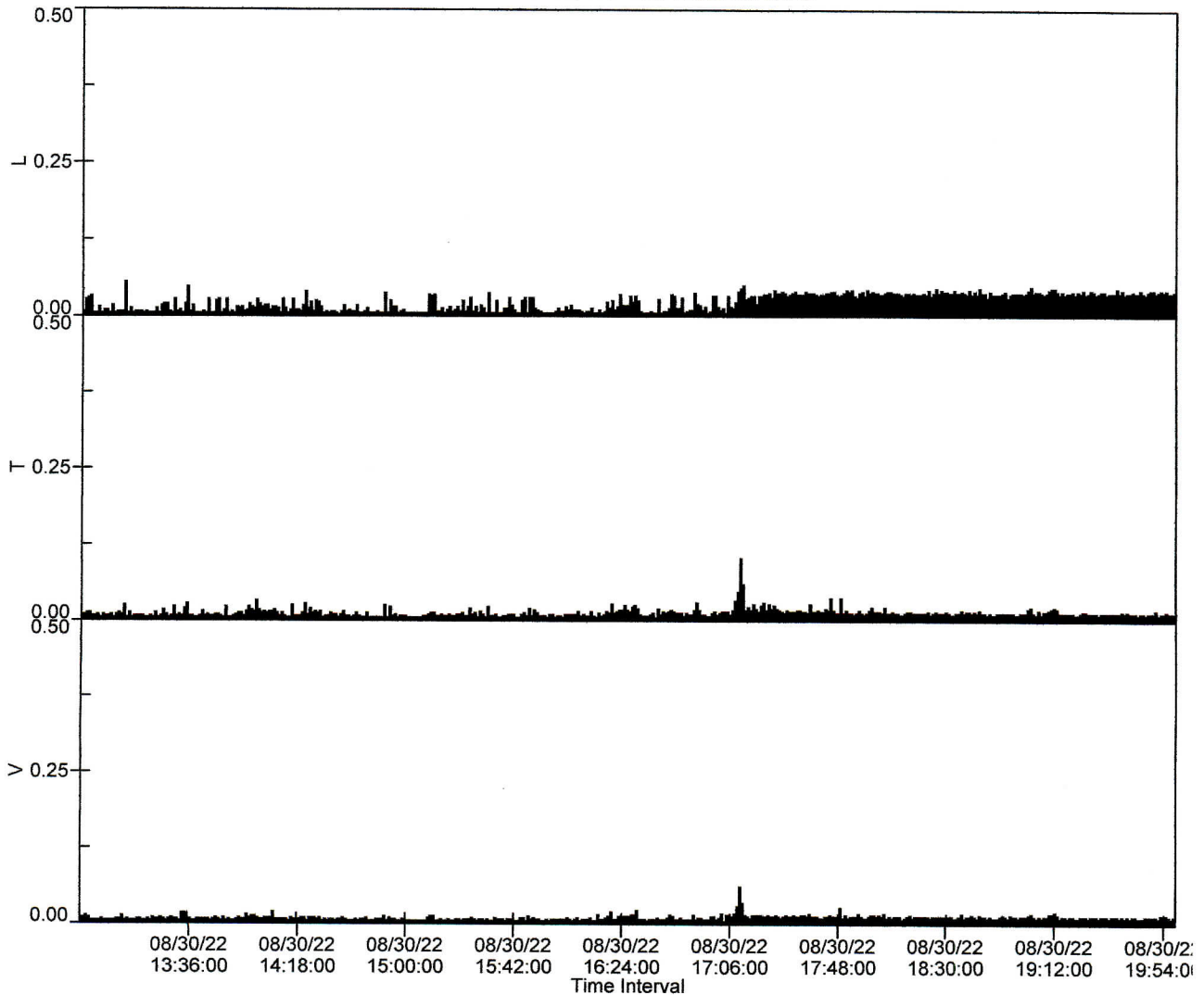
Recording Time: 424 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 98

Record Max PPV: 0.103 in/s Record Max DB: 106 db



SN: 3734 v3.22
Date: 08/31/2022 **Time:** 06:01:00
Event: 99
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.055	0.065	0.040
FREQ (Hz)	14.7	20.8	17.9
Peak Air Pressure:	106 db		

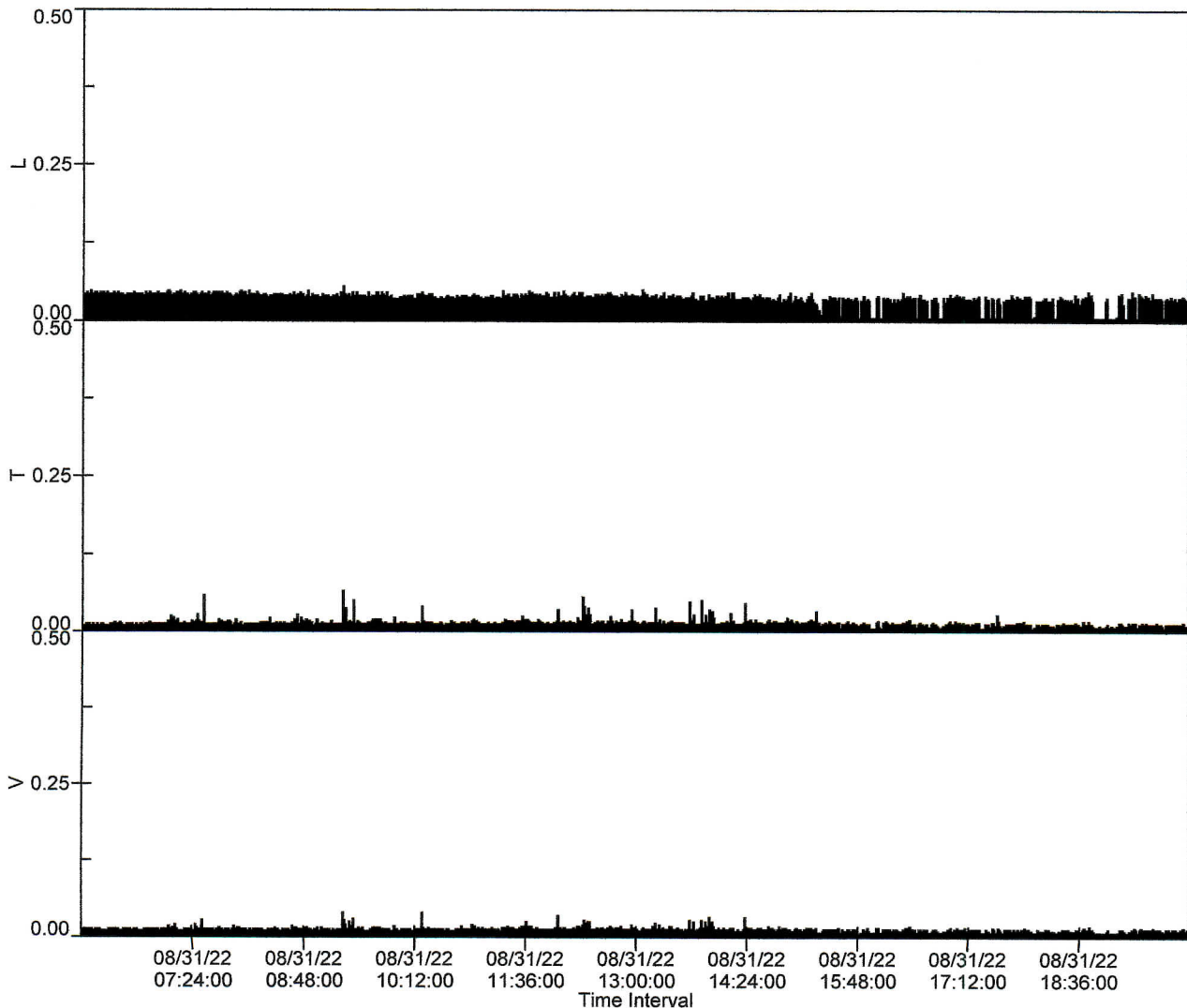
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 99

Record Max PPV: 0.065 in/s Record Max DB: 106 db



SN: 3734 v3.22
Date: 09/02/2022 **Time:** 06:01:00
Event: 101
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.085	0.133	0.073
FREQ (Hz)	17.2	18.5	15.6
Peak Air Pressure:	107 db		

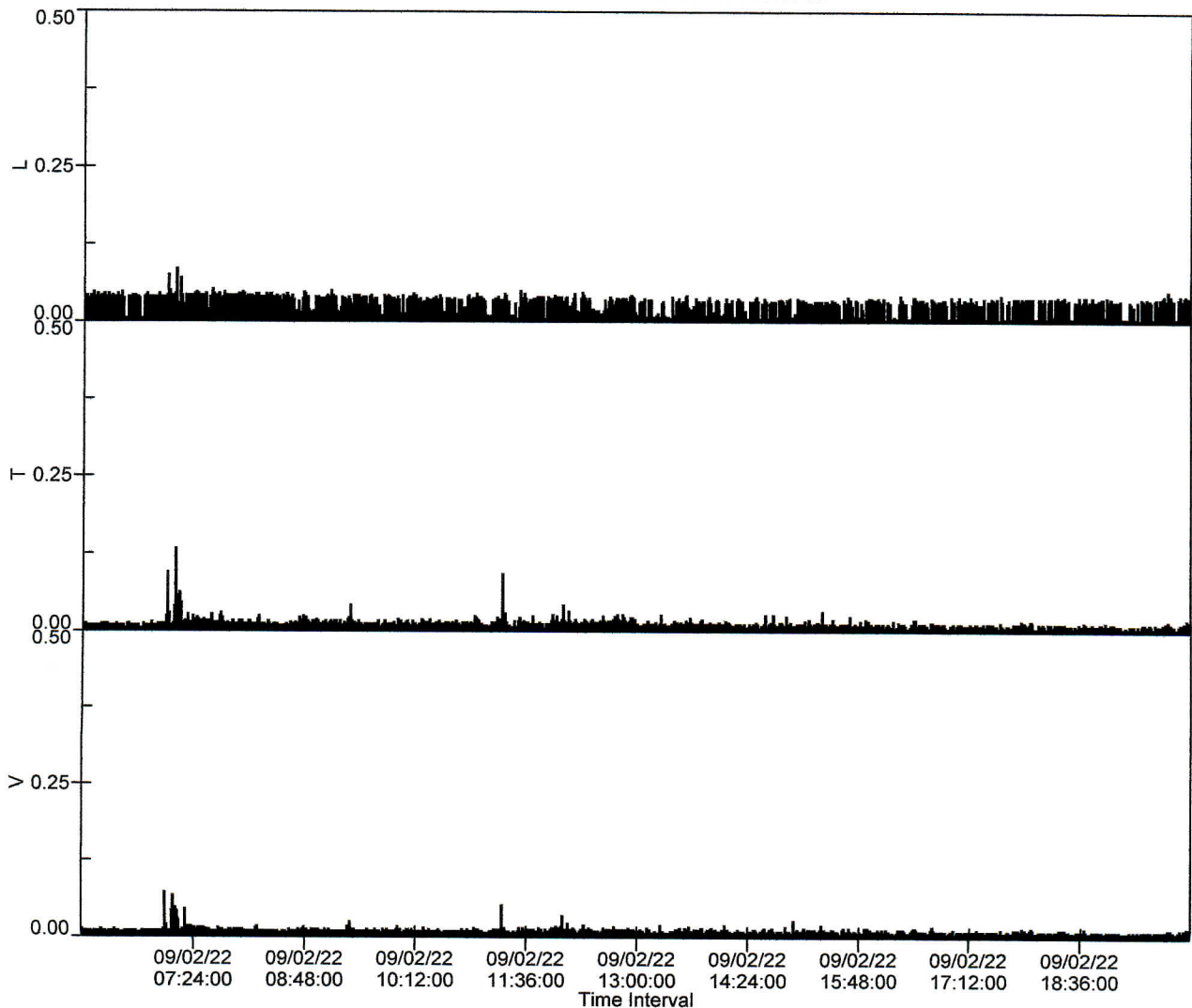
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 101

Record Max PPV: 0.133 in/s Record Max DB: 107 db



SN: 3734 v3.22
Date: 09/03/2022 **Time:** 06:01:00
Event: 102
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

**Continuous Monitor Recording
Summary Data**

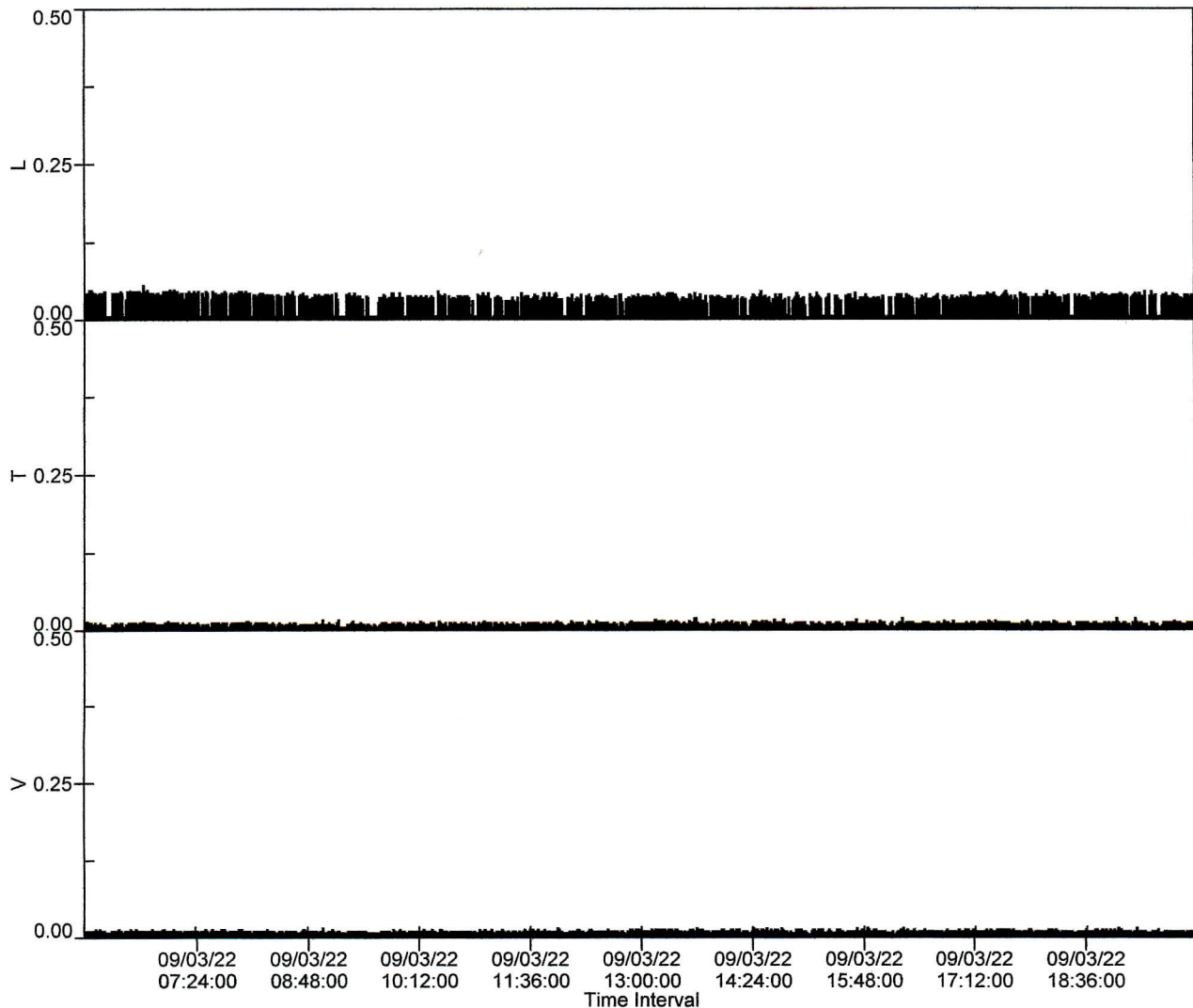
	L	T	V
PPV (in/s)	0.055	0.020	0.015
FREQ (Hz)	500.0	19.2	500.0
Peak Air Pressure:	105 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 102

Record Max PPV: 0.055 in/s Record Max DB: 105 db



SN: 3734 v3.22
Date: 09/04/2022 **Time:** 06:01:00
Event: 103
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.050	0.040	0.038
FREQ (Hz)	166.7	50.0	55.6
Peak Air Pressure:	105 db		

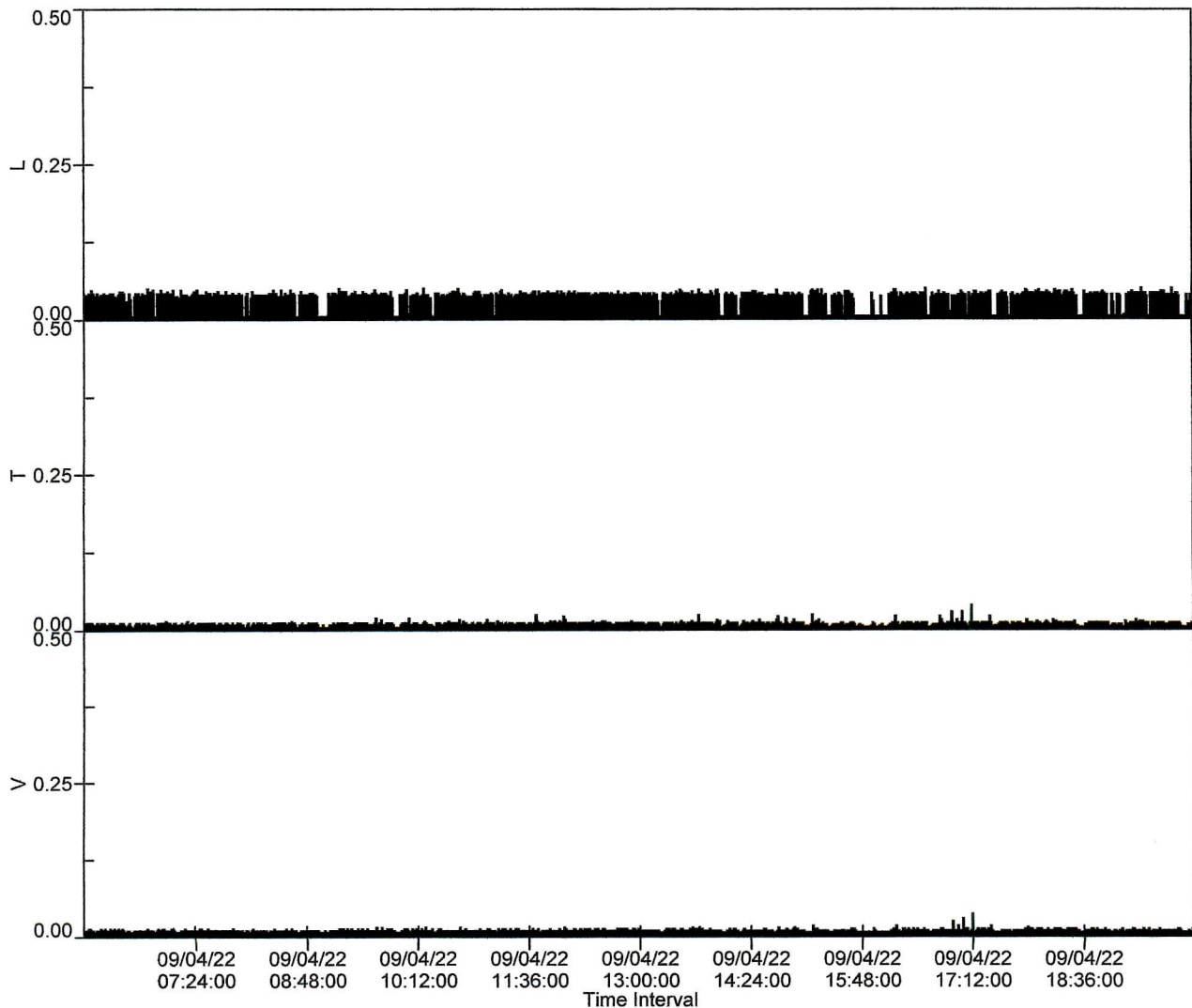
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 103

Record Max PPV: 0.050 in/s Record Max DB: 105 db



SN: 3734 v3.22
Date: 09/06/2022 **Time:** 06:01:00
Event: 105
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.053	0.128	0.058
FREQ (Hz)	71.4	17.2	14.7
Peak Air Pressure:	104 db		

