

NSP Phase 2 Hibbard Park Project
Wilmette, Illinois

**VIBRATION
MONITORING
REPORT-10**

Mike Warning
V3 Companies
7325 Janes Avenue
Woodridge, IL 60517

June 21, 2021

Cti



4262 Old Grand Ave
Suite 102
Chicago, IL 60031

June 21, 2021

Mike Warning
V3 Companies
7325 Janes Avenue
Woodridge, IL 60517

RE: **Report: 10** - *Ground Vibration Monitoring for the Wilmette NSP Phase 2 Hibbard Park Project located in Wilmette, Illinois.*

Mr. Warning,

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 **June 7, 2021 through June 21, 2021**.

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.

June 21, 2021	491 Skokie Boulevard	Unit #3817	V	0.068 (in/s)
June 10, 2021	3005 Wilmette Avenue	Unit #3559	V	0.410 (in/s)
June 7, 2021	3000 Hill Street	Unit #3734	T	0.355 (in/s)


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

Sincerely,

Daniel W. McCarthy
Senior Instrumentation Engineer

Hibbard Park Seismograph Location Diagram



 Seismograph Location

SN: 3817 v3.22
Date: 06/07/2021 Time: 08:21:00
Event: 120
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.023	0.013	0.033
FREQ (Hz)	71.4	250.0	100.0
Peak Air Pressure:	79 db		

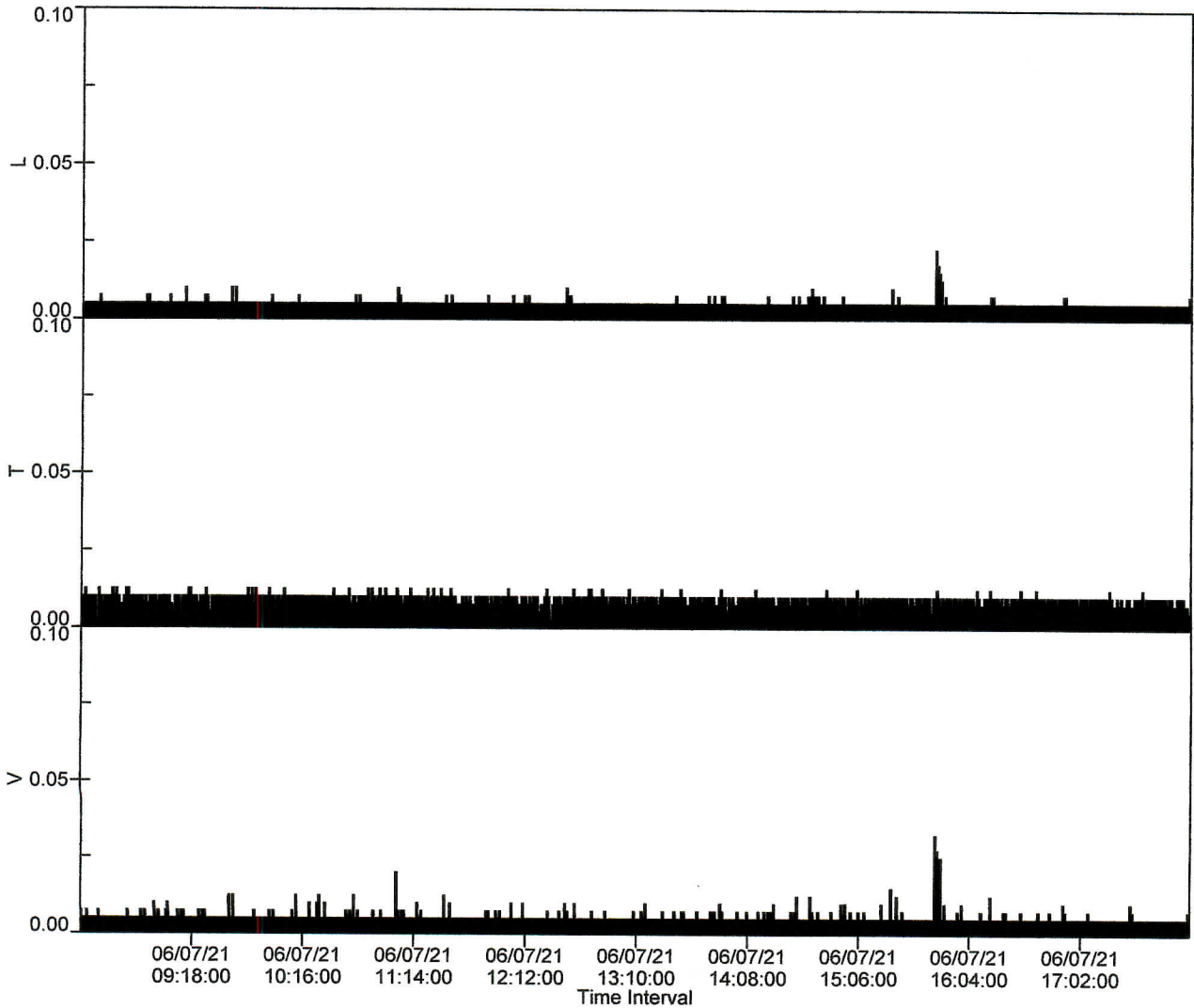
Recording Time: 578 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
359 Northgate Drive
Warrendale, PA 15086 U.S.A.
TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 120