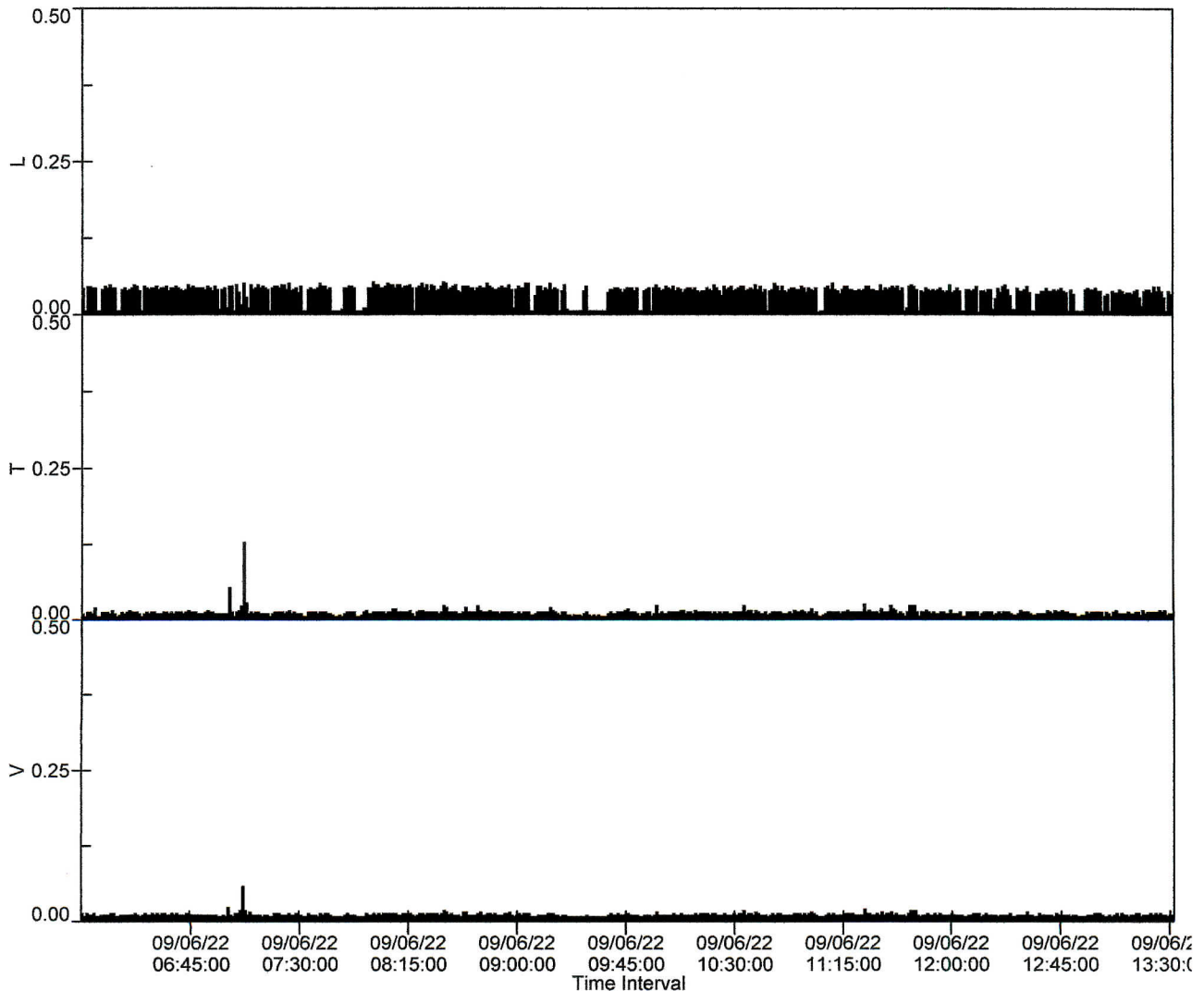
Recording Time: 451 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 105

Record Max PPV: 0.128 in/s Record Max DB: 104 db



SN: 3734 v3.22
Date: 09/06/2022 **Time:** 13:38:00
Event: 106
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

**Continuous Monitor Recording
Summary Data**

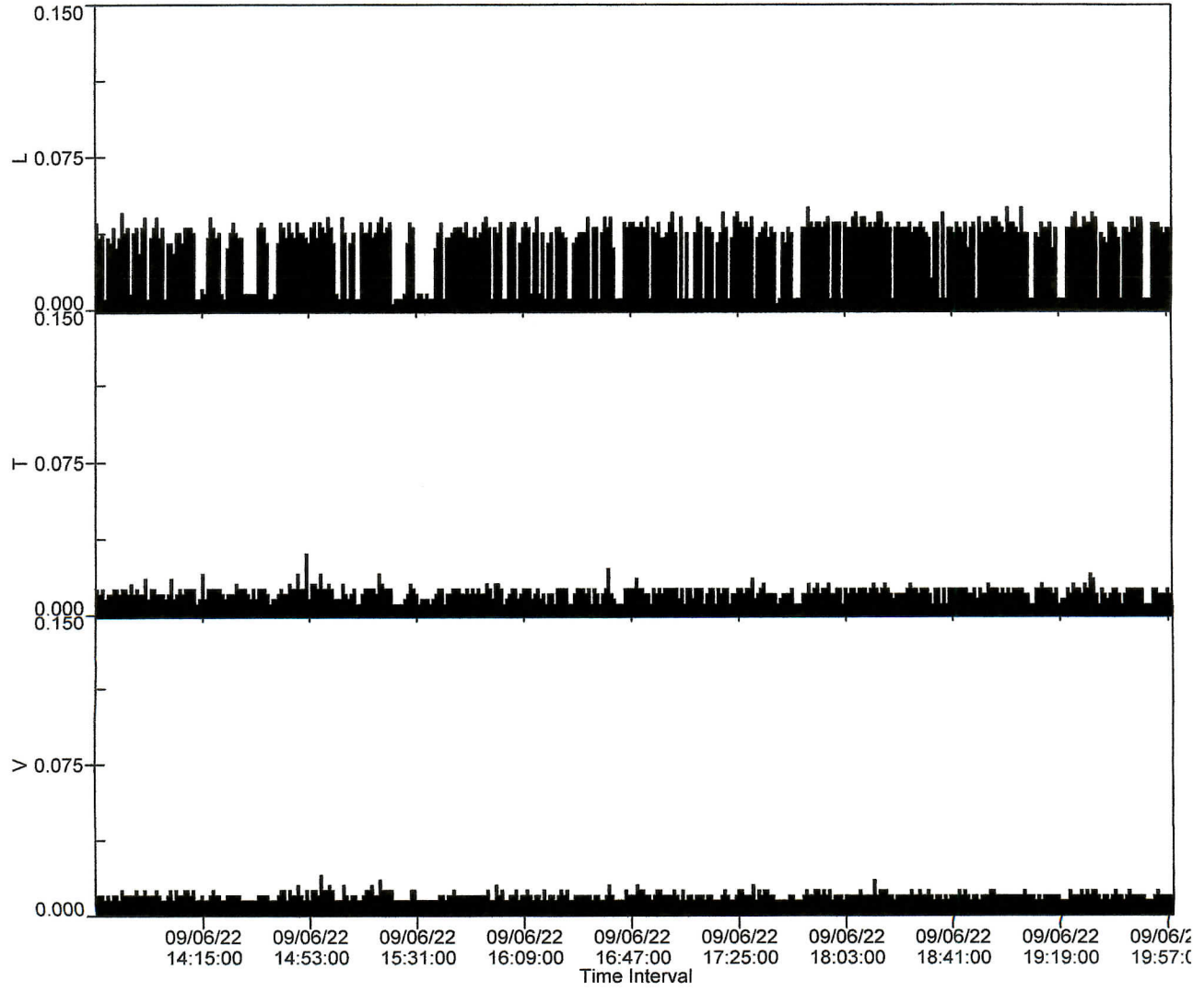
	L	T	V
PPV (in/s)	0.050	0.030	0.020
FREQ (Hz)	83.3	16.7	250.0
Peak Air Pressure:	104 db		
Recording Time:	381 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 106

Record Max PPV: 0.050 in/s Record Max DB: 104 db



SN: 3734 v3.22
Date: 09/07/2022 **Time:** 06:01:00
Event: 107
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.055	0.030	0.018
FREQ (Hz)	100.0	20.0	166.7
Peak Air Pressure:	102 db		

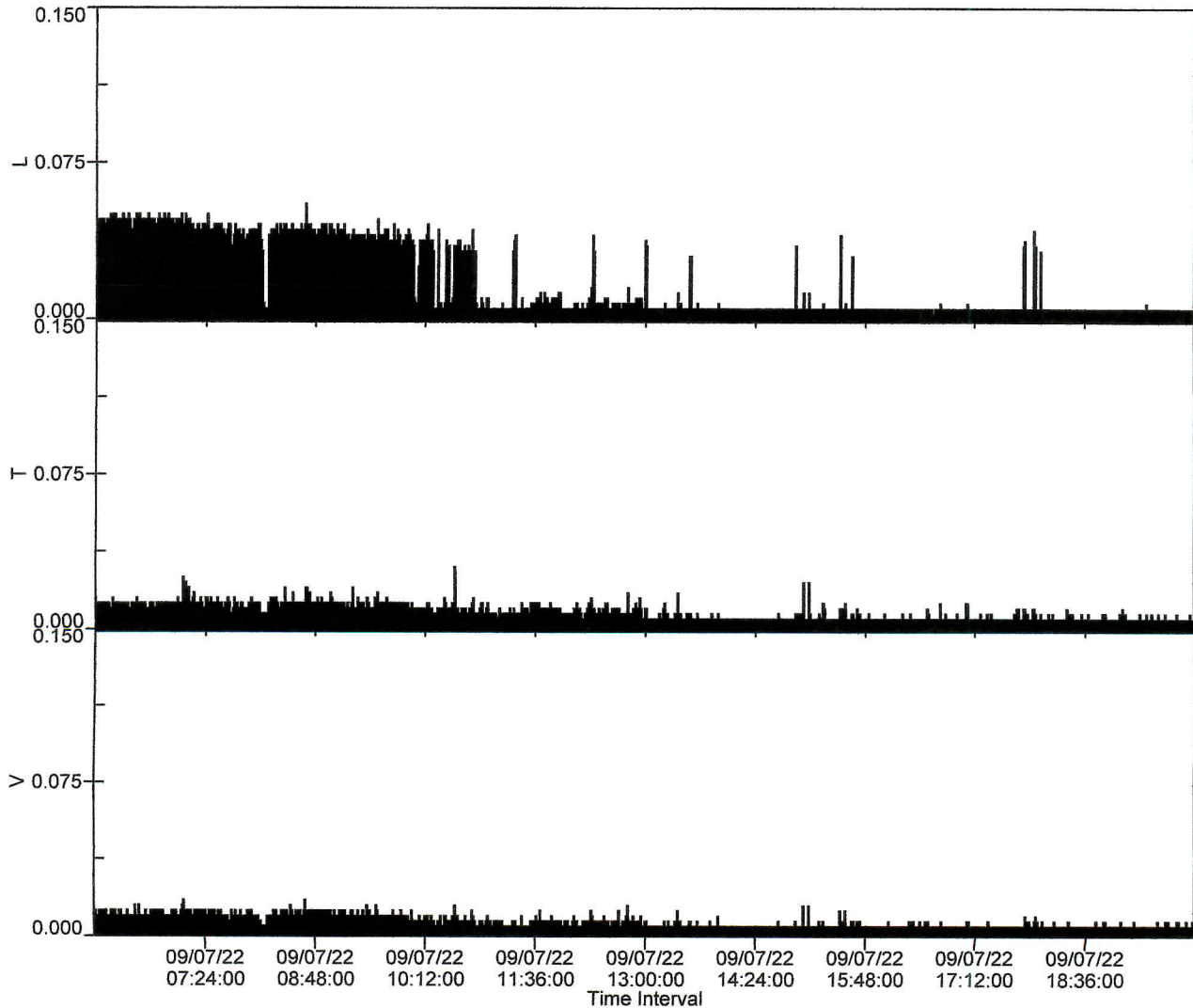
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 107

Record Max PPV: 0.055 in/s Record Max DB: 102 db



SN: 3734 v3.22
Date: 09/08/2022 **Time:** 06:01:00
Event: 108
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.055	0.028	0.018
FREQ (Hz)	41.7	38.5	38.5
Peak Air Pressure:	102 db		

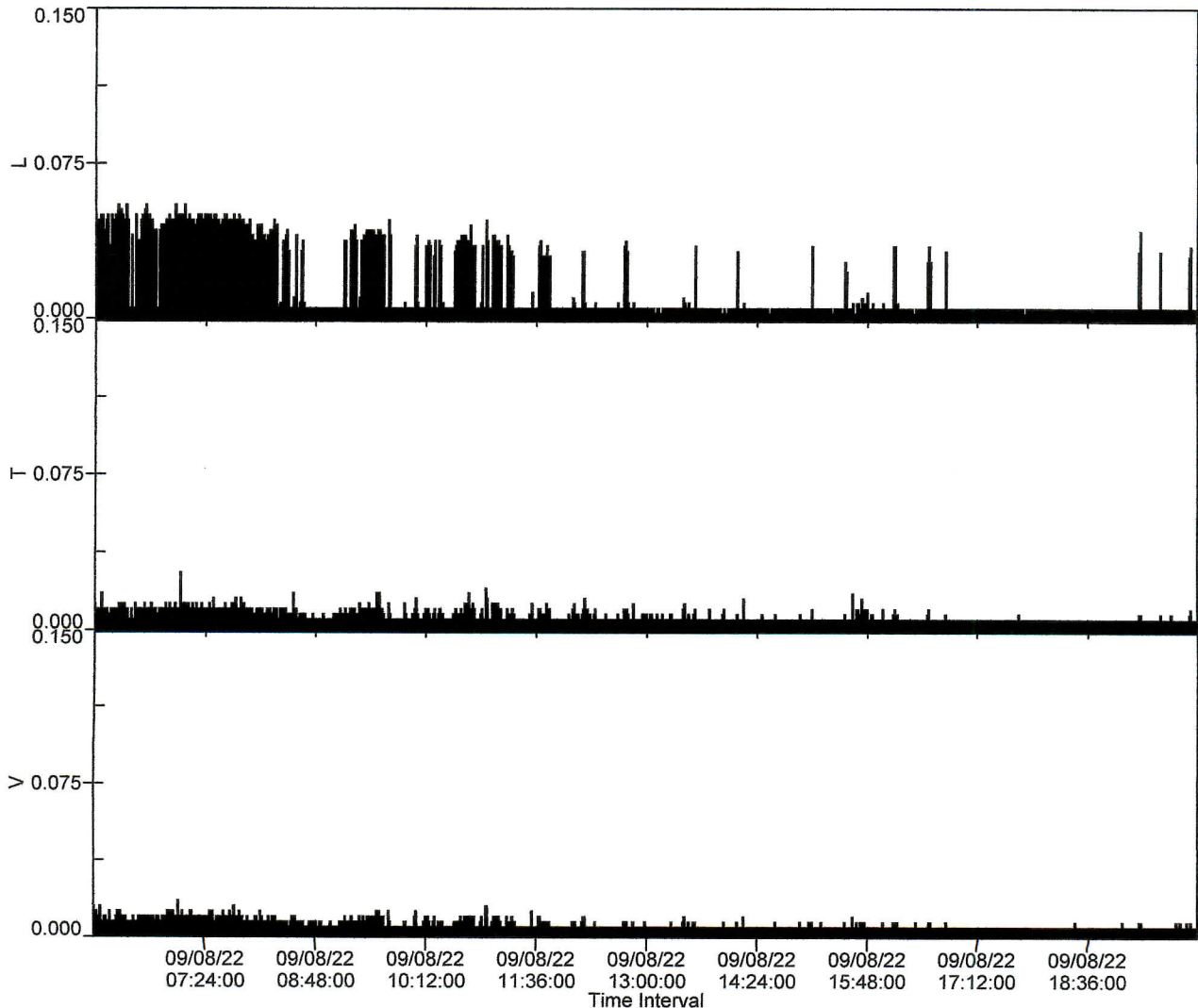
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 108

Record Max PPV: 0.055 in/s Record Max DB: 102 db



SN: 3734 v3.22
Date: 09/09/2022 **Time:** 06:01:00
Event: 109
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.070	0.113	0.100
FREQ (Hz)	83.3	62.5	62.5
Peak Air Pressure:	102 db		

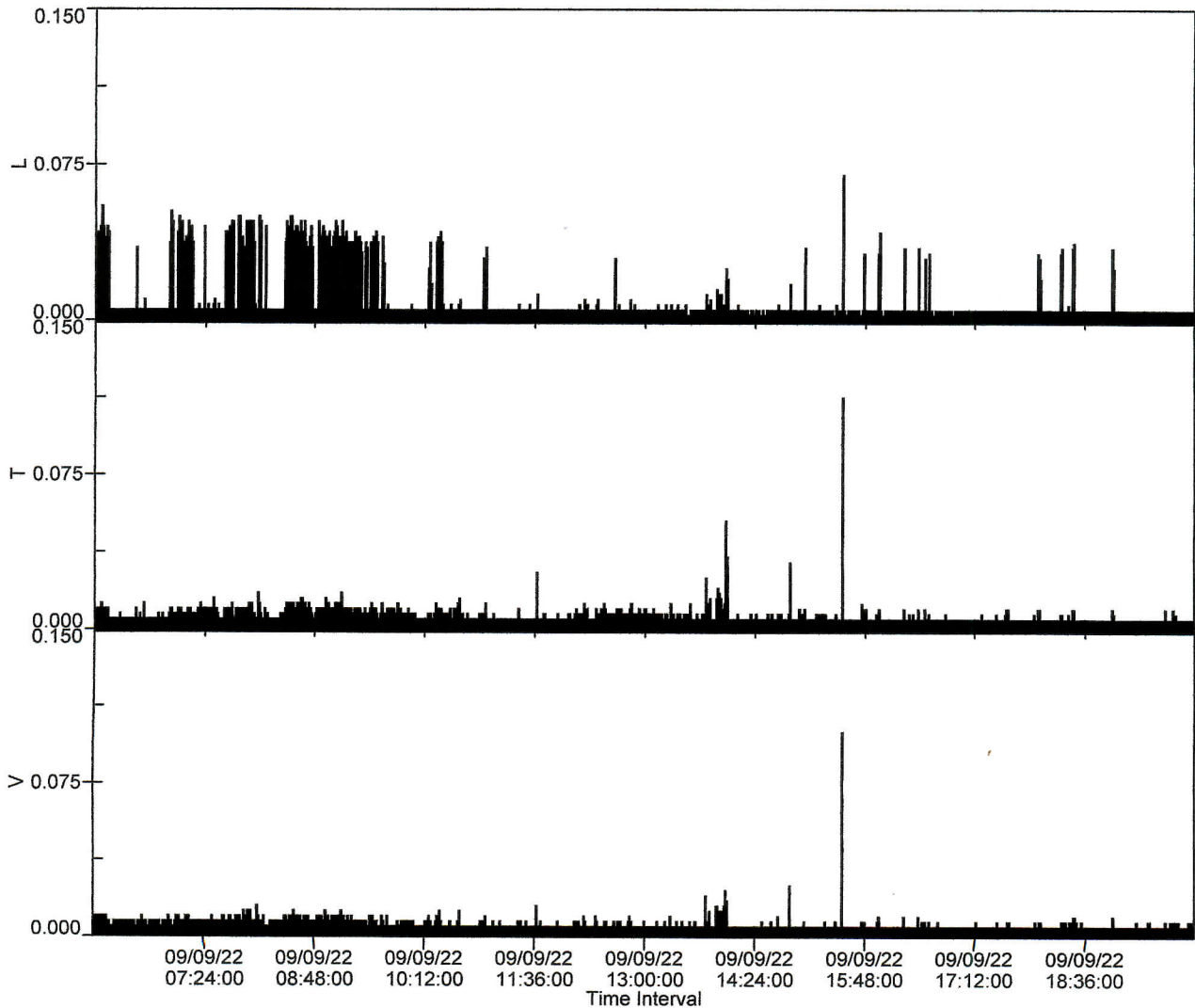
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 109

Record Max PPV: 0.113 in/s Record Max DB: 102 db



SN: 3734 v3.22
Date: 09/10/2022 **Time:** 06:01:00
Event: 110
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.053	0.035	0.023
FREQ (Hz)	166.7	55.6	45.5
Peak Air Pressure:	100 db		

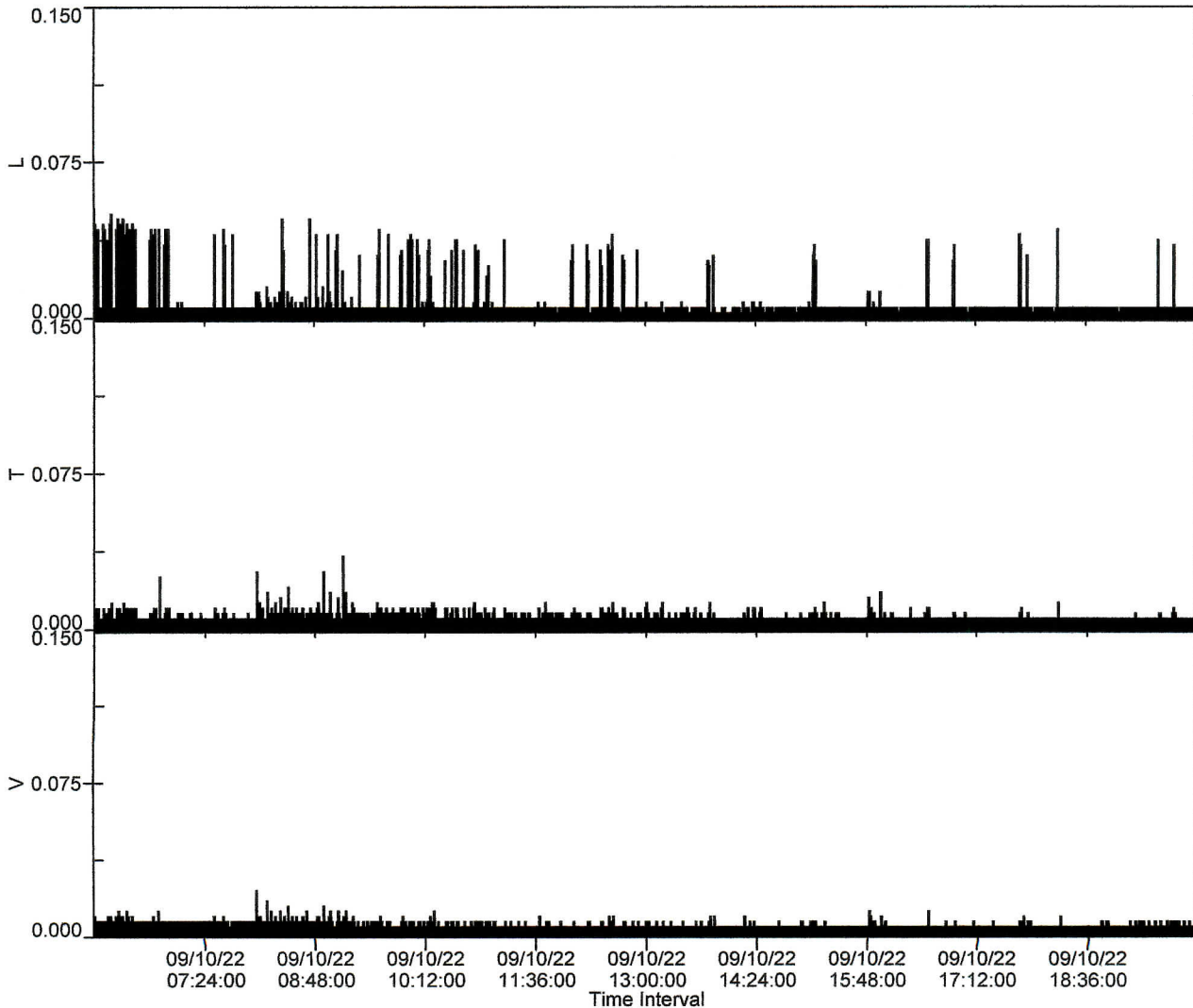
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 110

Record Max PPV: 0.053 in/s Record Max DB: 100 db



SN: 3734 v3.22
Date: 09/11/2022 **Time:** 06:01:00
Event: 111
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

**Continuous Monitor Recording
Summary Data**

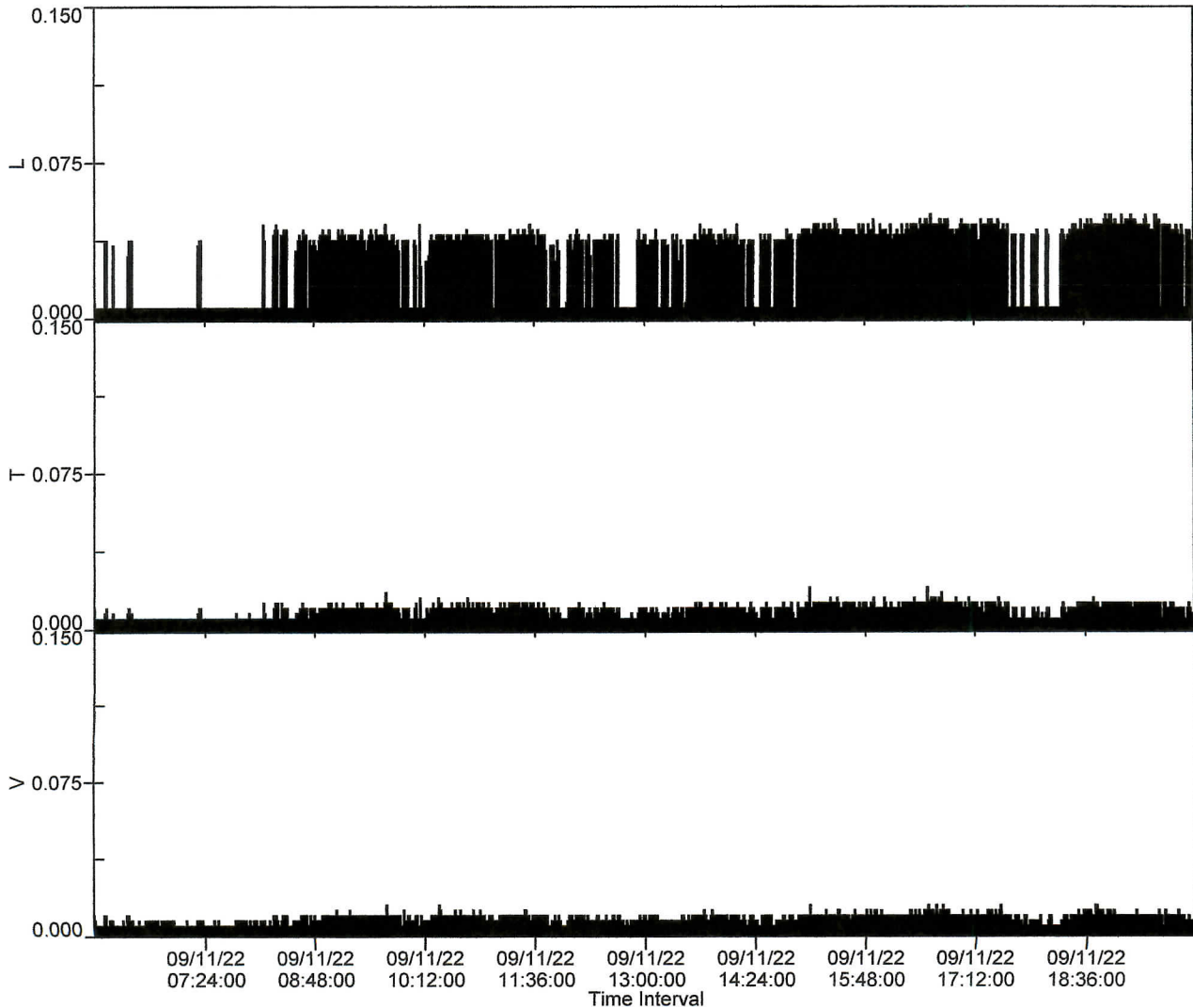
	L	T	V
PPV (in/s)	0.050	0.020	0.015
FREQ (Hz)	62.5	500.0	.9
Peak Air Pressure:	103 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 111

Record Max PPV: 0.050 in/s Record Max DB: 103 db



SN: 3734 v3.22
Date: 09/12/2022 **Time:** 06:01:00
Event: 112
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: SW CORNER OF PARK

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.053	0.025	0.015
FREQ (Hz)	100.0	18.5	25.0
Peak Air Pressure:	92 db		

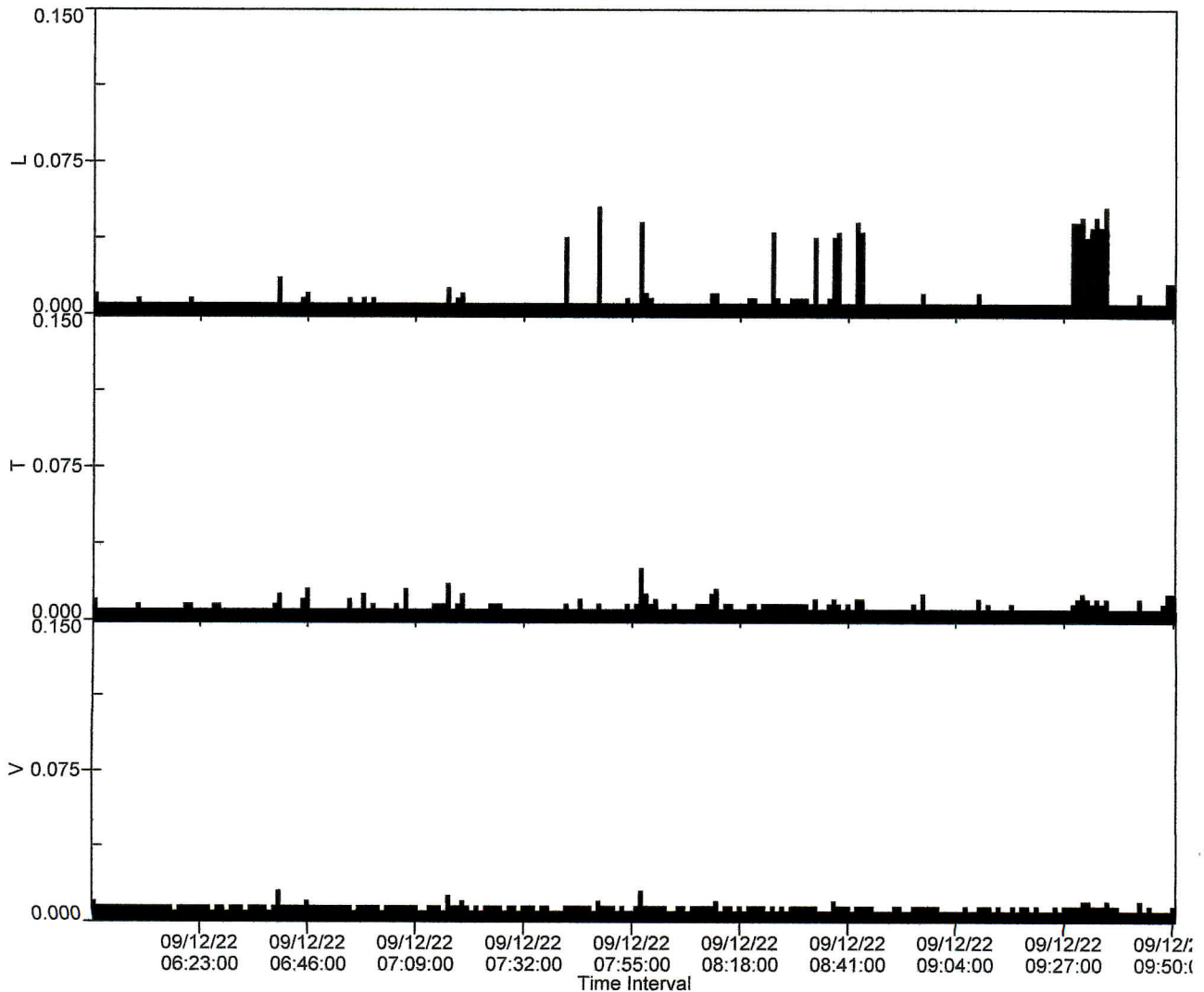
Recording Time: 230 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 04/12/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 112

Record Max PPV: 0.053 in/s Record Max DB: 92 db



SN: 3733 v3.22
Date: 08/29/2022 **Time:** 10:18:00
Event: 97
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.253	0.193	0.168
FREQ (Hz)	13.9	10.9	19.2
Peak Air Pressure:	87 db		

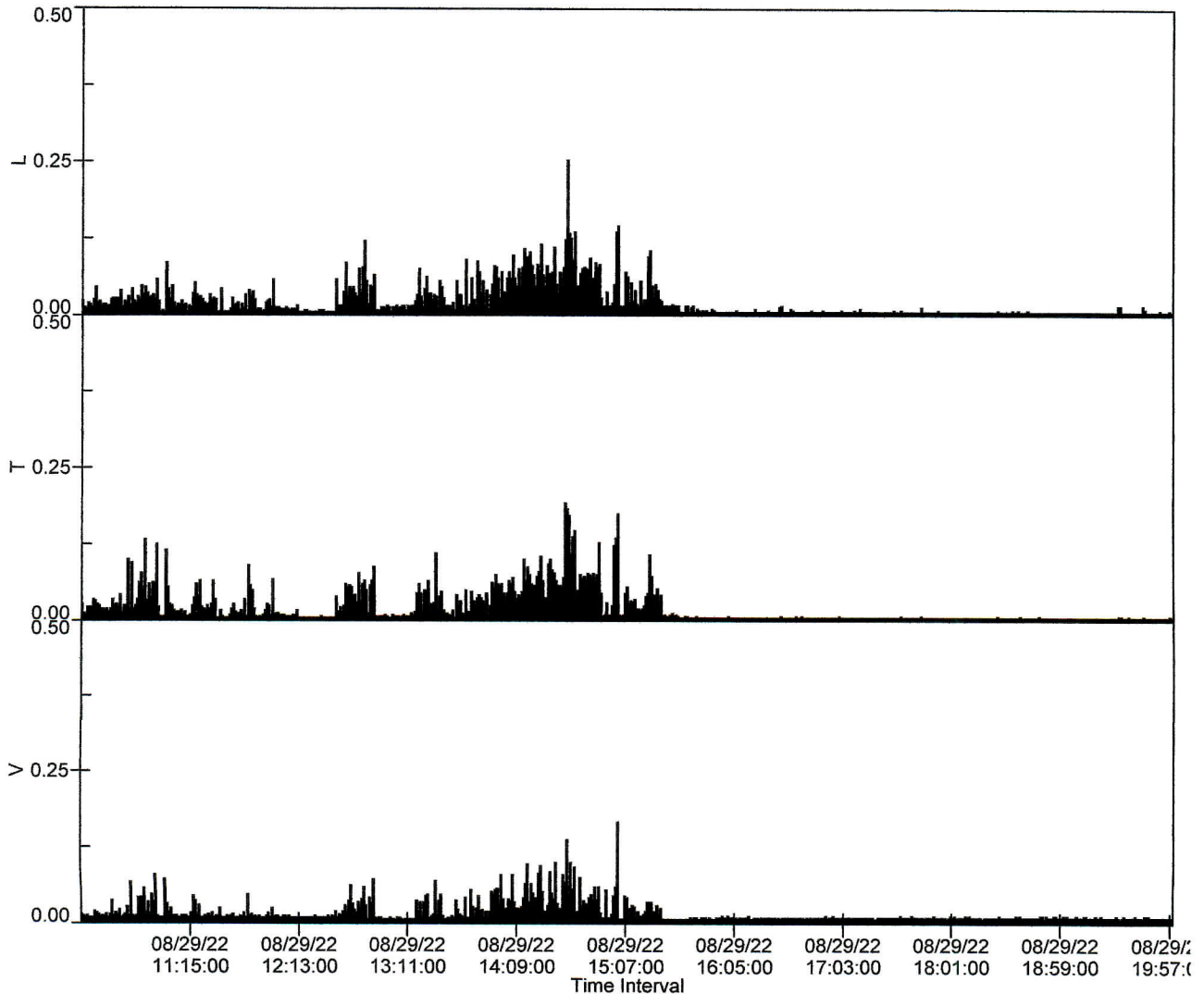
Recording Time: 581 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 97

Record Max PPV: 0.253 in/s Record Max DB: 87 db



SN: 3733 v3.22
Date: 08/30/2022 **Time:** 06:01:00
Event: 98
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

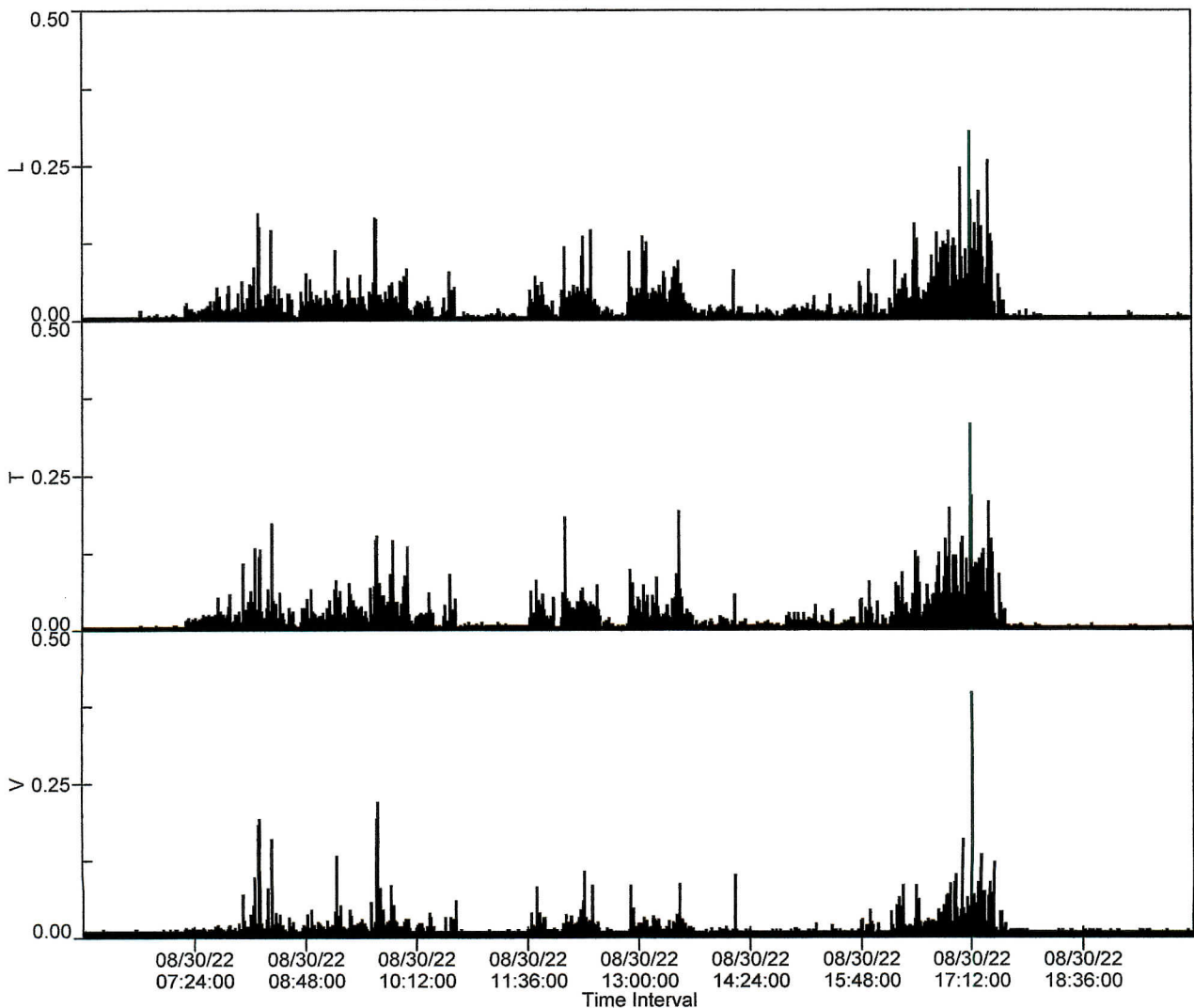
	L	T	V
PPV (in/s)	0.305	0.333	0.398
FREQ (Hz)	17.2	15.6	21.7
Peak Air Pressure:	89 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 98

Record Max PPV: 0.398 in/s Record Max DB: 89 db



SN: 3733 v3.22
Date: 08/31/2022 **Time:** 06:01:00
Event: 99
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

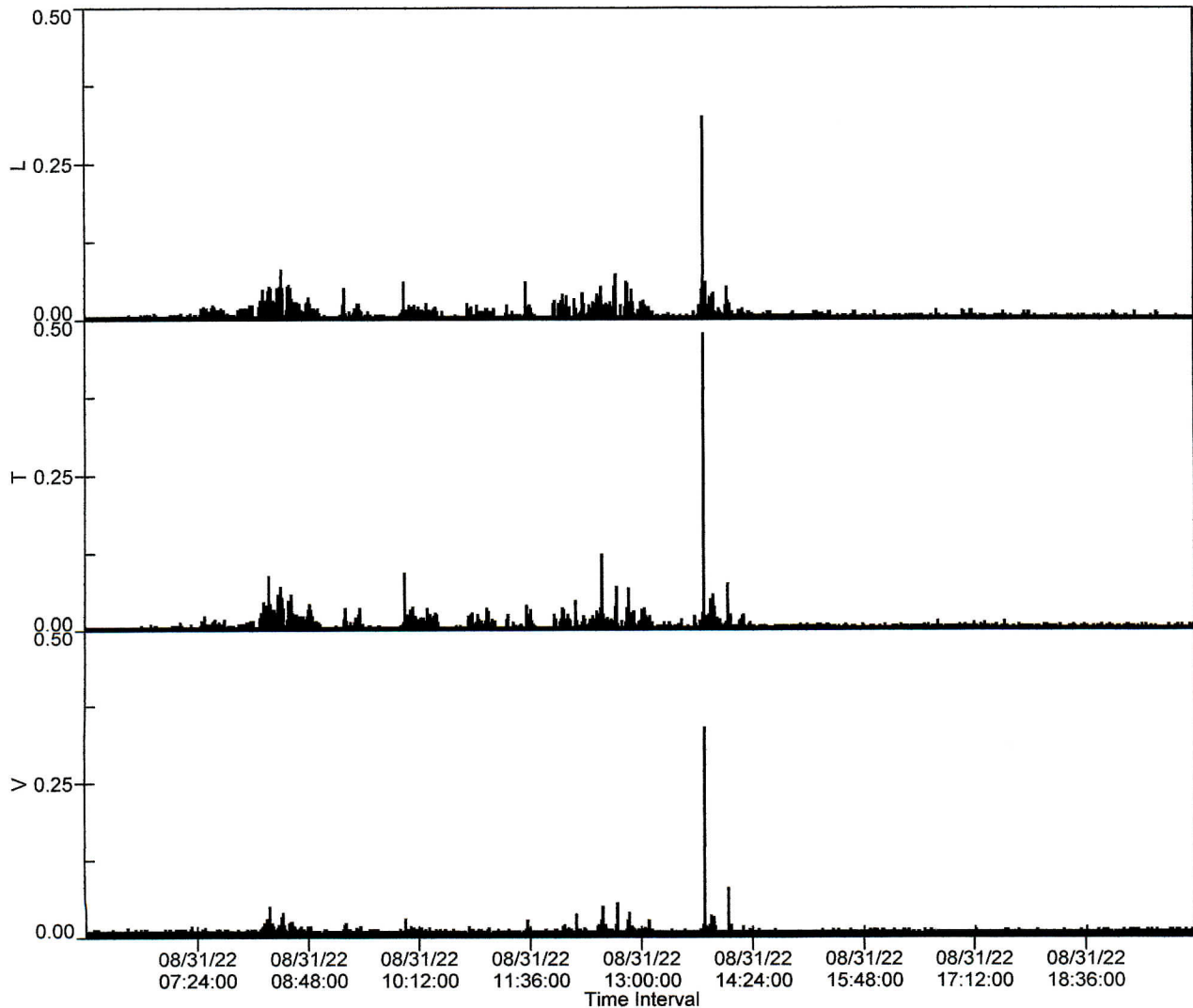
	L	T	V
PPV (in/s)	0.325	0.478	0.340
FREQ (Hz)	22.7	20.8	20.0
Peak Air Pressure:	86 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 99