Record Max PPV: 0.033 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/08/2021 **Time:** 06:01:00
Event: 121
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.010	0.013	0.023
FREQ (Hz)	16.7	166.7	15.2
Peak Air Pressure:	79 db		

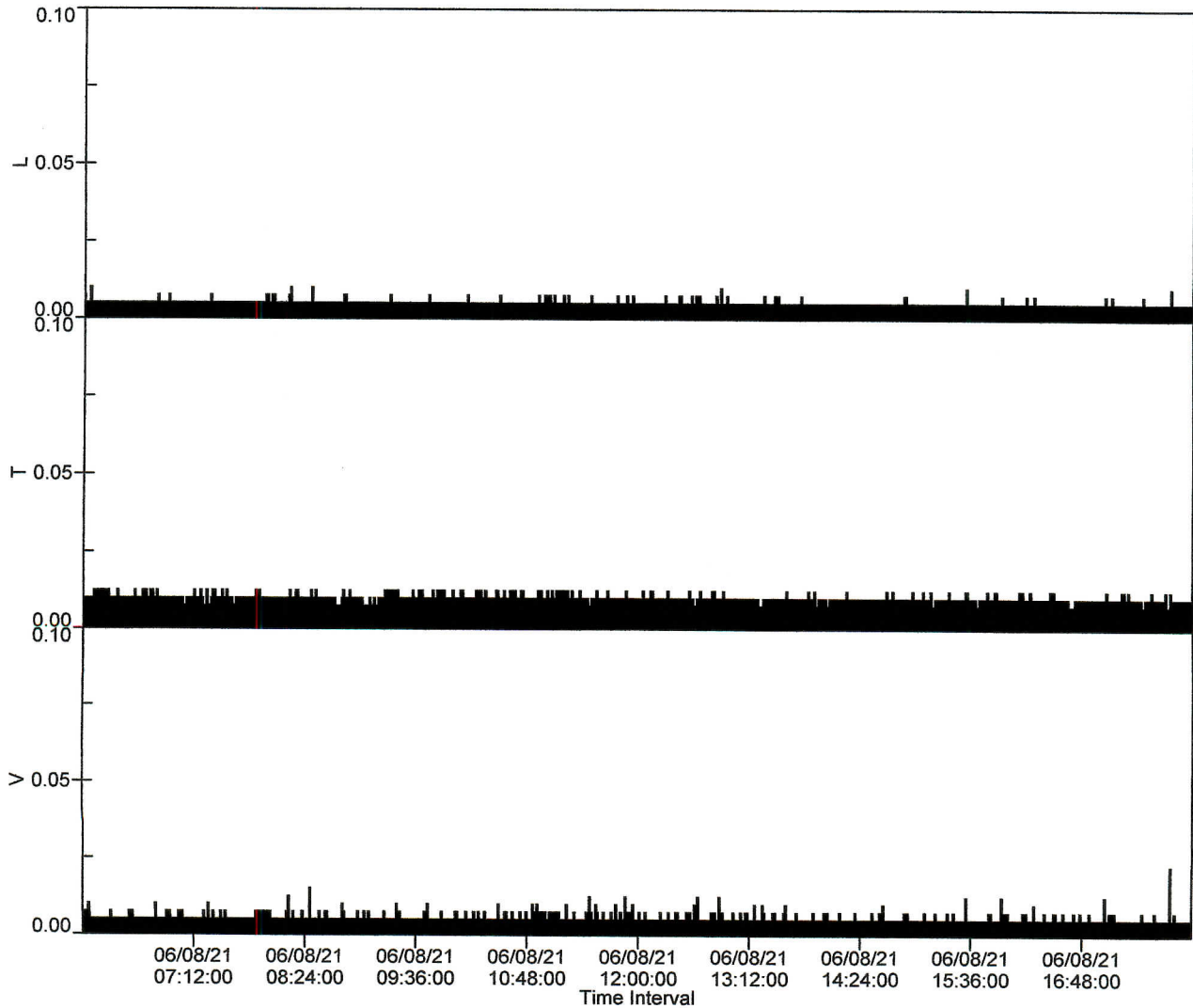
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 121