Record Max PPV: 0.478 in/s Record Max DB: 86 db



SN: 3733 v3.22
Date: 09/01/2022 **Time:** 06:01:00
Event: 100
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

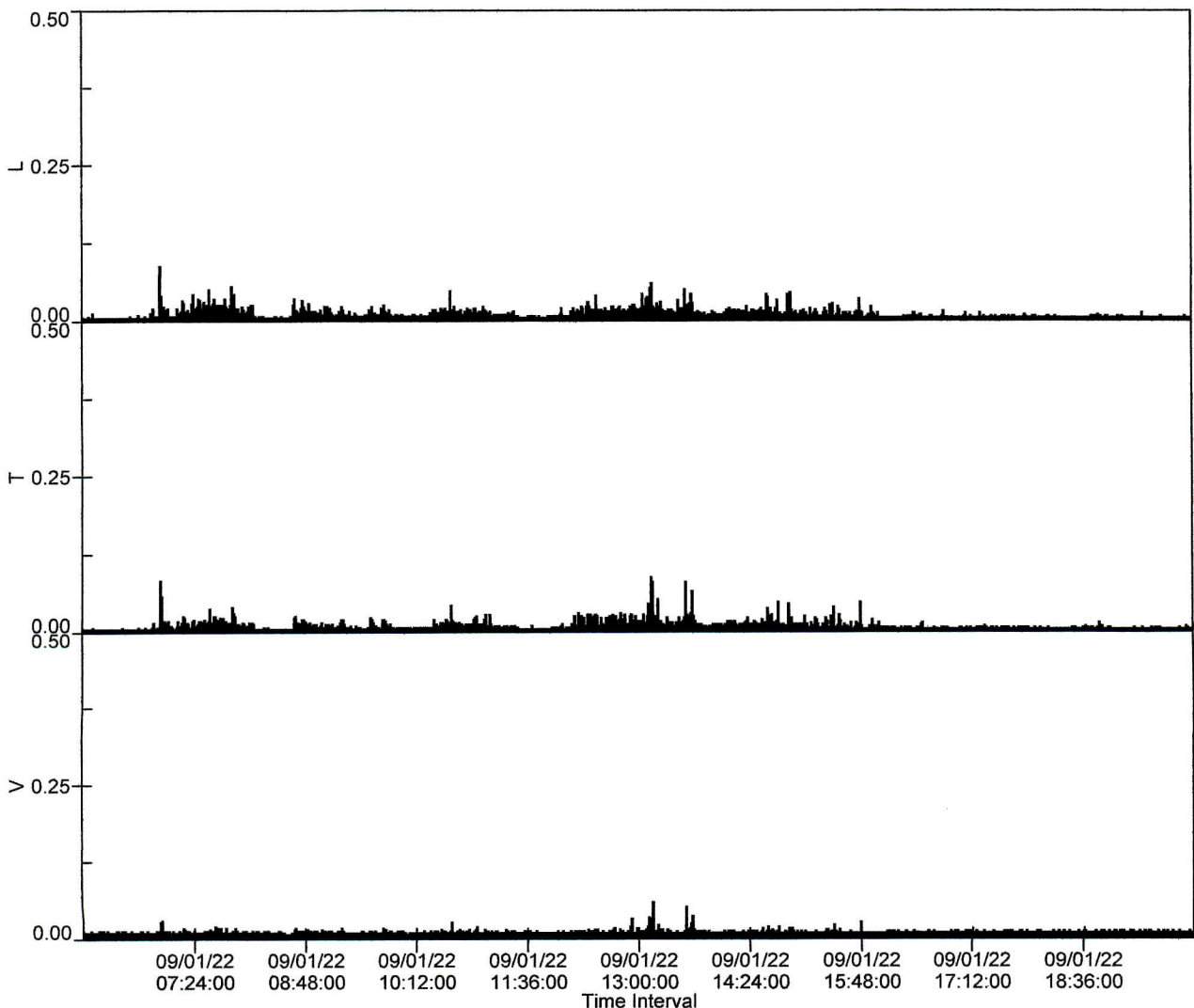
	L	T	V
PPV (in/s)	0.088	0.088	0.060
FREQ (Hz)	16.7	18.5	15.6
Peak Air Pressure:	86 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 100

Record Max PPV: 0.088 in/s Record Max DB: 86 db



SN: 3733 v3.22
Date: 09/02/2022 **Time:** 06:01:00
Event: 101
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.083	0.078	0.038
FREQ (Hz)	20.0	17.9	16.1
Peak Air Pressure:	84 db		

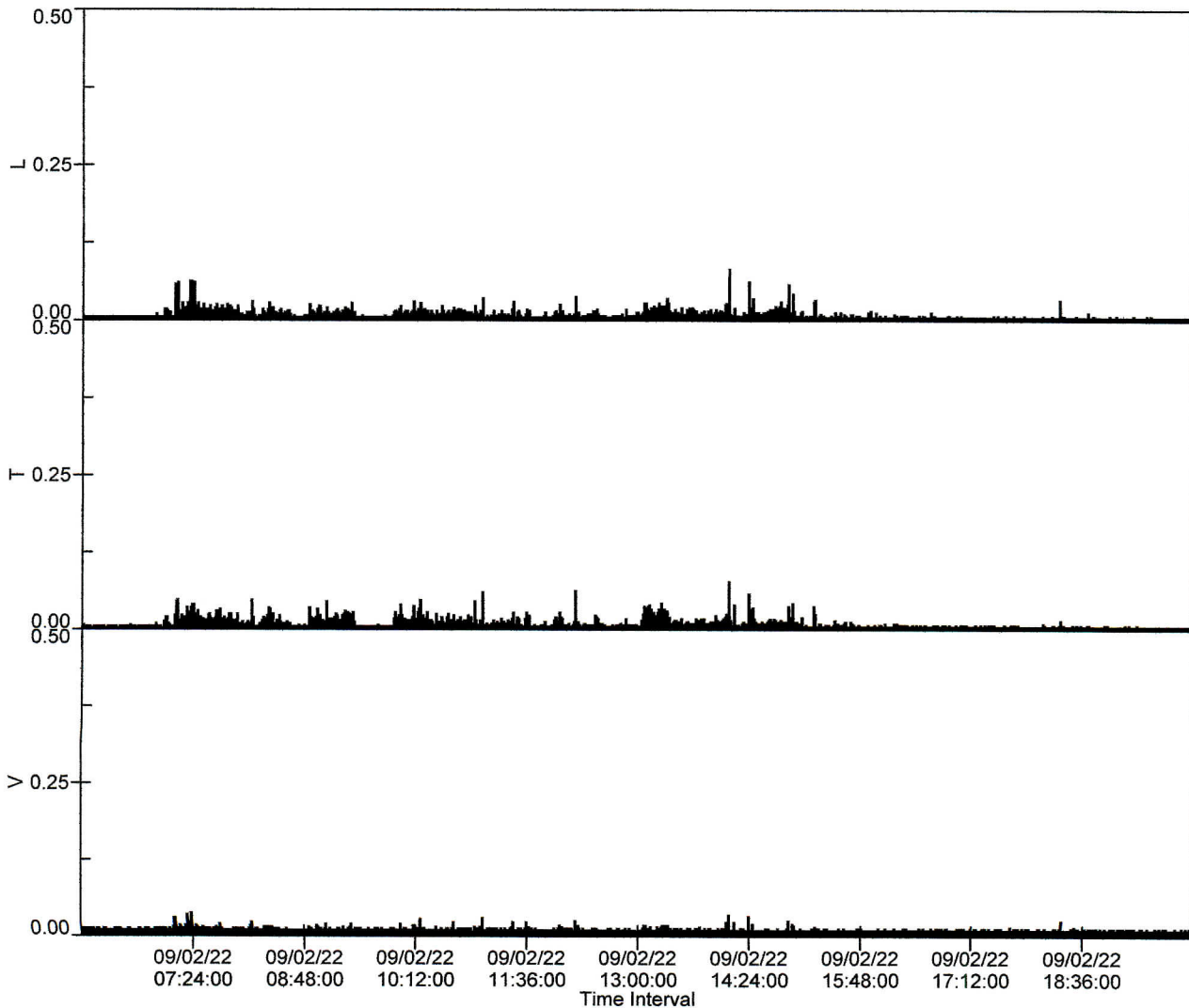
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
359 Northgate Drive
Warrendale, PA 15086 U.S.A.
TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 101

Record Max PPV: 0.083 in/s Record Max DB: 84 db



SN: 3733 v3.22
Date: 09/03/2022 **Time:** 06:01:00
Event: 102
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

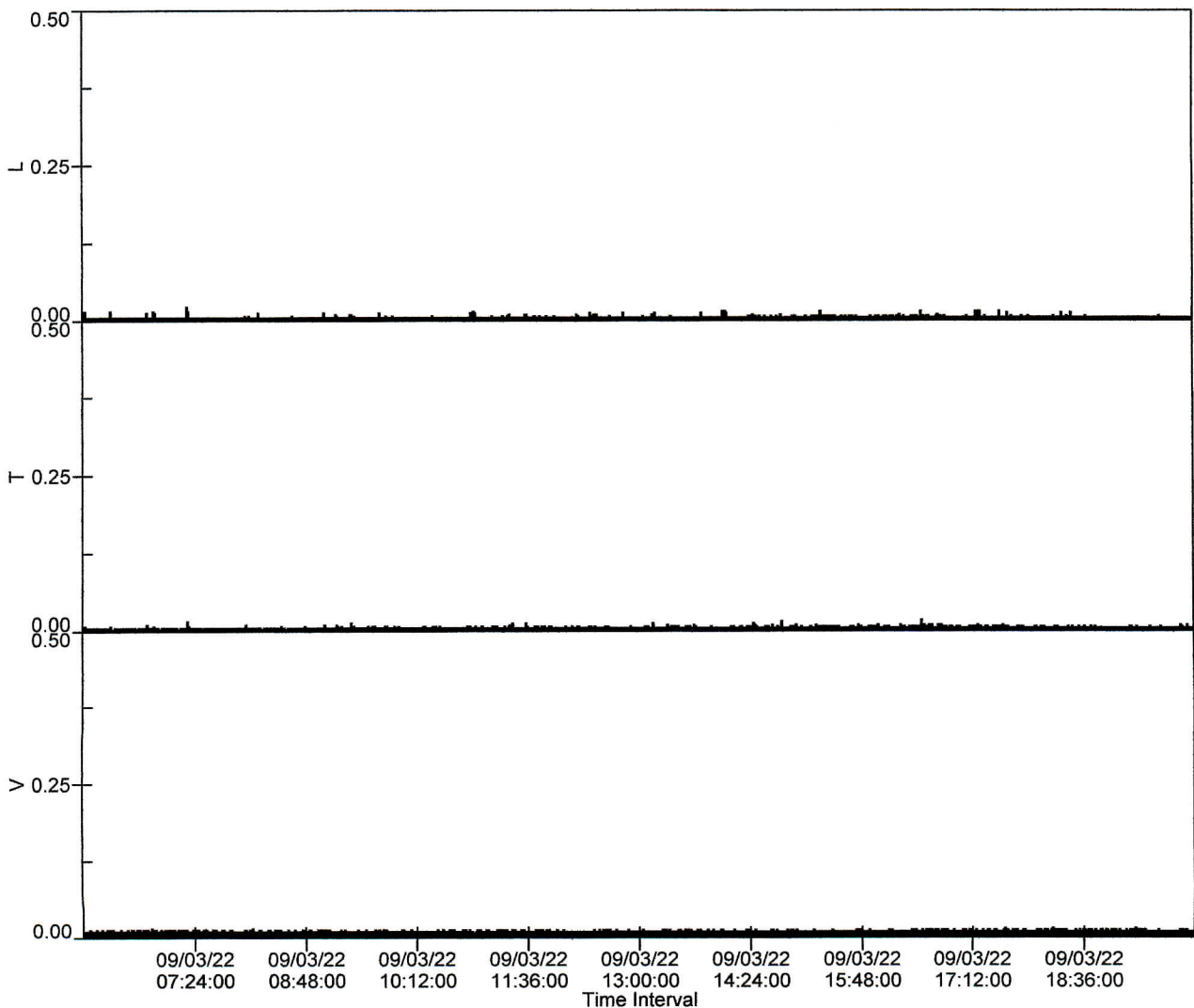
	L	T	V
PPV (in/s)	0.023	0.018	0.015
FREQ (Hz)	2.4	16.1	125.0
Peak Air Pressure:	86 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 102

Record Max PPV: 0.023 in/s Record Max DB: 86 db



SN: 3733 v3.22
Date: 09/04/2022 **Time:** 06:01:00
Event: 103
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

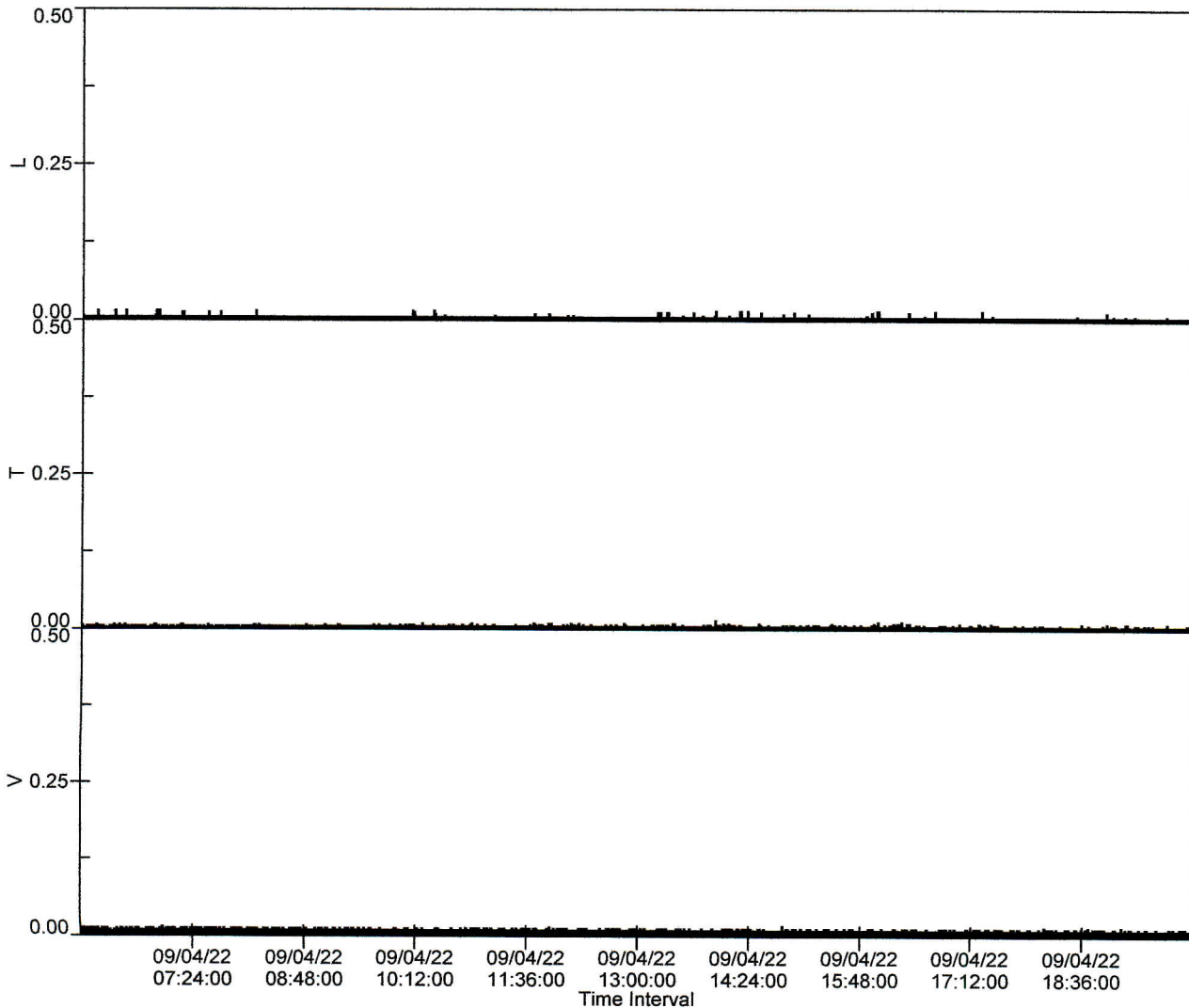
	L	T	V
PPV (in/s)	0.015	0.015	0.018
FREQ (Hz)	55.6	16.7	71.4
Peak Air Pressure:	87 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 103

Record Max PPV: 0.018 in/s Record Max DB: 87 db



SN: 3733 v3.22
Date: 09/05/2022 **Time:** 06:01:00
Event: 104
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

Continuous Monitor Recording
Summary Data

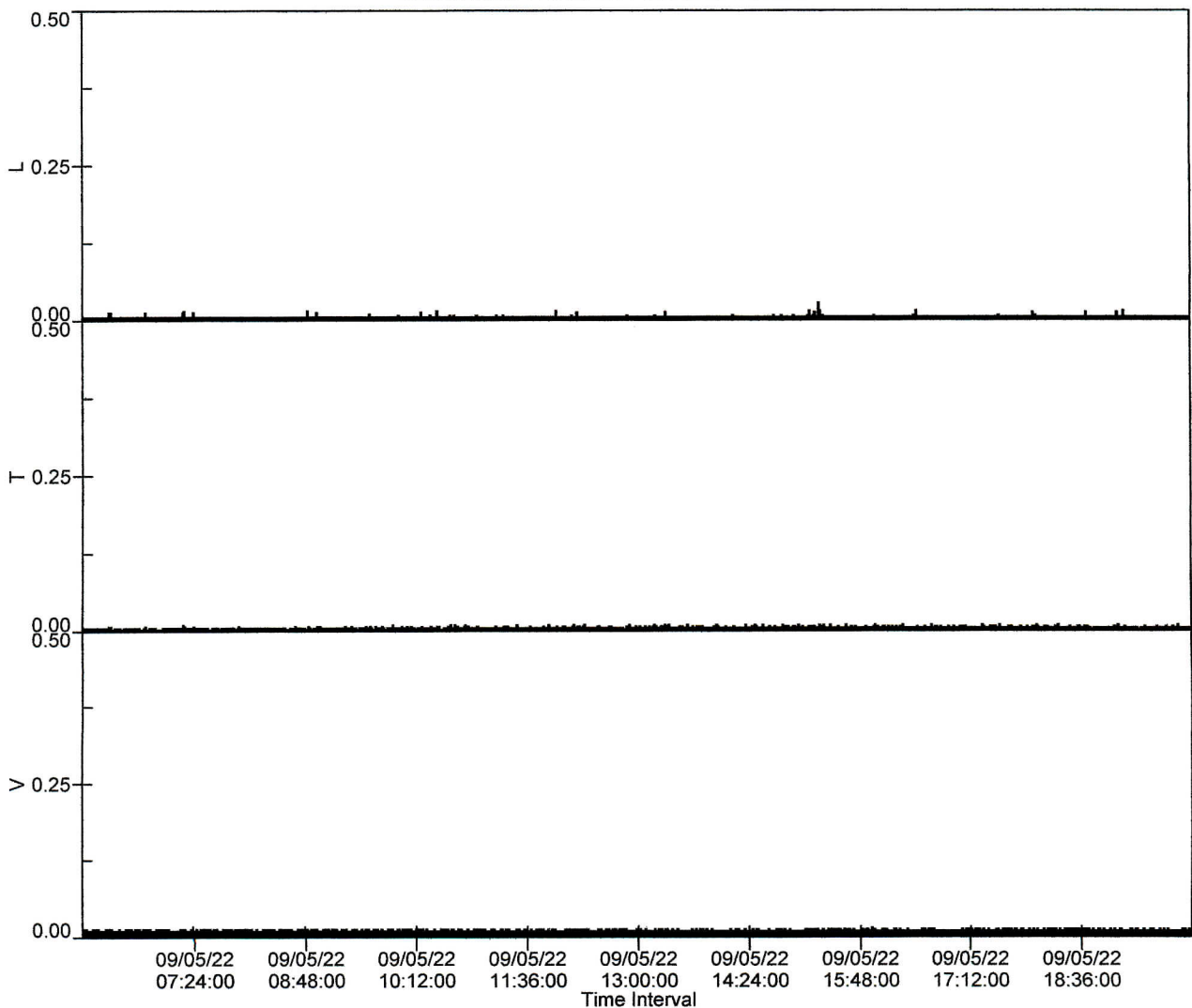
	L	T	V
PPV (in/s)	0.028	0.010	0.015
FREQ (Hz)	45.5	500.0	500.0
Peak Air Pressure:	86 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 104

Record Max PPV: 0.028 in/s Record Max DB: 86 db



SN: 3733 v3.22
Date: 09/06/2022 **Time:** 06:01:00
Event: 105
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