Record Max PPV: 0.023 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/09/2021 **Time:** 06:01:00
Event: 122
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.023	0.023	0.023
FREQ (Hz)	13.9	9.8	11.9
Peak Air Pressure:	79 db		

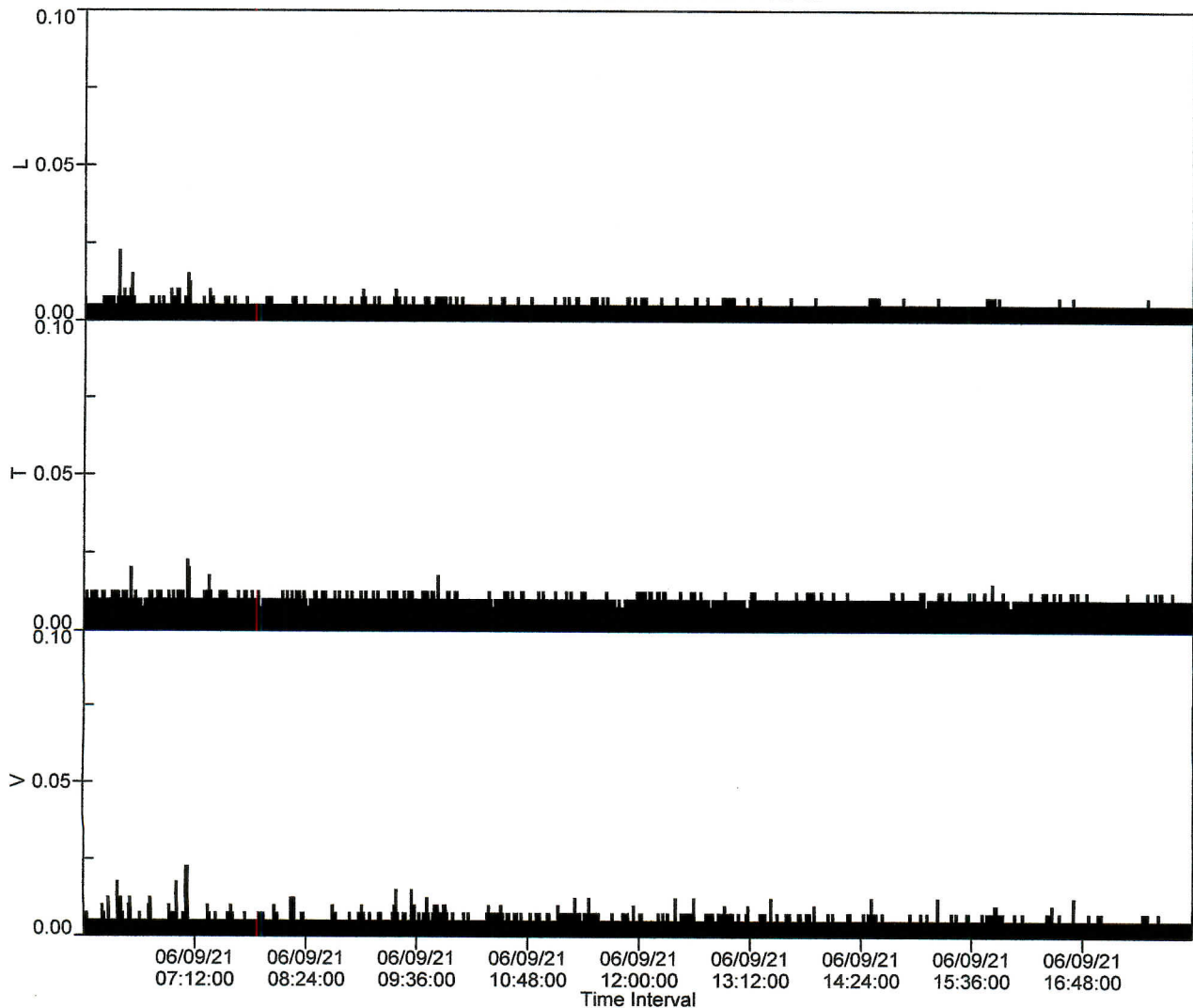
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 122