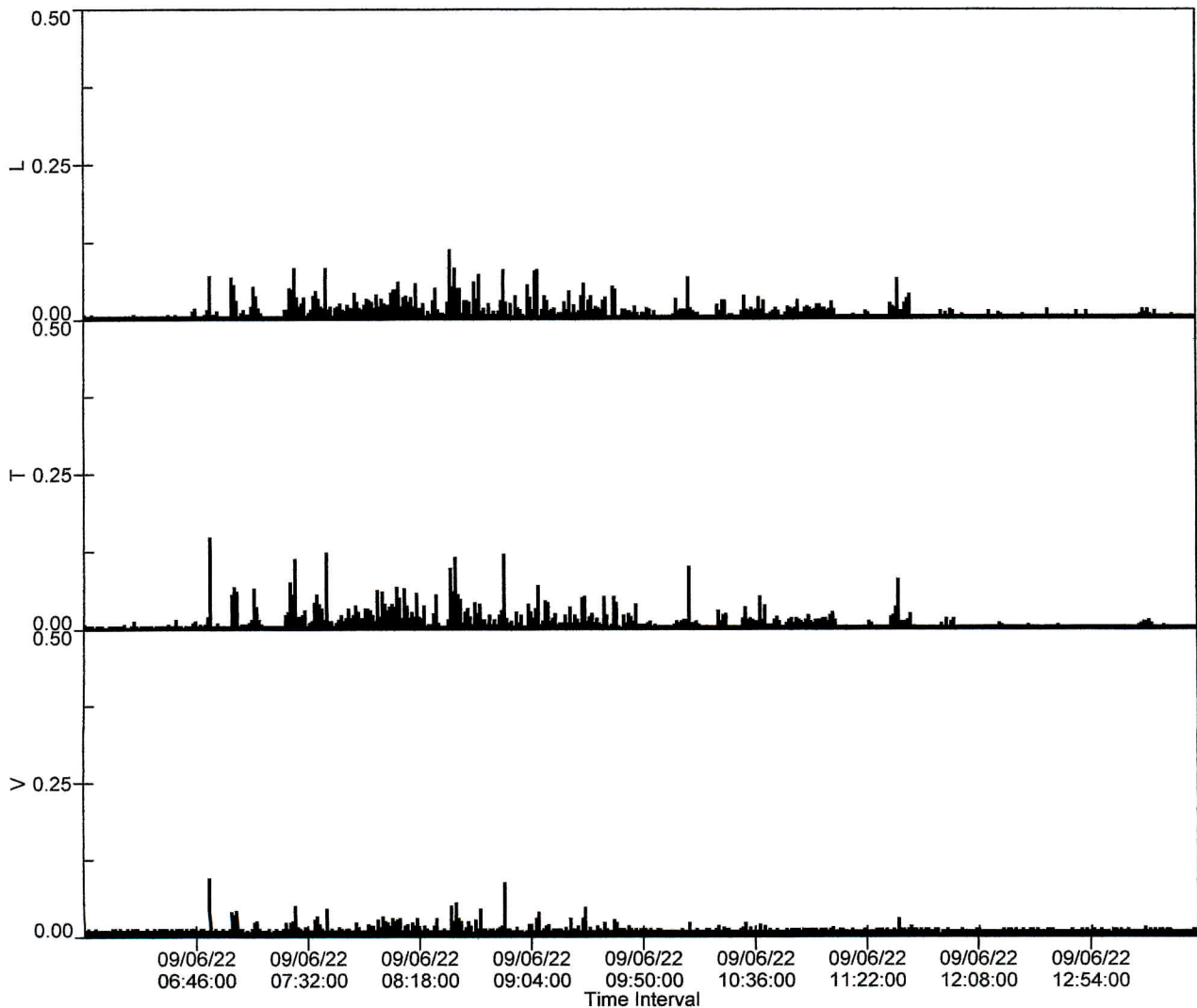
	L	T	V
PPV (in/s)	0.113	0.148	0.095
FREQ (Hz)	22.7	18.5	20.8
Peak Air Pressure:	82 db		
Recording Time:	457 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 105

Record Max PPV: 0.148 in/s Record Max DB: 82 db



SN: 3733 v3.22
Date: 09/06/2022 Time: 13:44:00
Event: 106
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.058	0.078	0.045
FREQ (Hz)	16.7	15.2	22.7
Peak Air Pressure:	95 db		

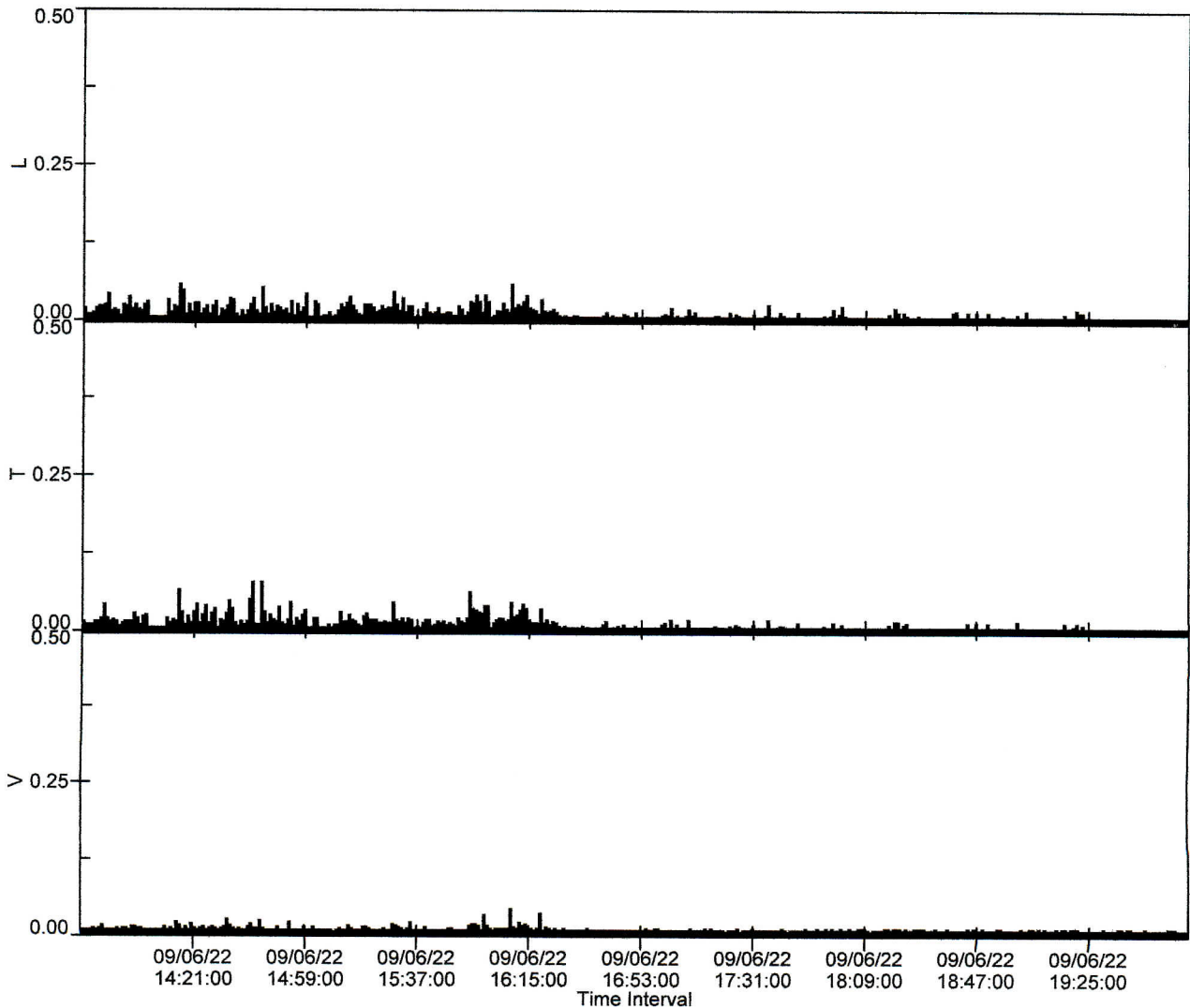
Recording Time: 375 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
359 Northgate Drive
Warrendale, PA 15086 U.S.A.
TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 106

Record Max PPV: 0.078 in/s Record Max DB: 95 db



SN: 3733 v3.22
Date: 09/07/2022 **Time:** 06:01:00
Event: 107
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.193	0.173	0.165
FREQ (Hz)	23.8	29.4	33.3
Peak Air Pressure:	90 db		

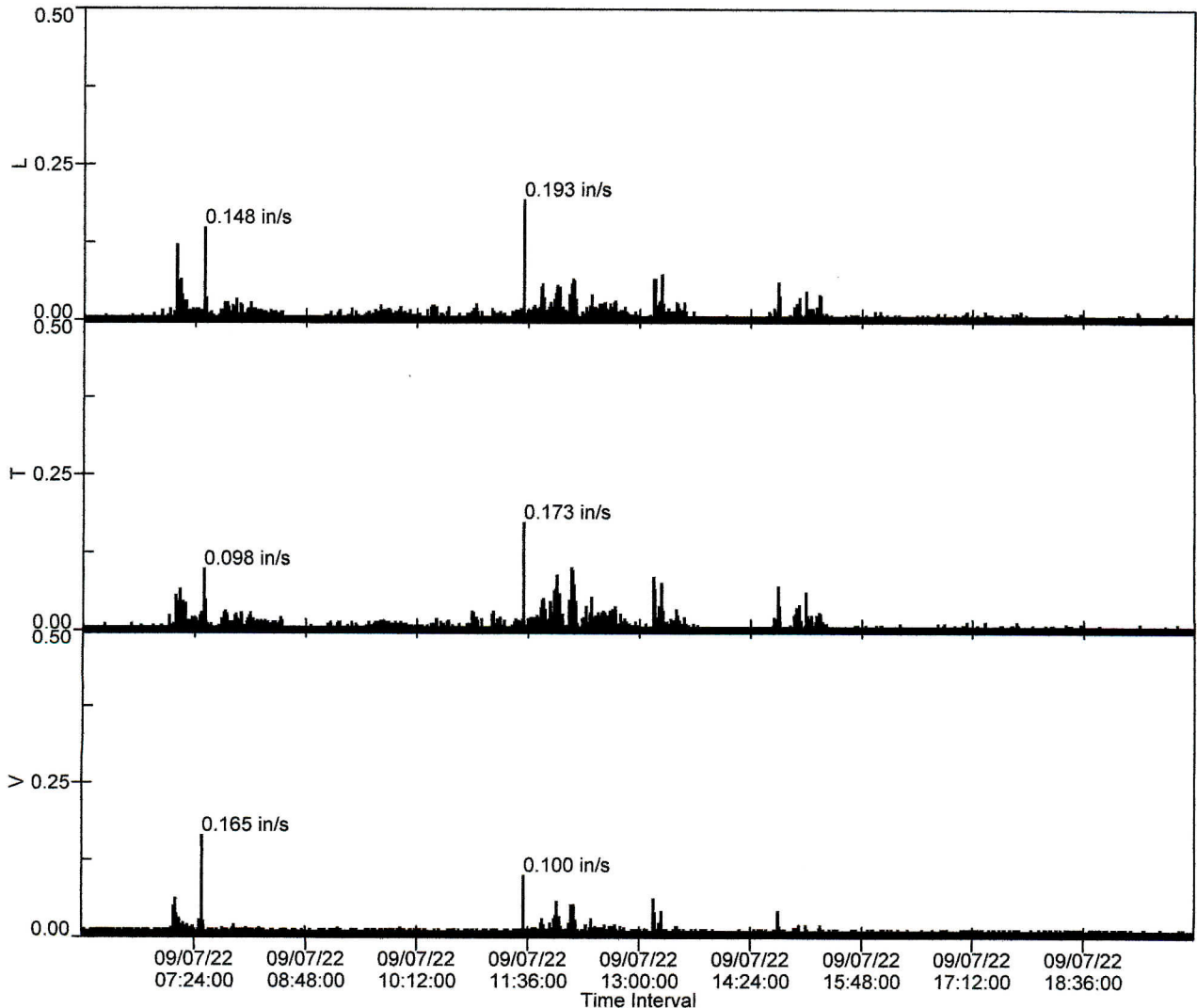
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 107

Record Max PPV: 0.193 in/s Record Max DB: 90 db



SN: 3733 v3.22
Date: 09/08/2022 **Time:** 06:01:00
Event: 108
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.143	0.130	0.083
FREQ (Hz)	11.9	17.9	35.7
Peak Air Pressure:	92 db		

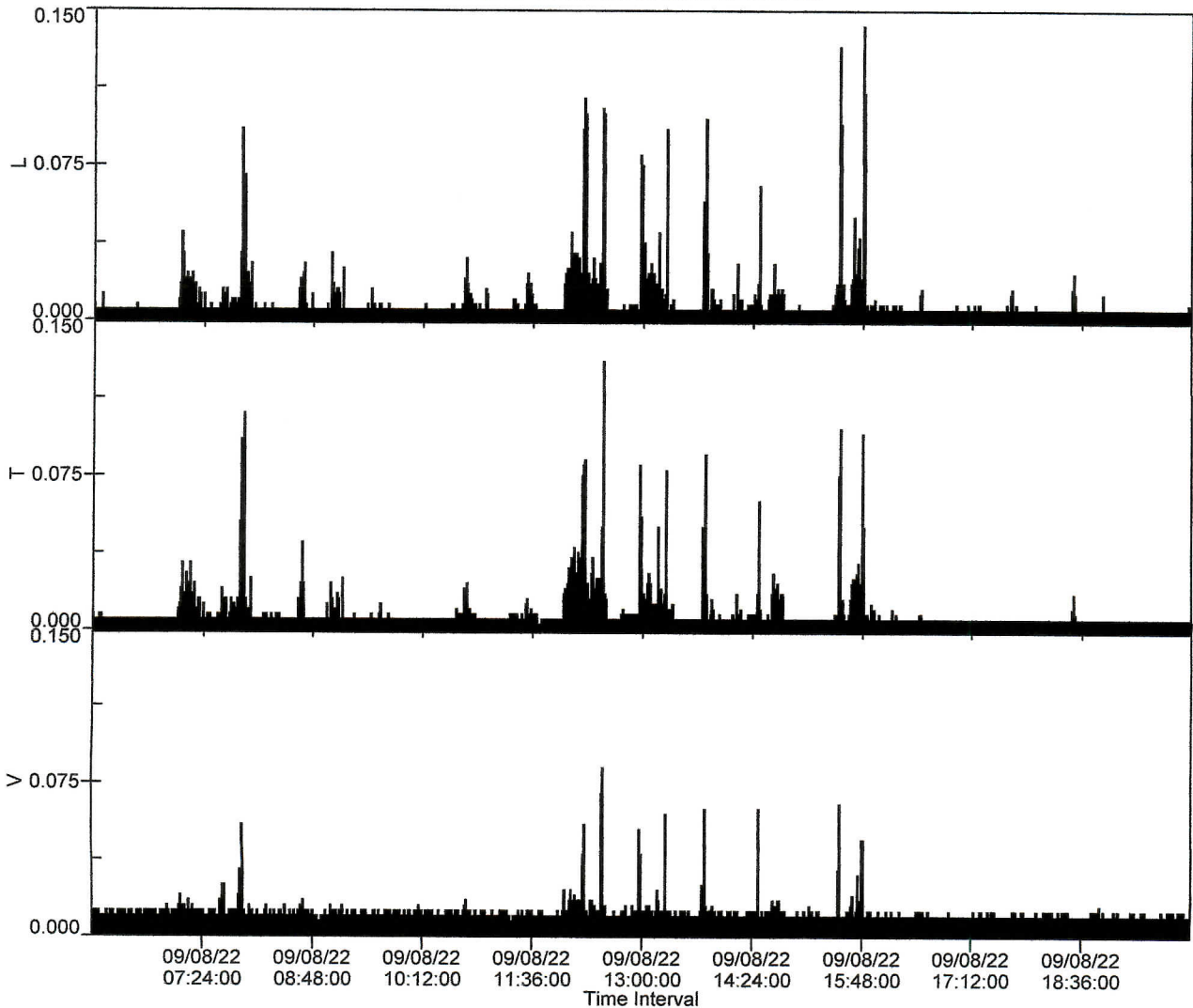
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 108

Record Max PPV: 0.143 in/s Record Max DB: 92 db



SN: 3733 v3.22
Date: 09/09/2022 **Time:** 06:01:00
Event: 109
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

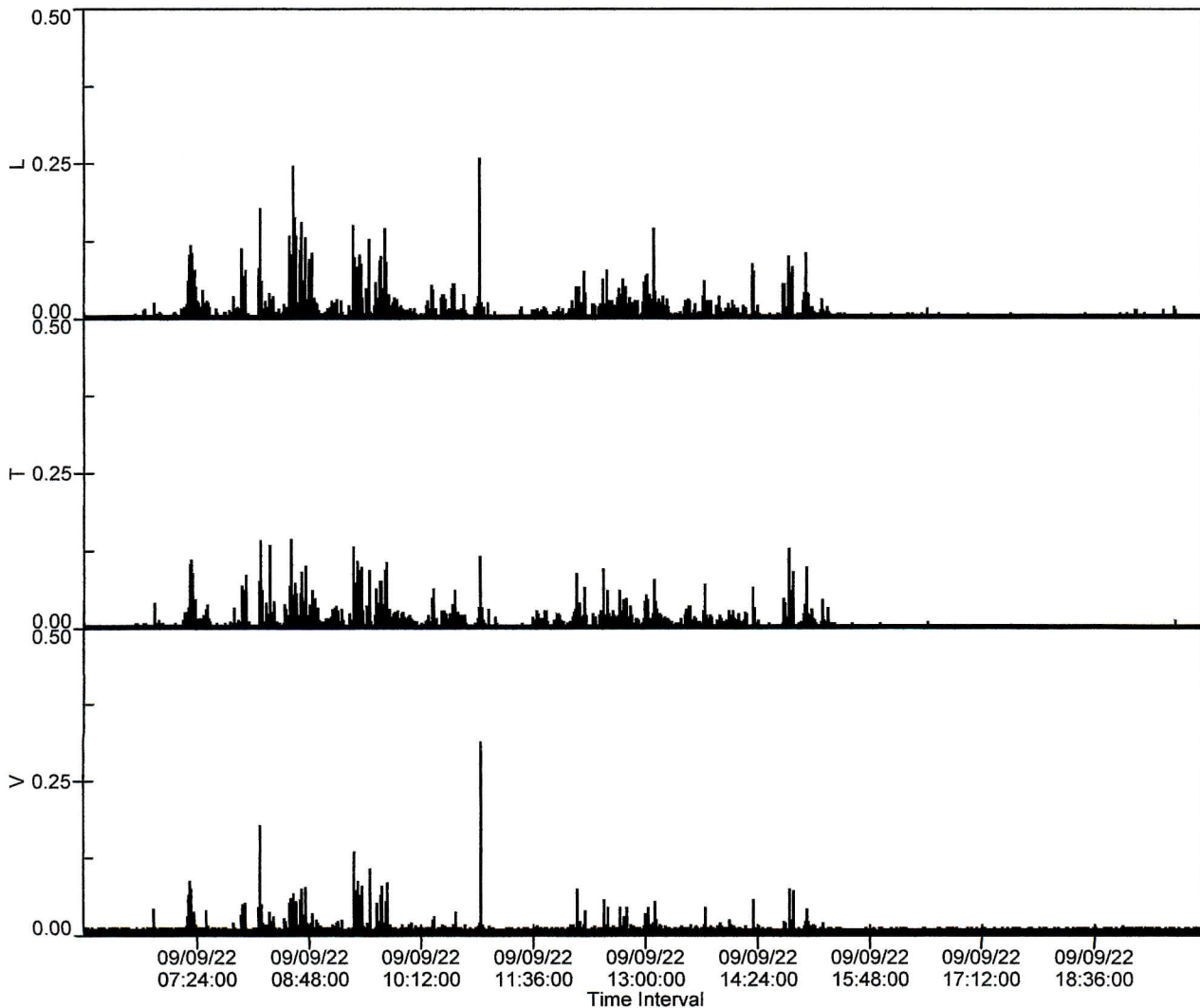
	L	T	V
PPV (in/s)	0.258	0.143	0.313
FREQ (Hz)	20.8	17.9	21.7
Peak Air Pressure:	89 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 109

Record Max PPV: 0.313 in/s Record Max DB: 89 db



SN: 3733 v3.22
Date: 09/10/2022 **Time:** 06:01:00
Event: 110
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