Record Max PPV: 0.023 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/10/2021 **Time:** 06:01:00
Event: 123
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.020	0.015	0.040
FREQ (Hz)	13.2	11.1	11.4
Peak Air Pressure:	79 db		

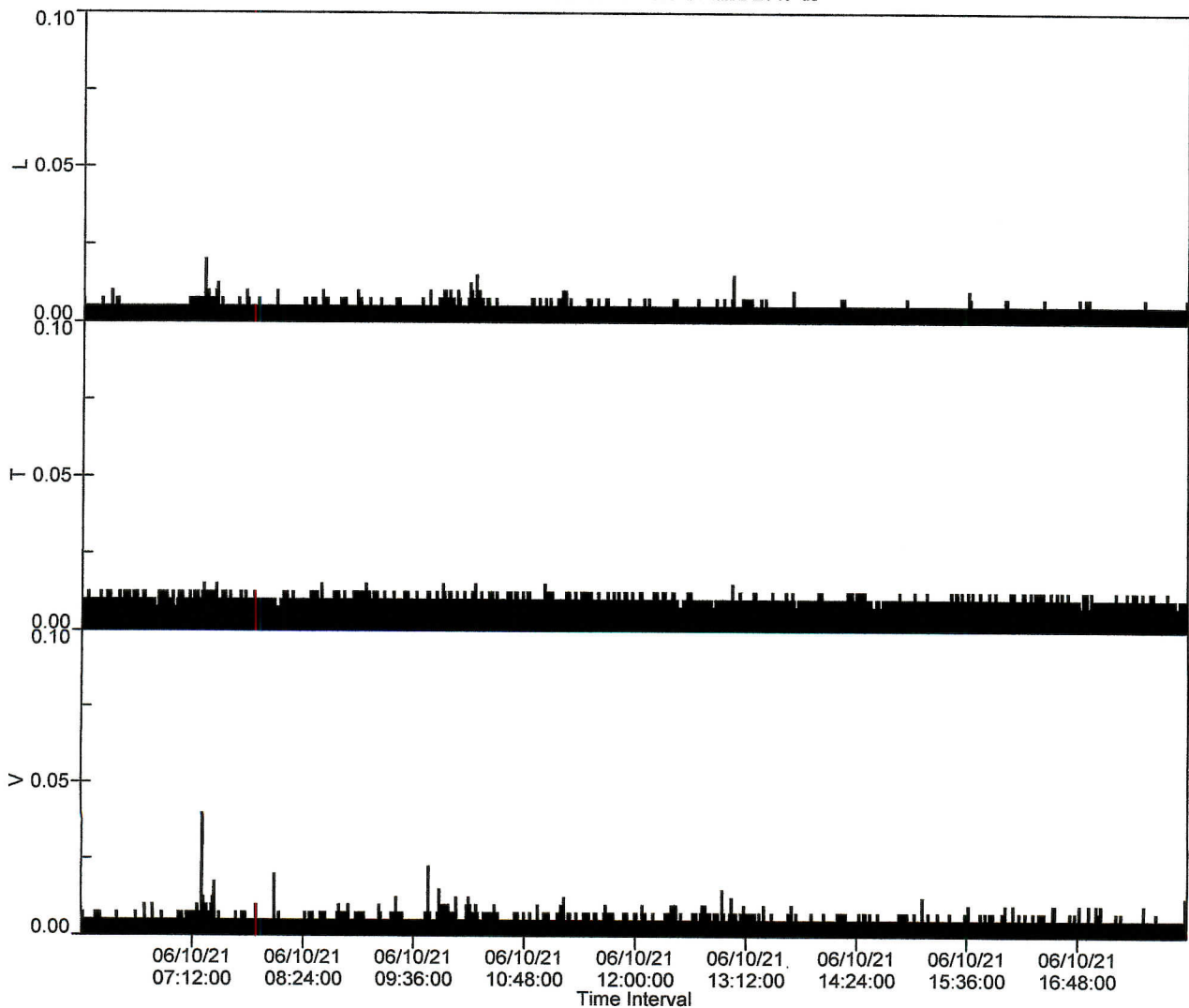
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 123