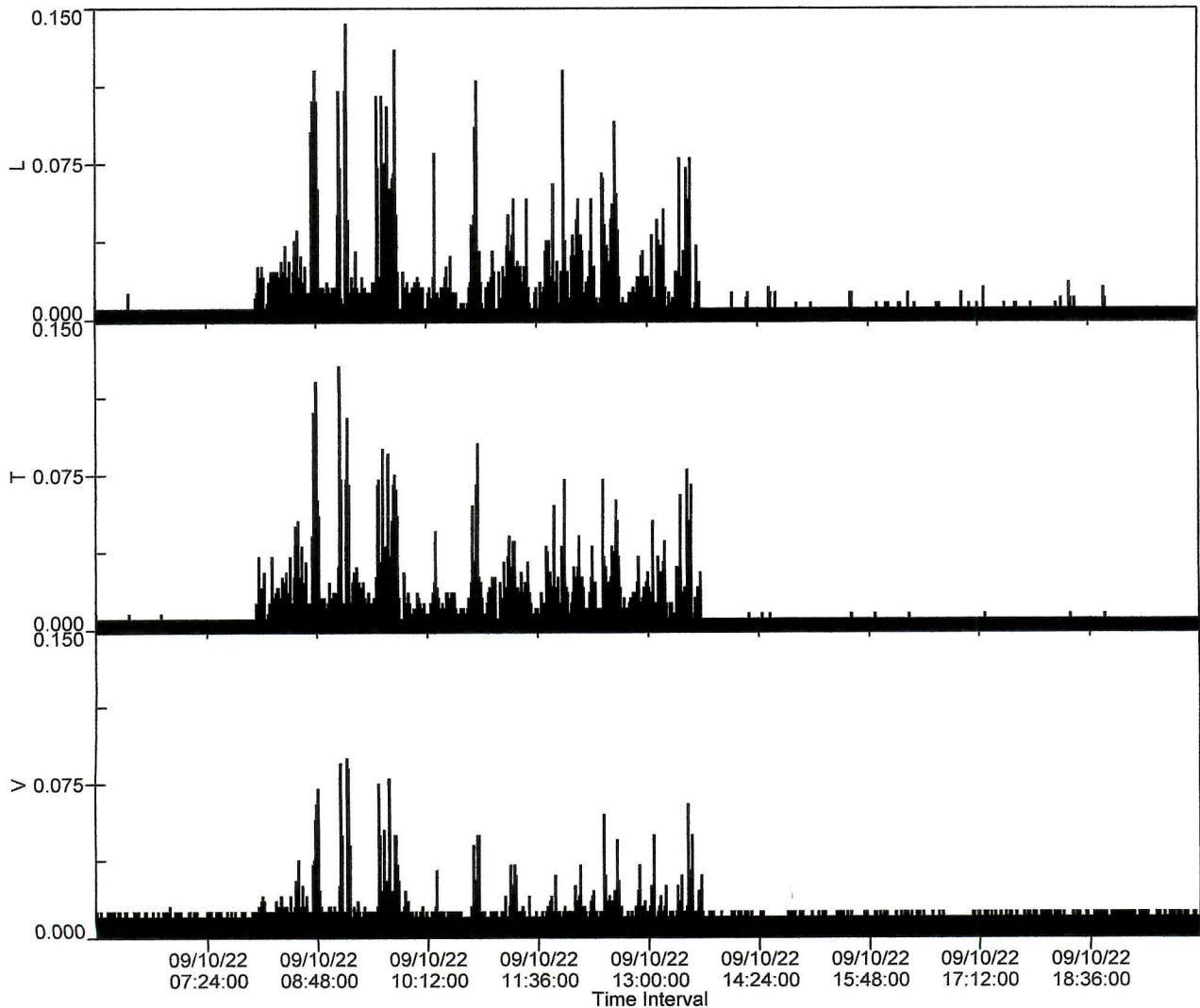
	L	T	V
PPV (in/s)	0.143	0.128	0.088
FREQ (Hz)	31.3	19.2	38.5
Peak Air Pressure:	84 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 110

Record Max PPV: 0.143 in/s Record Max DB: 84 db



SN: 3733 v3.22
Date: 09/11/2022 **Time:** 06:01:00
Event: 111
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

**Continuous Monitor Recording
Summary Data**

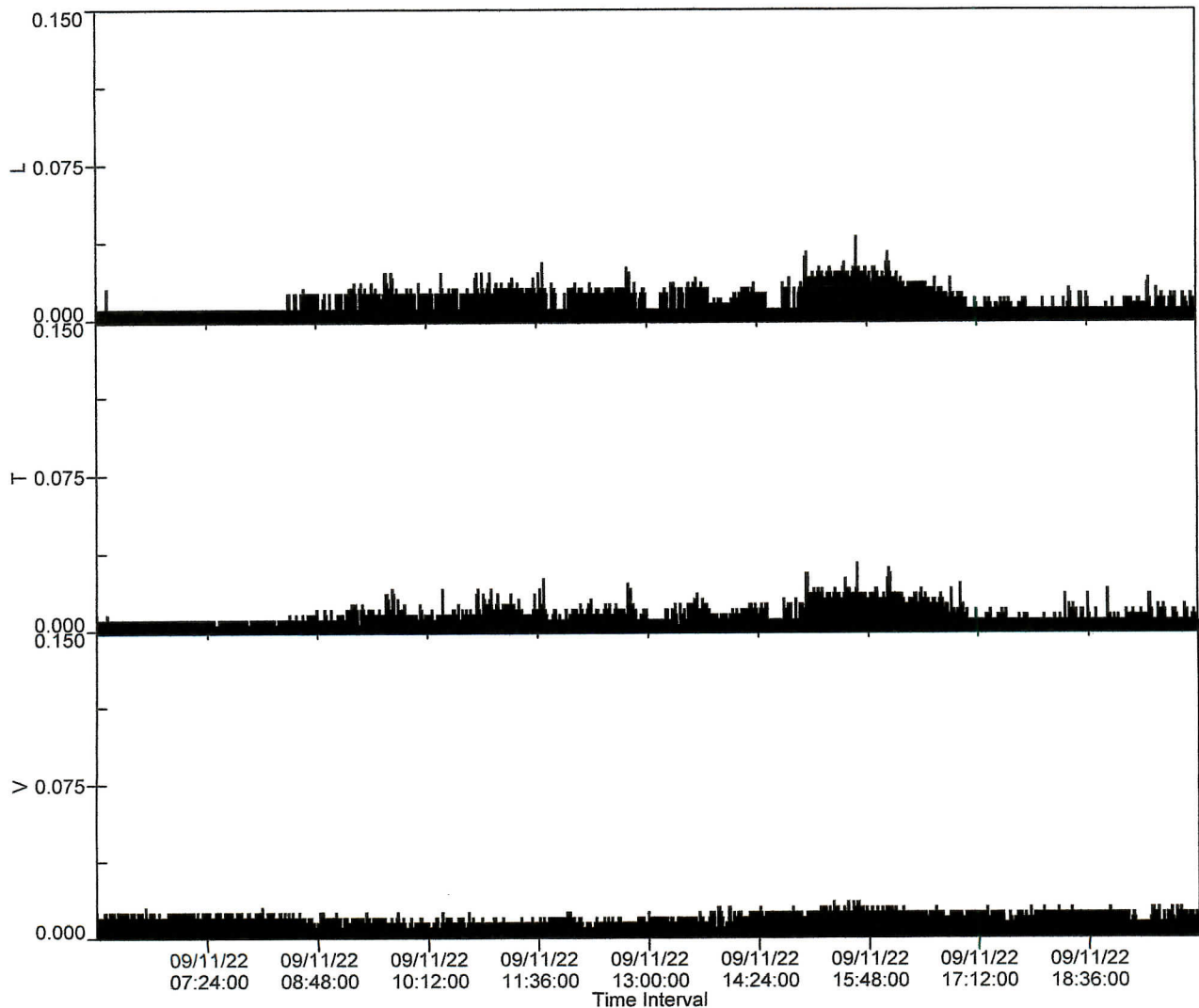
	L	T	V
PPV (in/s)	0.040	0.033	0.018
FREQ (Hz)	1.5	2.3	250.0
Peak Air Pressure:	103 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 111

Record Max PPV: 0.040 in/s Record Max DB: 103 db



SN: 3733 v3.22
Date: 09/12/2022 **Time:** 06:01:00
Event: 112
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: 2345 THORNWOOD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.040	0.065	0.030
FREQ (Hz)	12.2	16.1	20.8
Peak Air Pressure: 86 db			

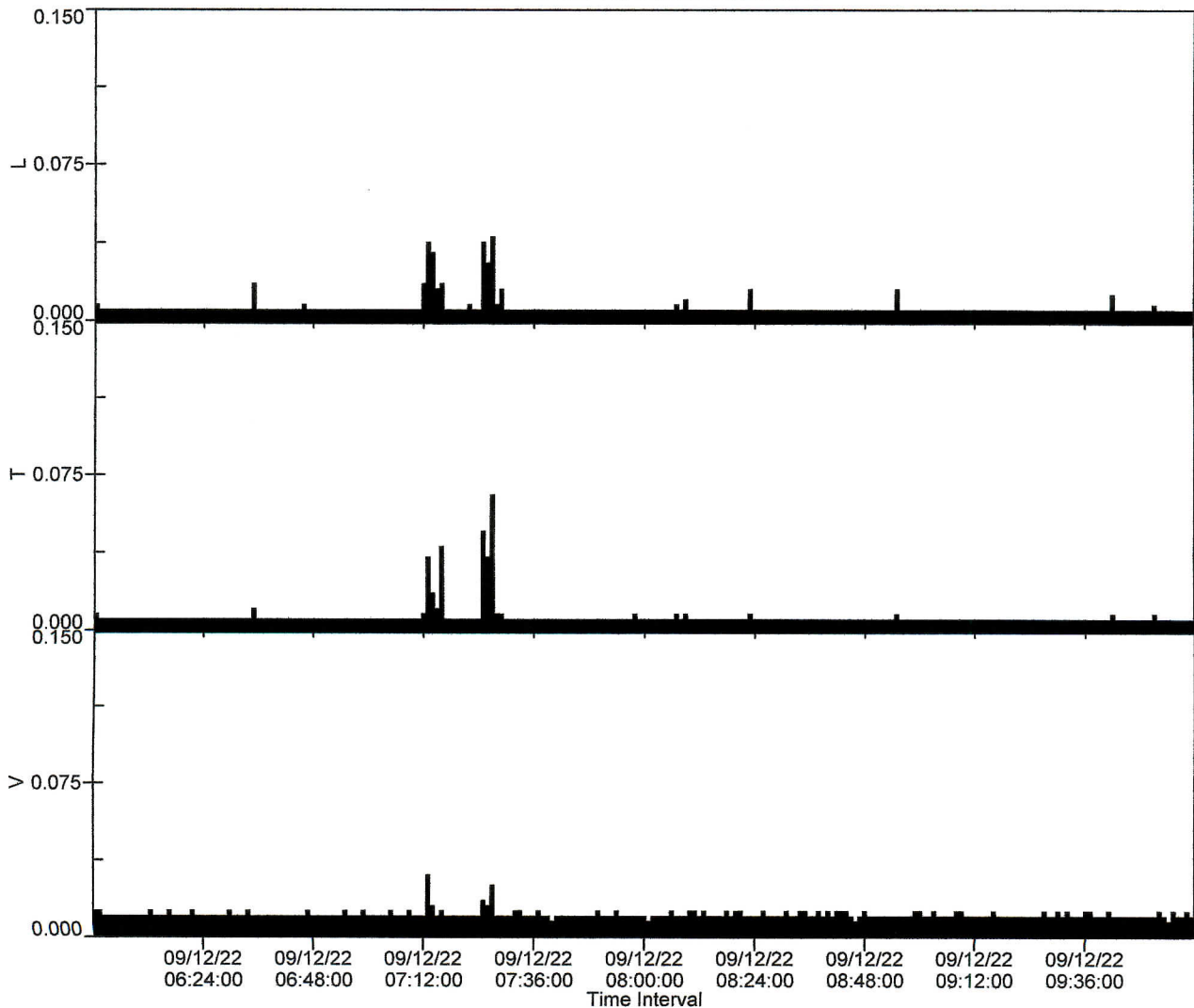
Recording Time: 239 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 12/28/2021
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3733 Event: 112

Record Max PPV: 0.065 in/s Record Max DB: 86 db



SN: 3647 v2.75
Date: 08/29/2022 **Time:** 10:26:00
Event: 97
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.040	0.040	0.023
FREQ (Hz)	15.2	9.1	8.9
Peak Air Pressure:	101 db		

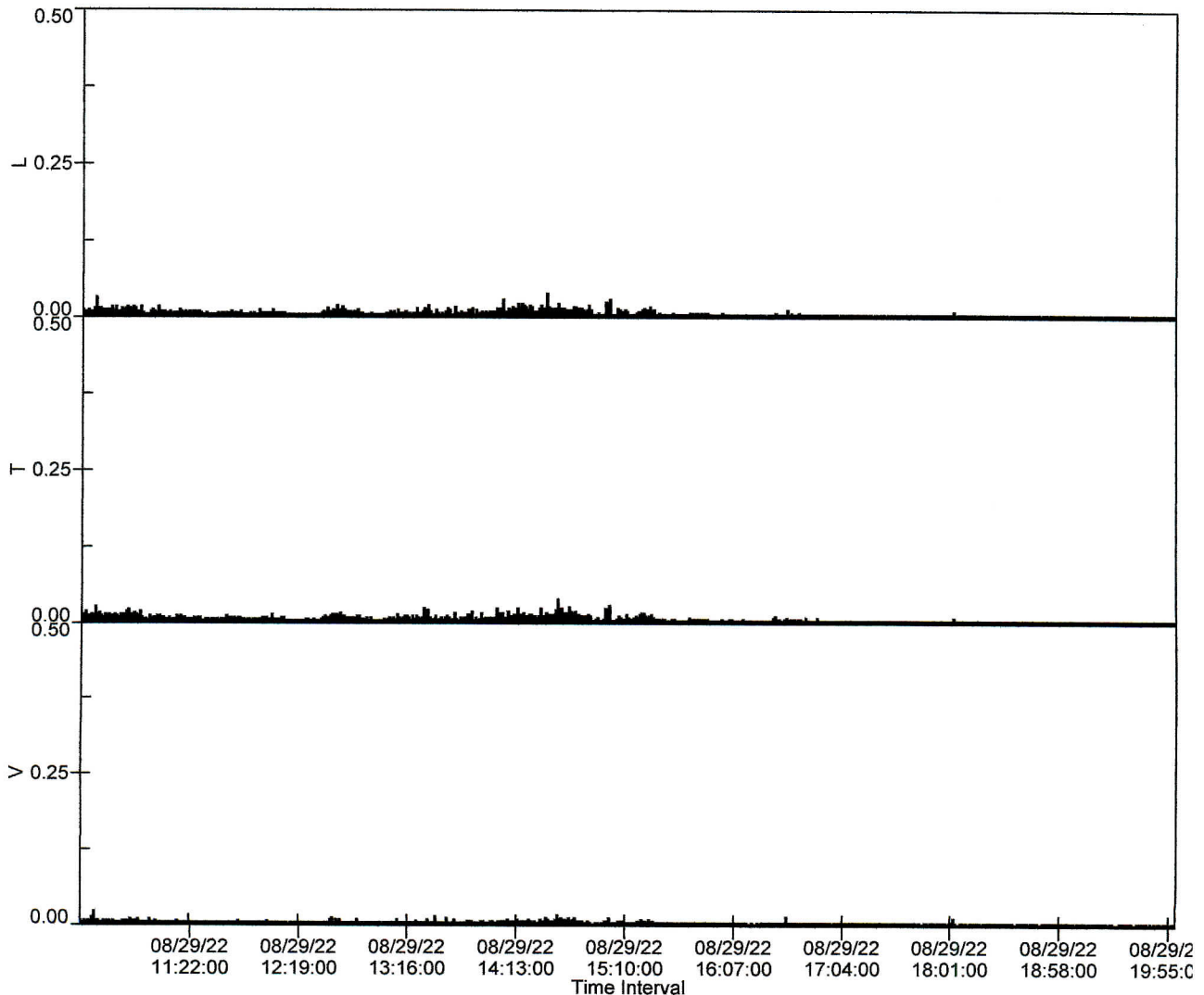
Recording Time: 573 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 97

Record Max PPV: 0.040 in/s Record Max DB: 101 db



SN: 3647 v2.75
Date: 08/30/2022 **Time:** 06:01:00
Event: 98
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.048	0.035	0.025
FREQ (Hz)	10.9	8.2	12.8
Peak Air Pressure:	100 db		

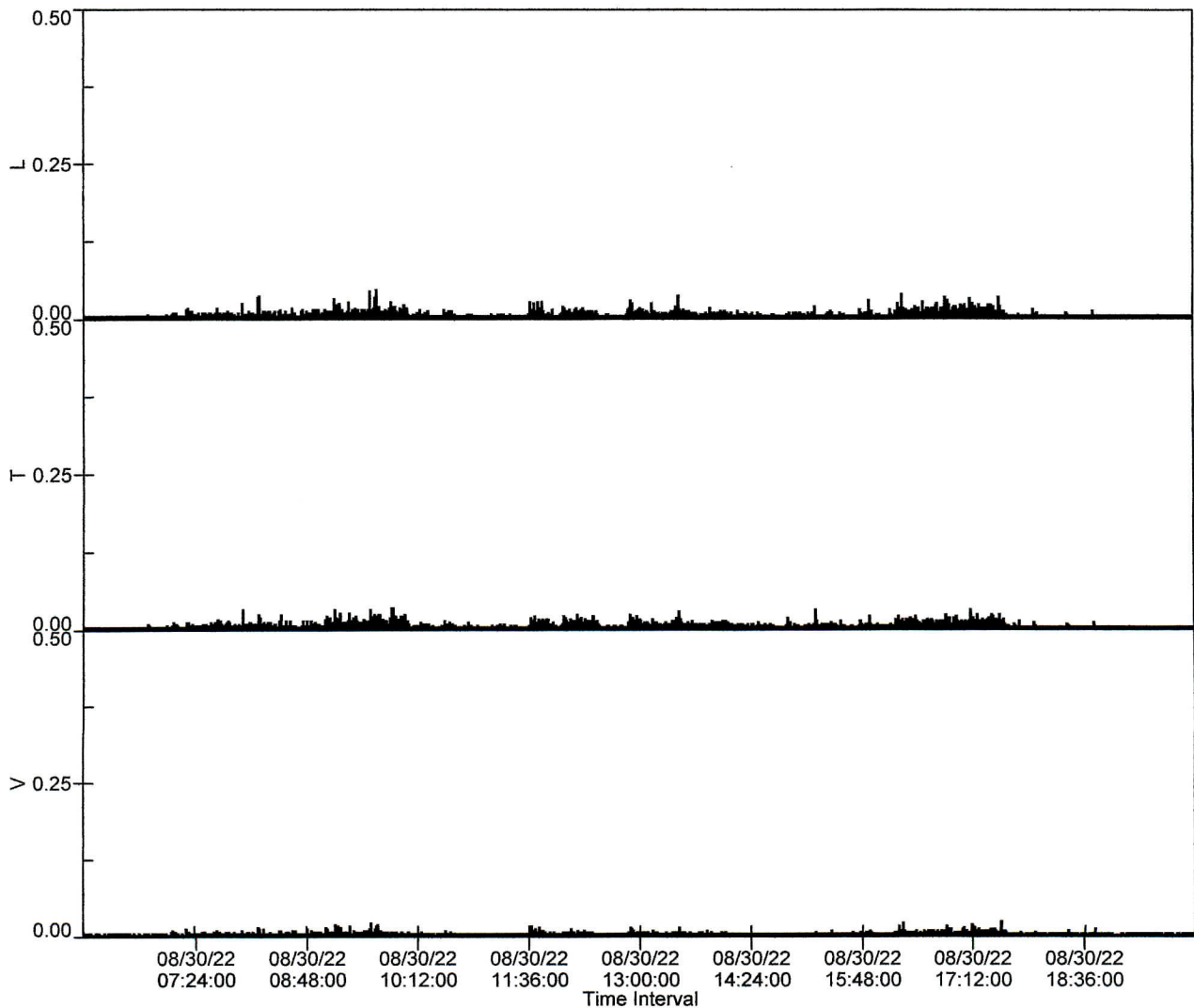
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 98

Record Max PPV: 0.048 in/s Record Max DB: 100 db



SN: 3647 v2.75
Date: 08/31/2022 **Time:** 06:01:00
Event: 99
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.108	0.035	0.038
FREQ (Hz)	13.9	10.4	13.9
Peak Air Pressure:	102 db		

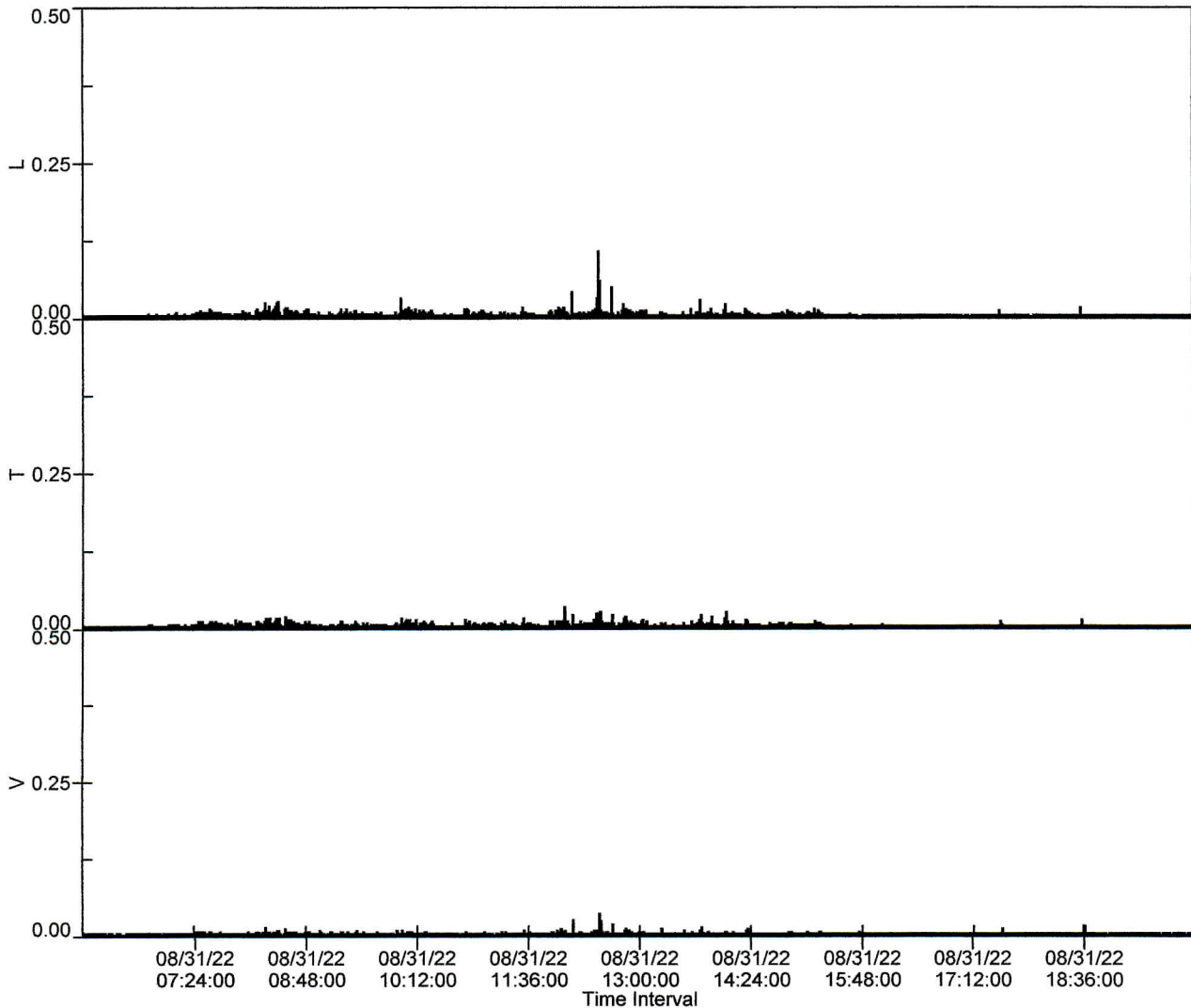
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 99