Record Max PPV: 0.040 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/11/2021 **Time:** 06:01:00
Event: 124
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.010	0.015	0.015
FREQ (Hz)	13.5	500.0	16.7
Peak Air Pressure: 78 db			

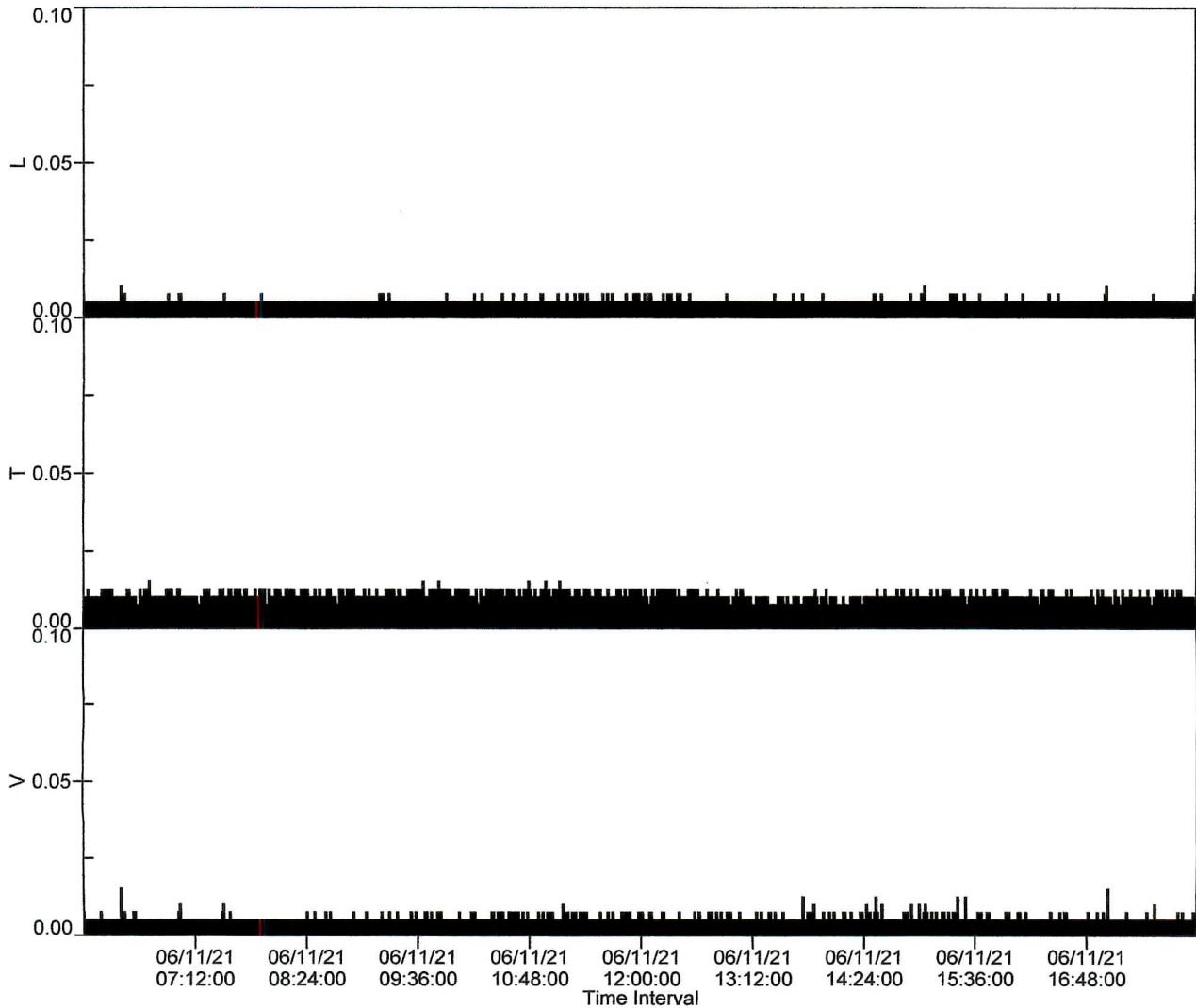
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 124

Record Max PPV: 0.015 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 06/12/2021 **Time:** 06:01:00
Event: 125
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.010	0.015	0.013
FREQ (Hz)	29.4	166.7	35.7
Peak Air Pressure:	79 db		

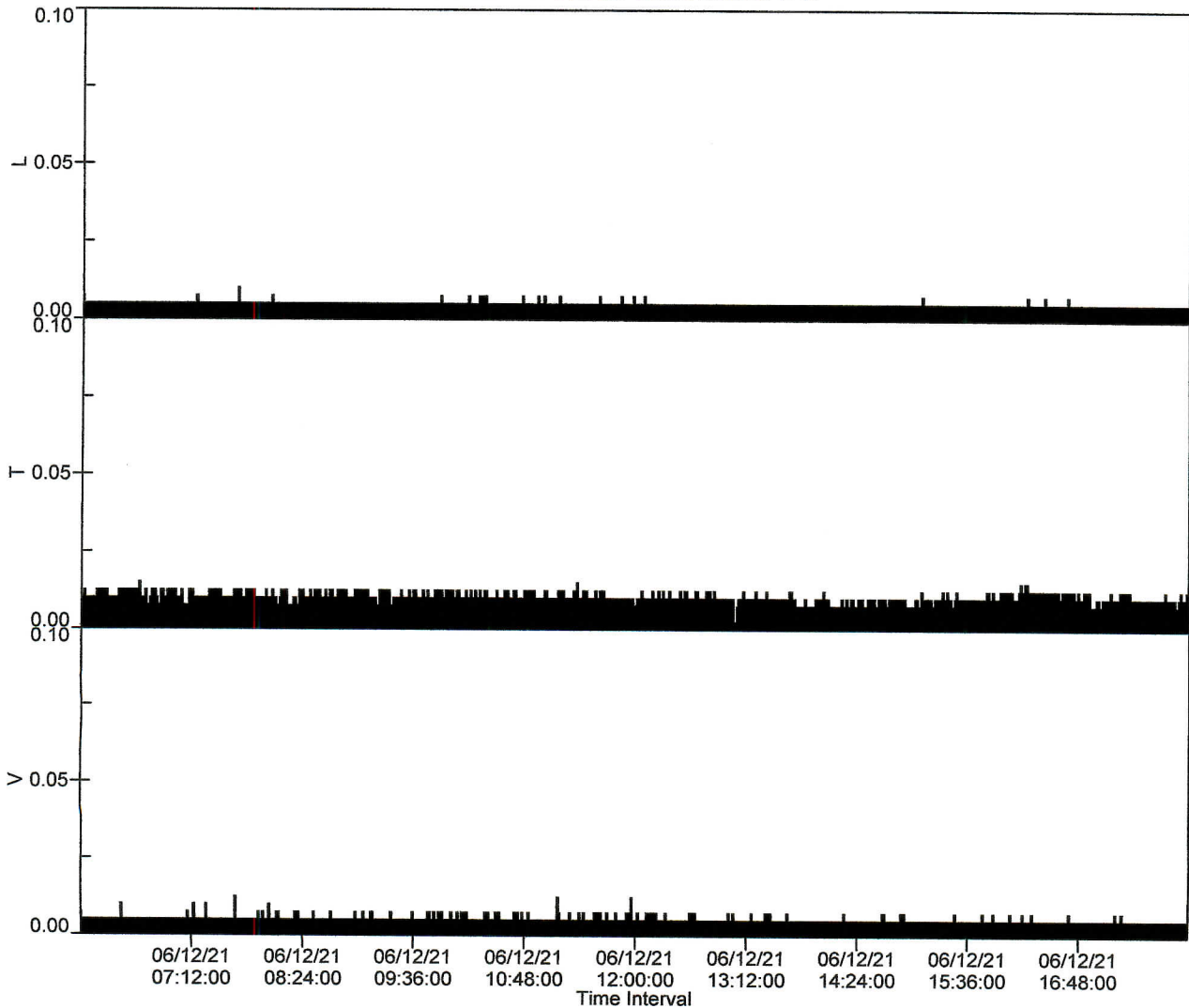
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 125