Record Max PPV: 0.108 in/s Record Max DB: 102 db



SN: 3647 v2.75
Date: 09/01/2022 **Time:** 06:01:00
Event: 100
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

**Continuous Monitor Recording
Summary Data**

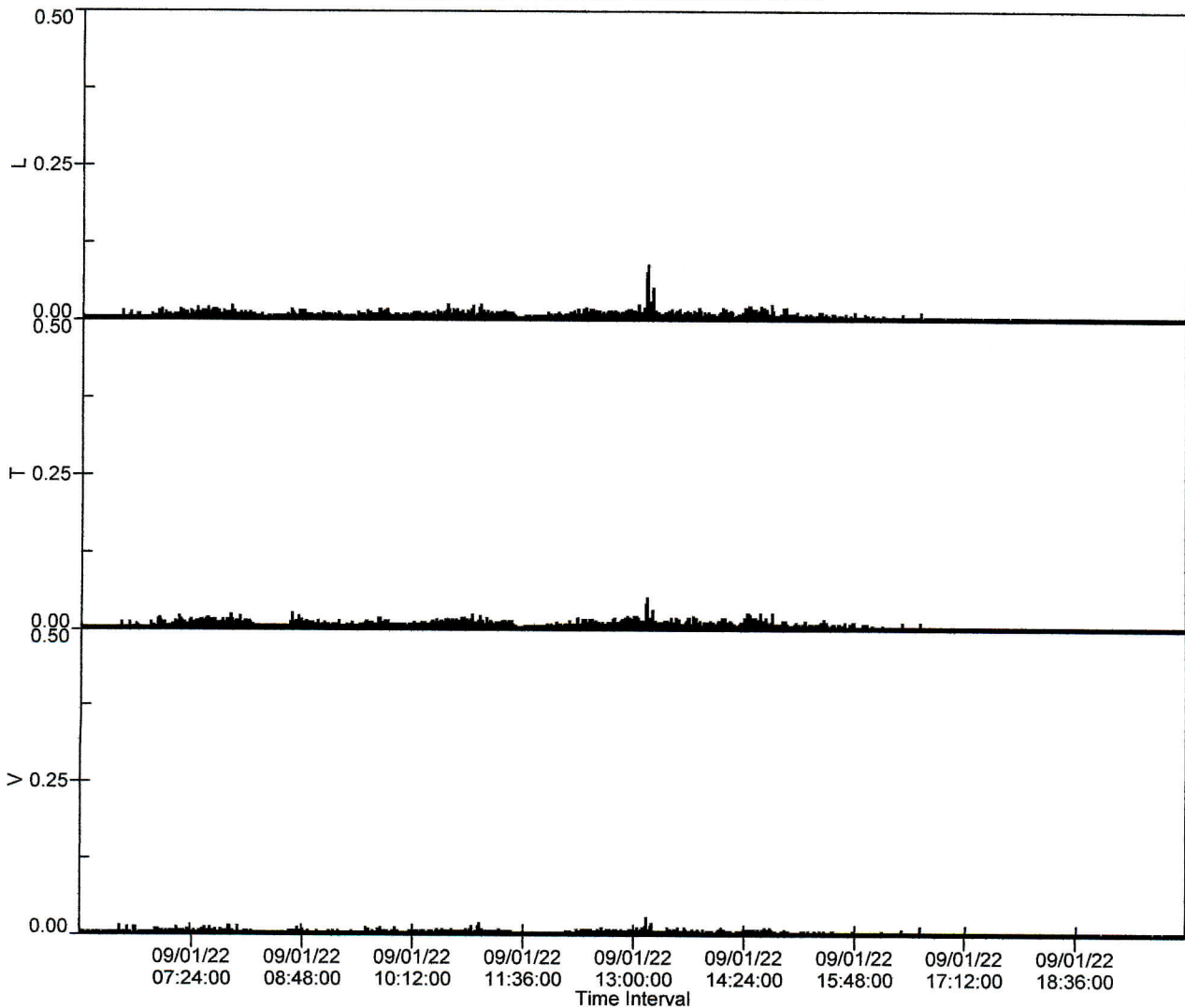
	L	T	V
PPV (in/s)	0.090	0.053	0.030
FREQ (Hz)	16.1	12.2	16.7
Peak Air Pressure: 101 db			
Recording Time: 838 minutes			
Sample Size: 1440			
Interval Size: 60 seconds			

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 100

Record Max PPV: 0.090 in/s Record Max DB: 101 db



SN: 3647 v2.75
Date: 09/02/2022 **Time:** 06:01:00
Event: 101
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.053	0.043	0.020
FREQ (Hz)	15.2	13.2	13.9
Peak Air Pressure:	102 db		

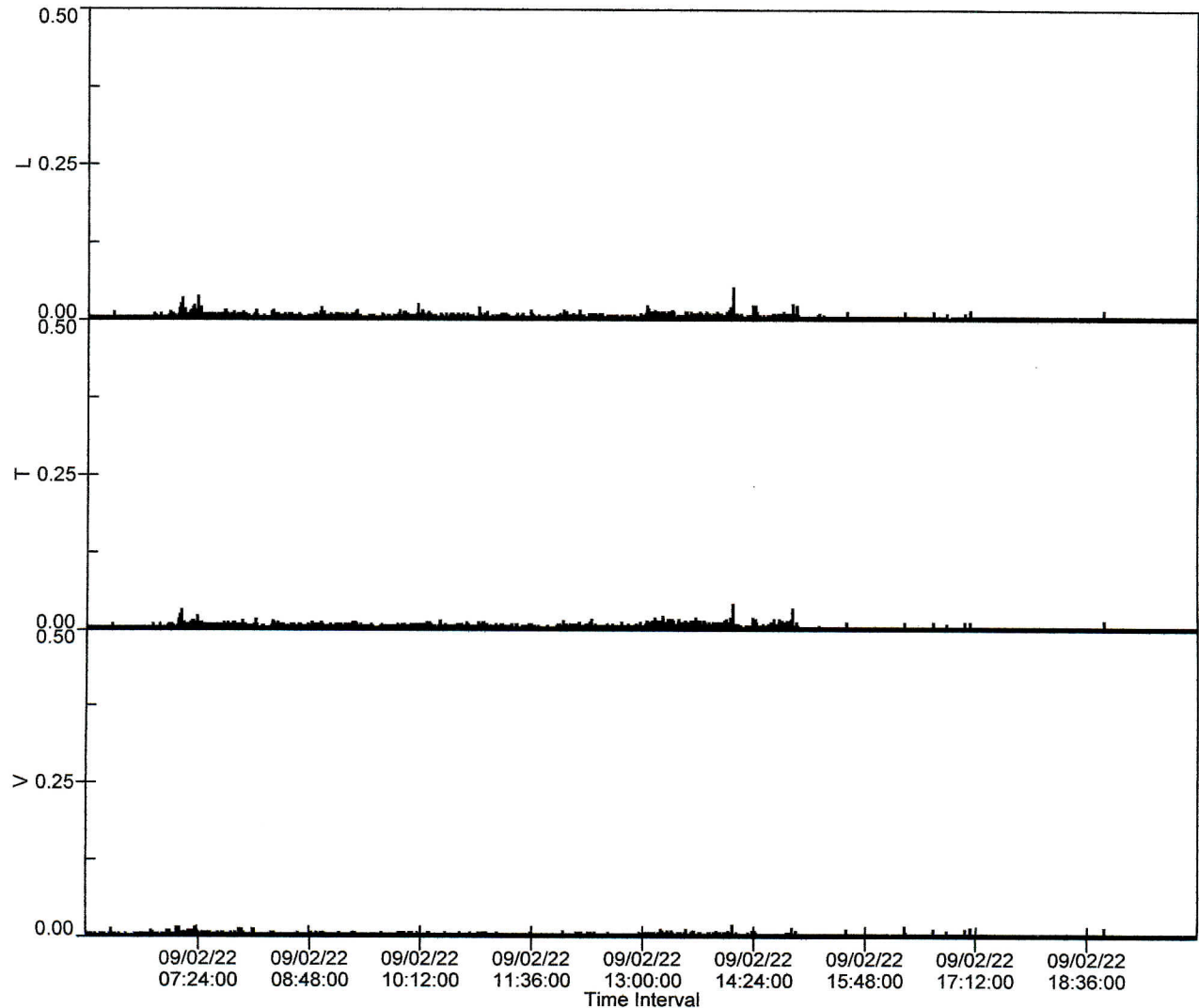
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 101

Record Max PPV: 0.053 in/s Record Max DB: 102 db



SN: 3647 v2.75
Date: 09/03/2022 **Time:** 06:01:00
Event: 102
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.015	0.015	0.018
FREQ (Hz)	250.0	166.7	250.0
Peak Air Pressure:	104 db		

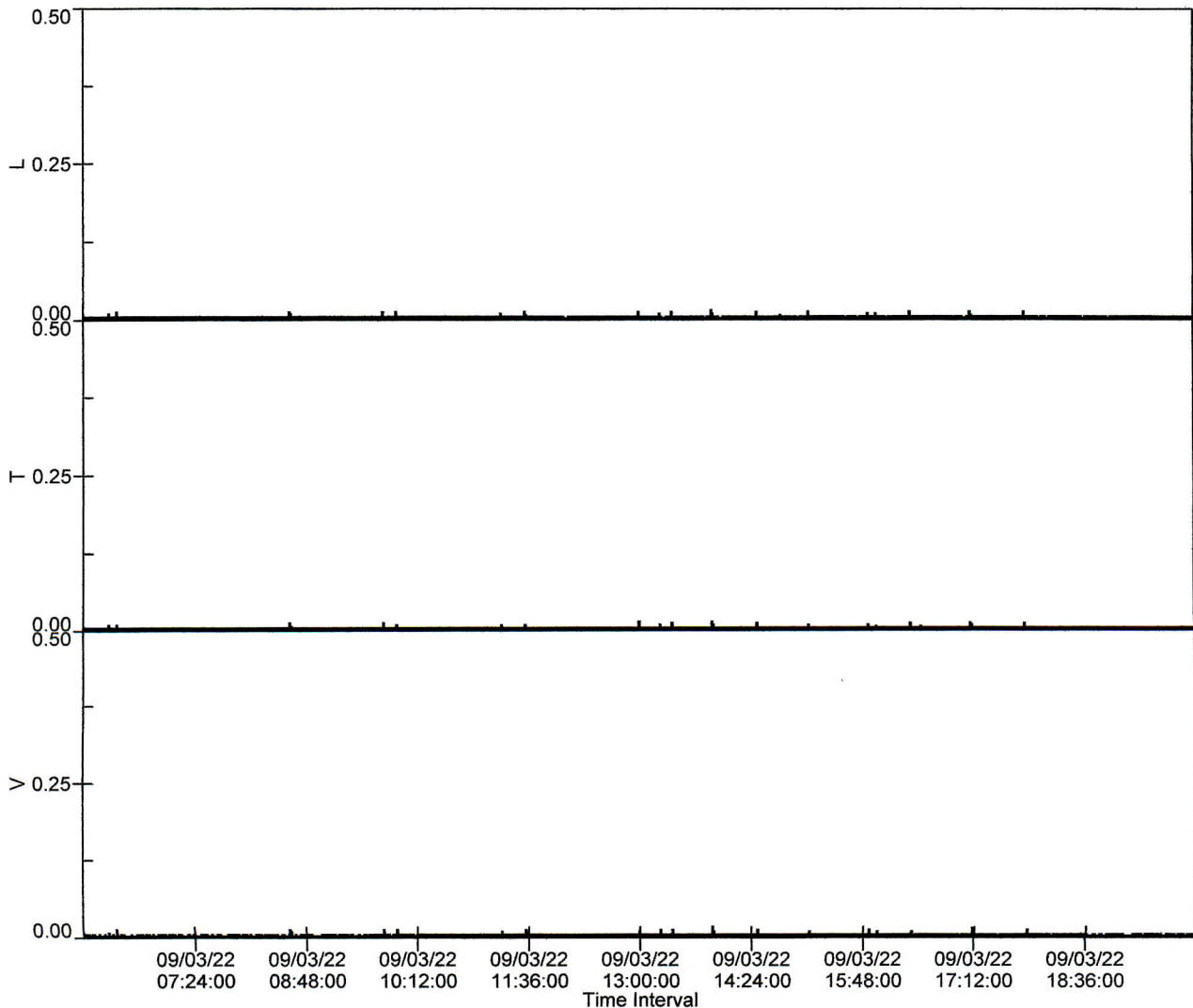
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 102

Record Max PPV: 0.018 in/s Record Max DB: 104 db



SN: 3647 v2.75
Date: 09/04/2022 **Time:** 06:01:00
Event: 103
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

**Continuous Monitor Recording
Summary Data**

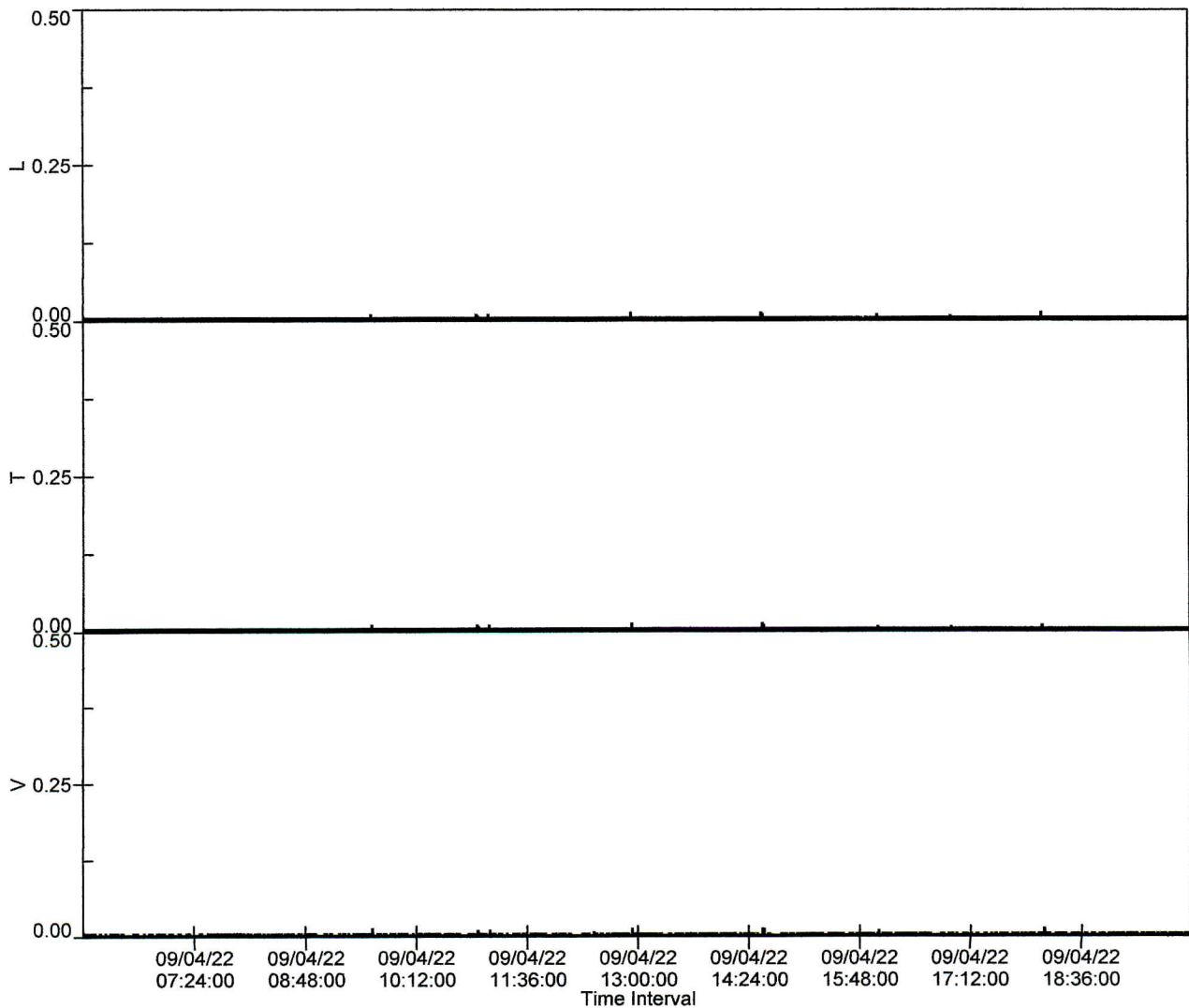
	L	T	V
PPV (in/s)	0.013	0.013	0.013
FREQ (Hz)	166.7	166.7	500.0
Peak Air Pressure:	100 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 103

Record Max PPV: 0.013 in/s Record Max DB: 100 db



SN: 3647 v2.75
Date: 09/06/2022 **Time:** 06:01:00
Event: 105
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.100	0.050	0.033
FREQ (Hz)	17.2	9.4	22.7
Peak Air Pressure:	100 db		

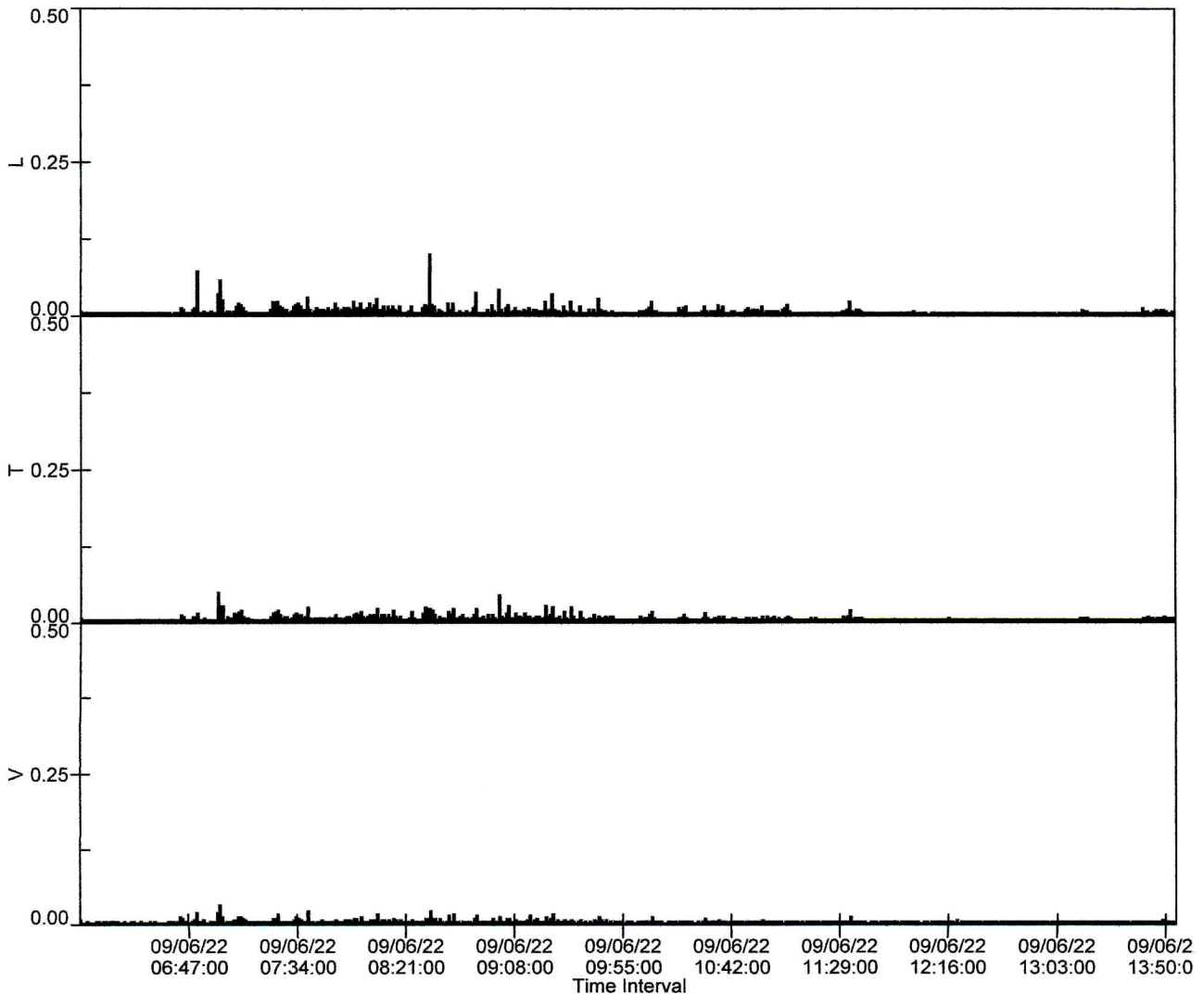
Recording Time: 474 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 105

Record Max PPV: 0.100 in/s Record Max DB: 100 db



SN: 3647 v2.75
Date: 09/07/2022 **Time:** 06:01:00
Event: 107
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

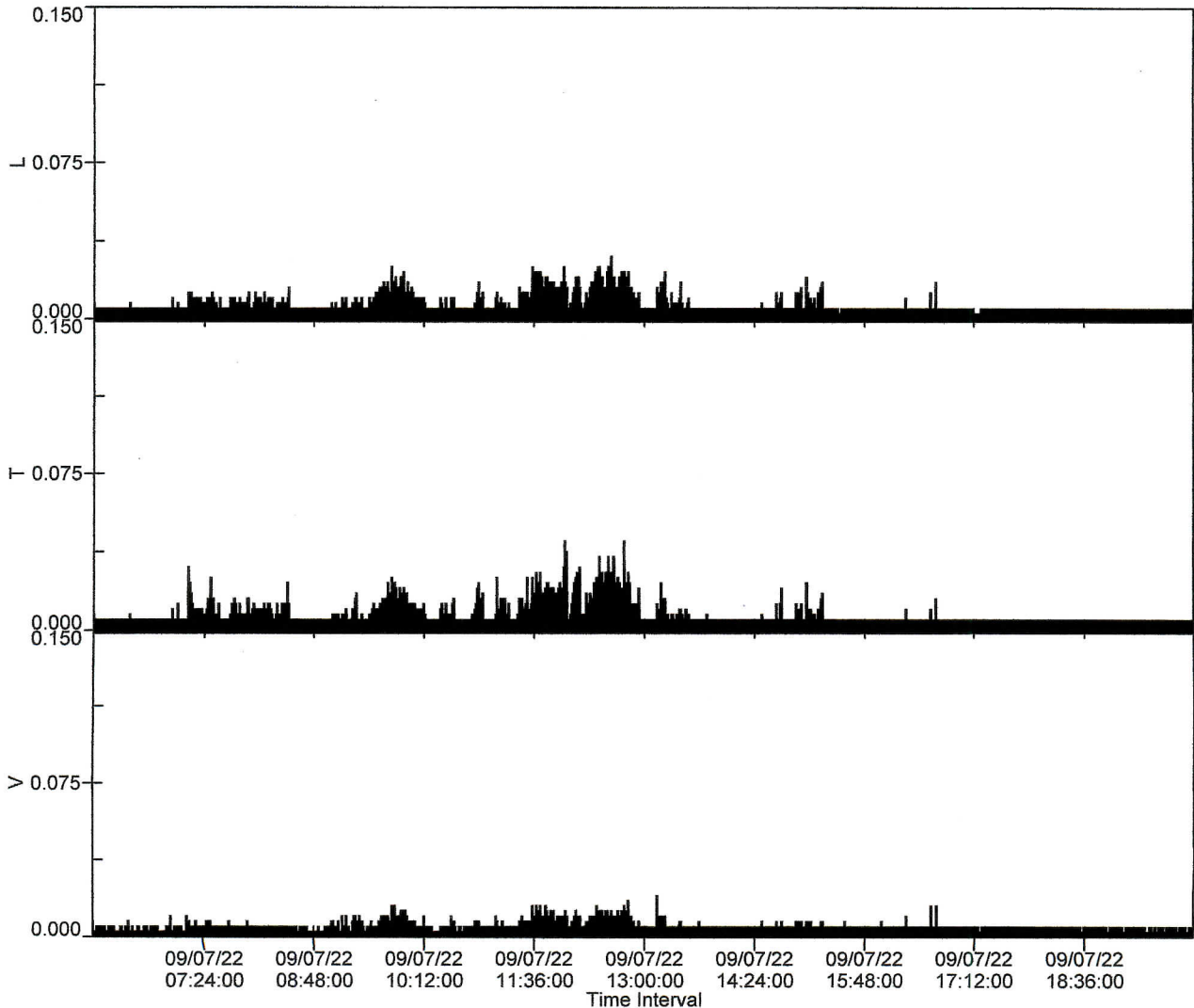
	L	T	V
PPV (in/s)	0.030	0.043	0.020
FREQ (Hz)	17.9	11.1	19.2
Peak Air Pressure:	102 db		
Recording Time:	838 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 107

Record Max PPV: 0.043 in/s Record Max DB: 102 db



SN: 3647 v2.75
Date: 09/08/2022 **Time:** 06:01:00
Event: 108
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.045	0.040	0.018
FREQ (Hz)	14.3	13.2	13.9
Peak Air Pressure: 105 db			

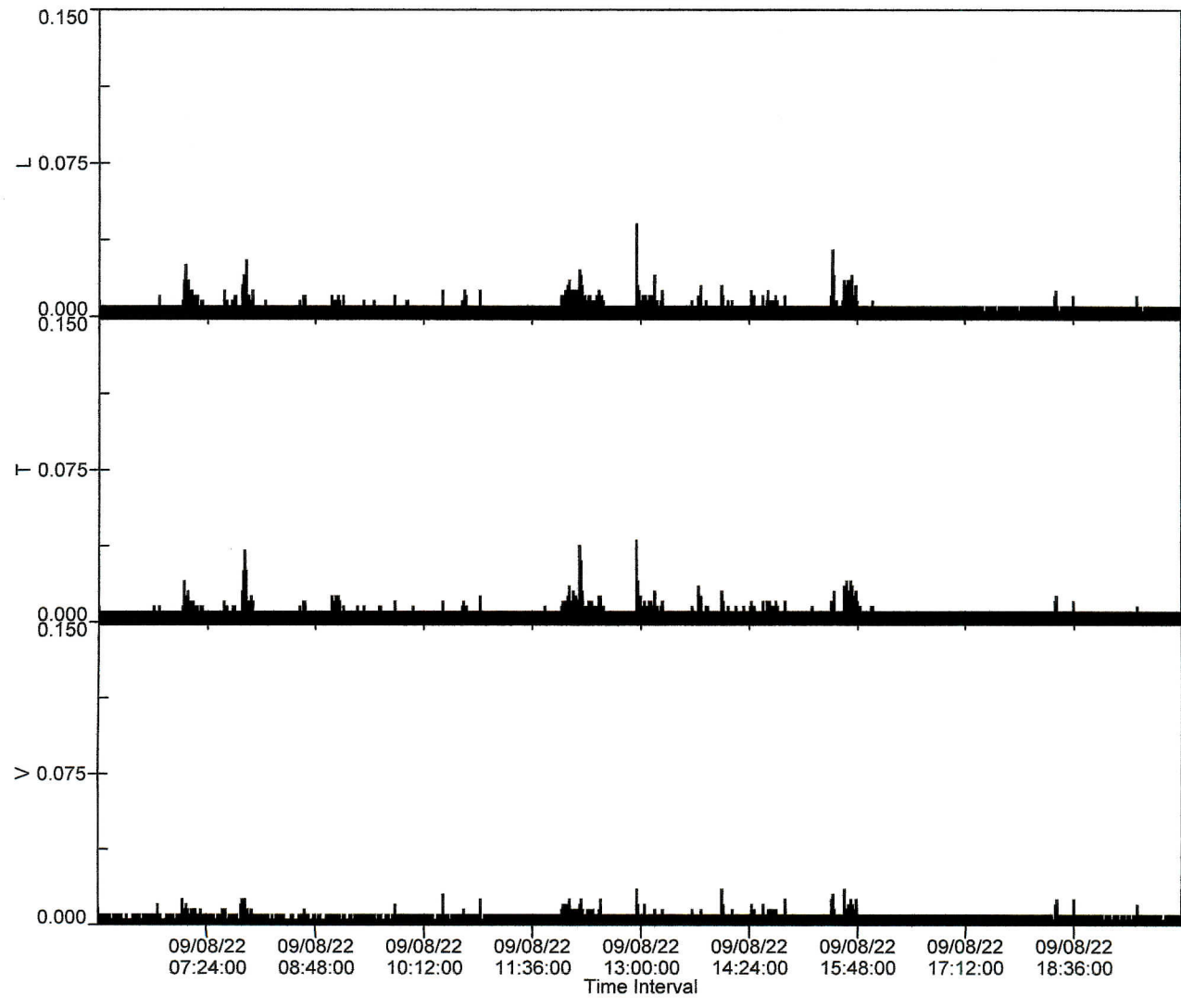
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 108

Record Max PPV: 0.045 in/s Record Max DB: 105 db



SN: 3647 v2.75
Date: 09/09/2022 **Time:** 06:01:00
Event: 109
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

**Continuous Monitor Recording
Summary Data**

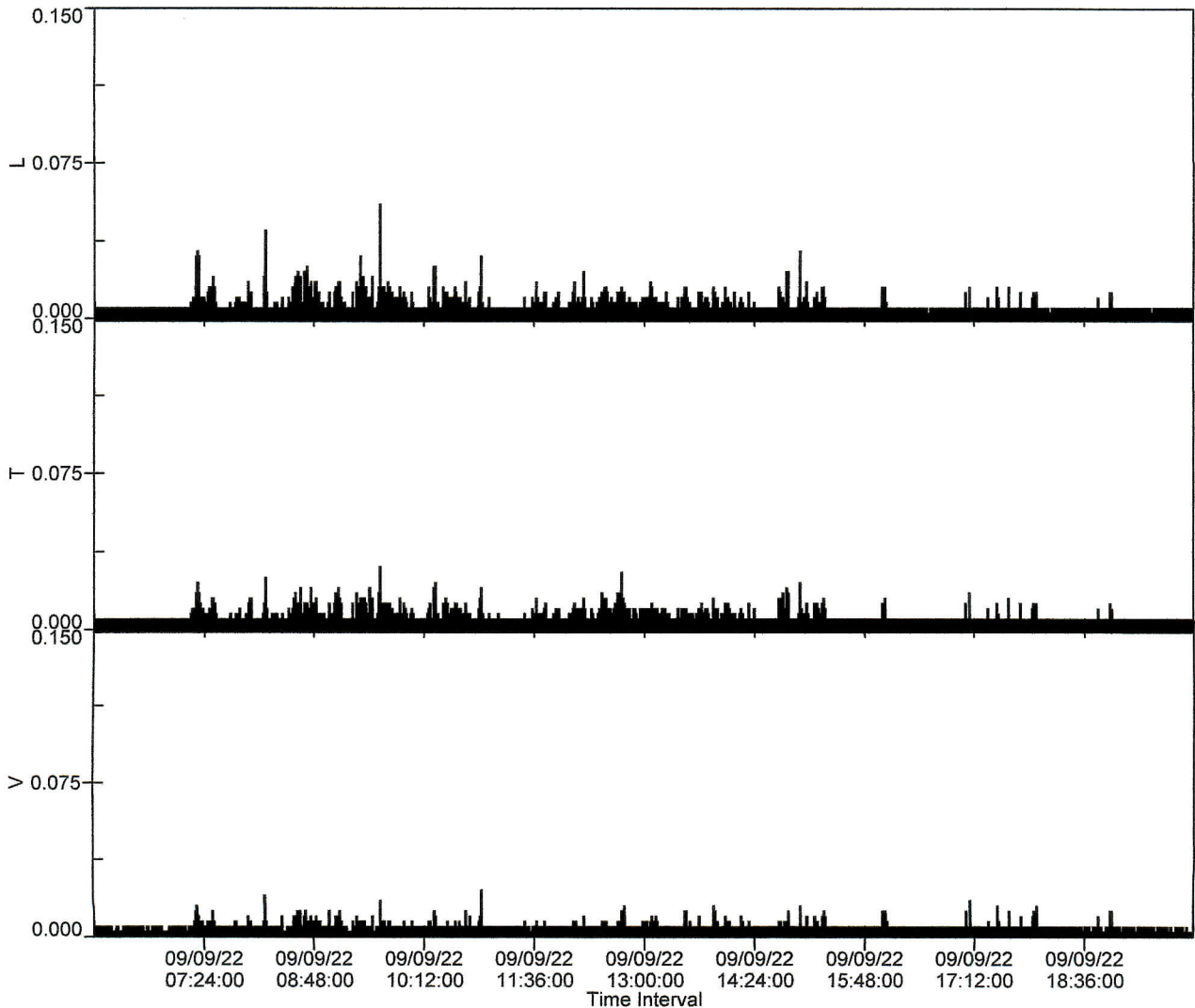
	L	T	V
PPV (in/s)	0.055	0.030	0.023
FREQ (Hz)	16.7	17.2	14.3
Peak Air Pressure: 107 db			
Recording Time: 838 minutes			
Sample Size: 1440			
Interval Size: 60 seconds			

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 109

Record Max PPV: 0.055 in/s Record Max DB: 107 db



SN: 3647 v2.75
Date: 09/10/2022 **Time:** 06:01:00
Event: 110
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.055	0.048	0.033
FREQ (Hz)	17.2	10.6	16.1
Peak Air Pressure: 103 db			

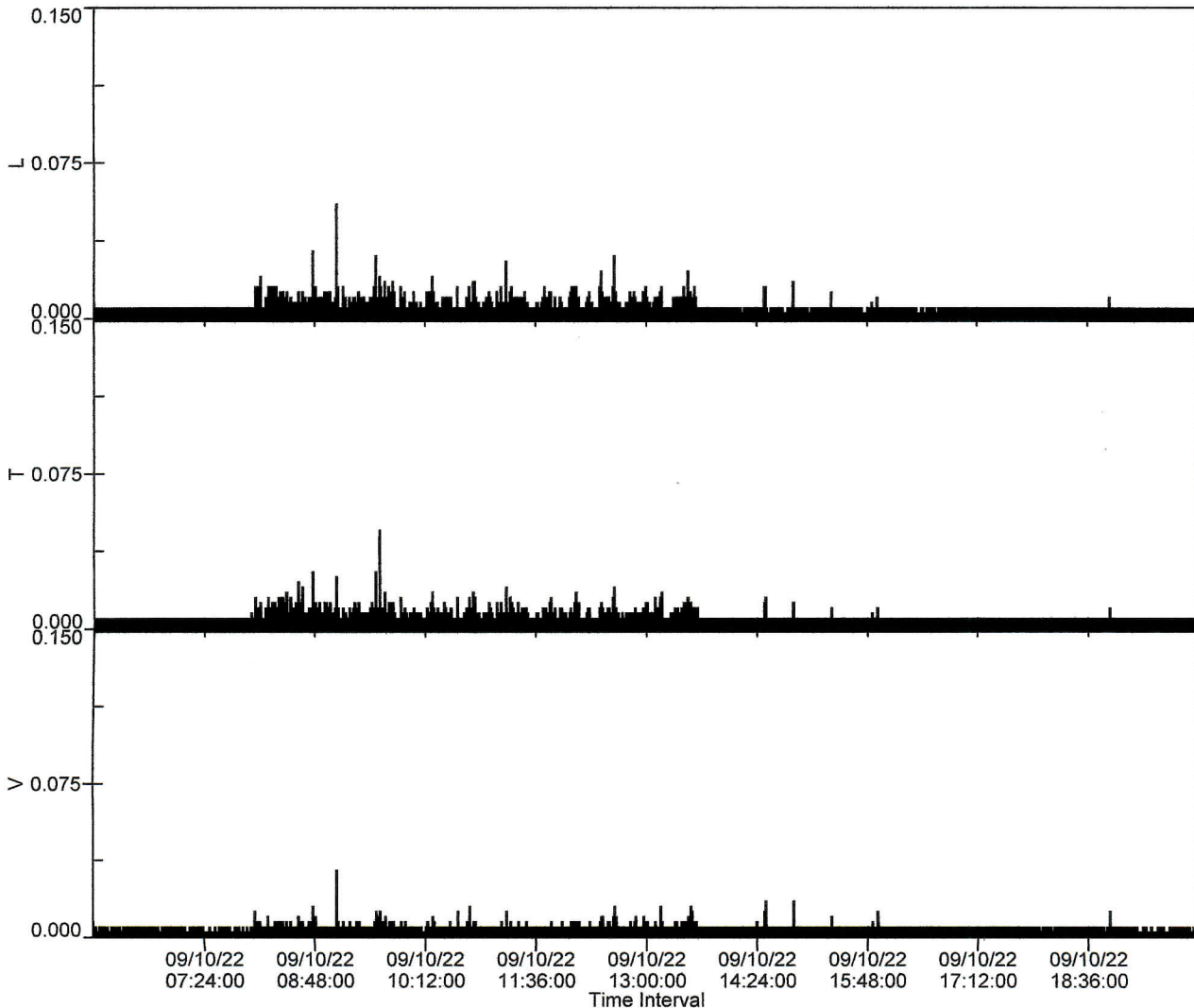
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 110

Record Max PPV: 0.055 in/s Record Max DB: 103 db



SN: 3647 v2.75
Date: 09/11/2022 **Time:** 06:01:00
Event: 111
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.018	0.015	0.018
FREQ (Hz)	250.0	500.0	250.0
Peak Air Pressure:	104 db		

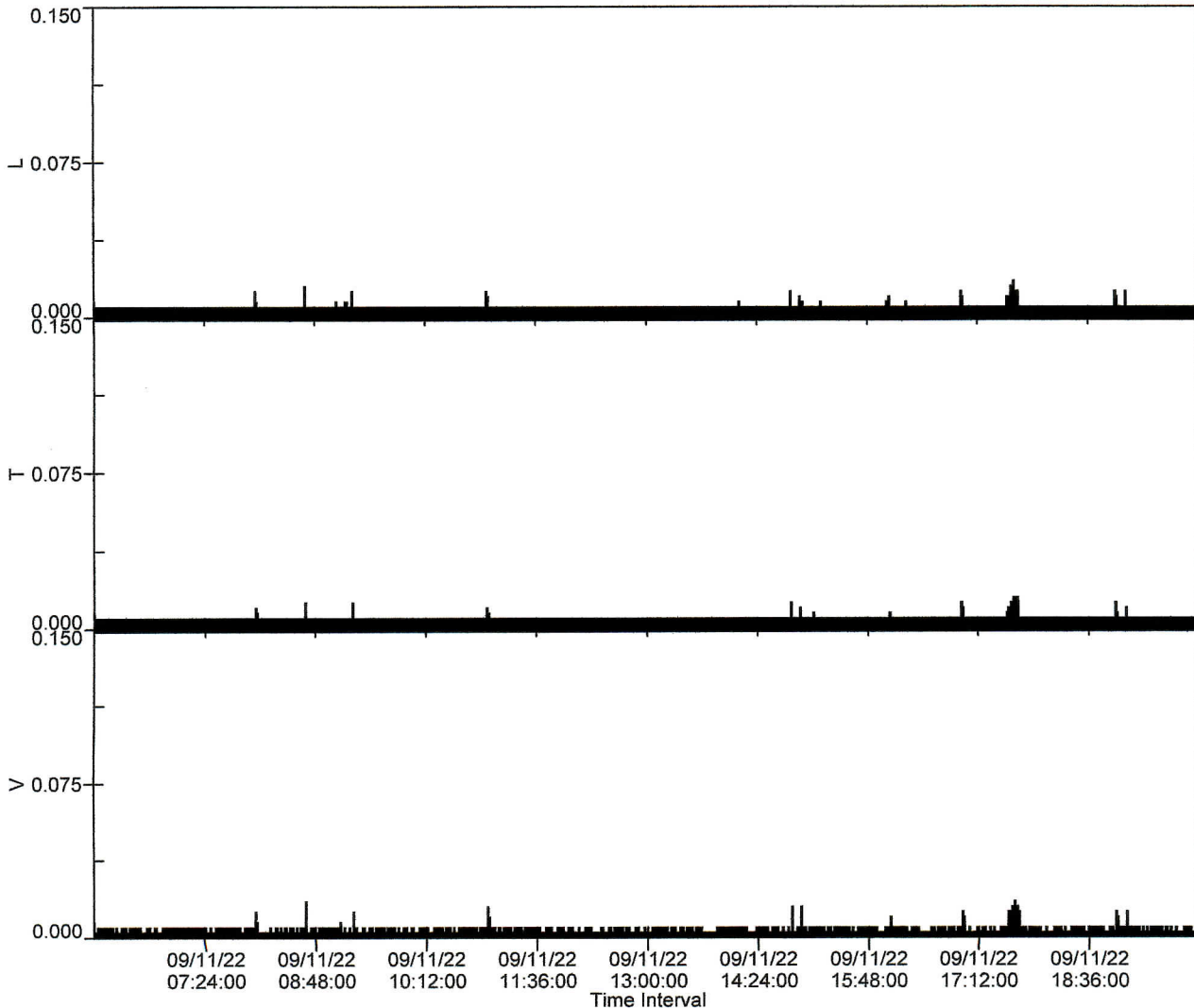
Recording Time: 838 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 111

Record Max PPV: 0.018 in/s Record Max DB: 104 db



SN: 3647 v2.75
Date: 09/12/2022 **Time:** 06:01:00
Event: 112
Client: BERGER
Operation: CONSTRUCTION
Location: THORNWOOD PARK
Distance: 25.
Operator: CTI INC
Comment: E SIDE COLGATE ST

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.020	0.015	0.018
FREQ (Hz)	11.4	12.5	125.0
Peak Air Pressure:	98 db		

Recording Time: 253 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/22/2022
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3647 Event: 112

Record Max PPV: 0.020 in/s Record Max DB: 98 db