Record Max PPV: 0.015 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/13/2021 **Time:** 06:01:00
Event: 126
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.008	0.015	0.008
FREQ (Hz)	17.2	250.0	.3
Peak Air Pressure:	79 db		

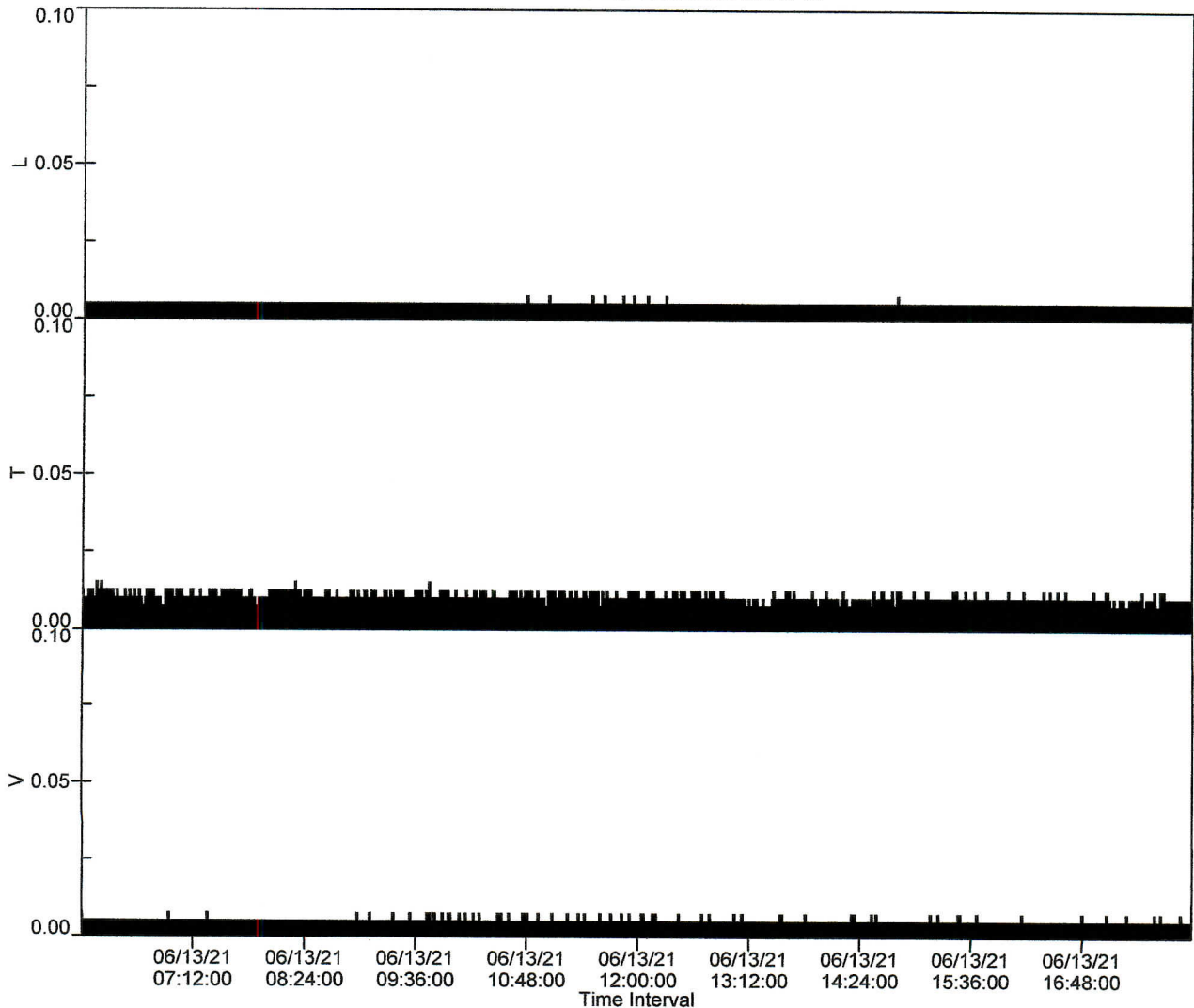
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 126

Record Max PPV: 0.015 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/14/2021 **Time:** 06:01:00
Event: 127
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.038	0.013	0.050
FREQ (Hz)	55.6	166.7	50.0
Peak Air Pressure:	79 db		

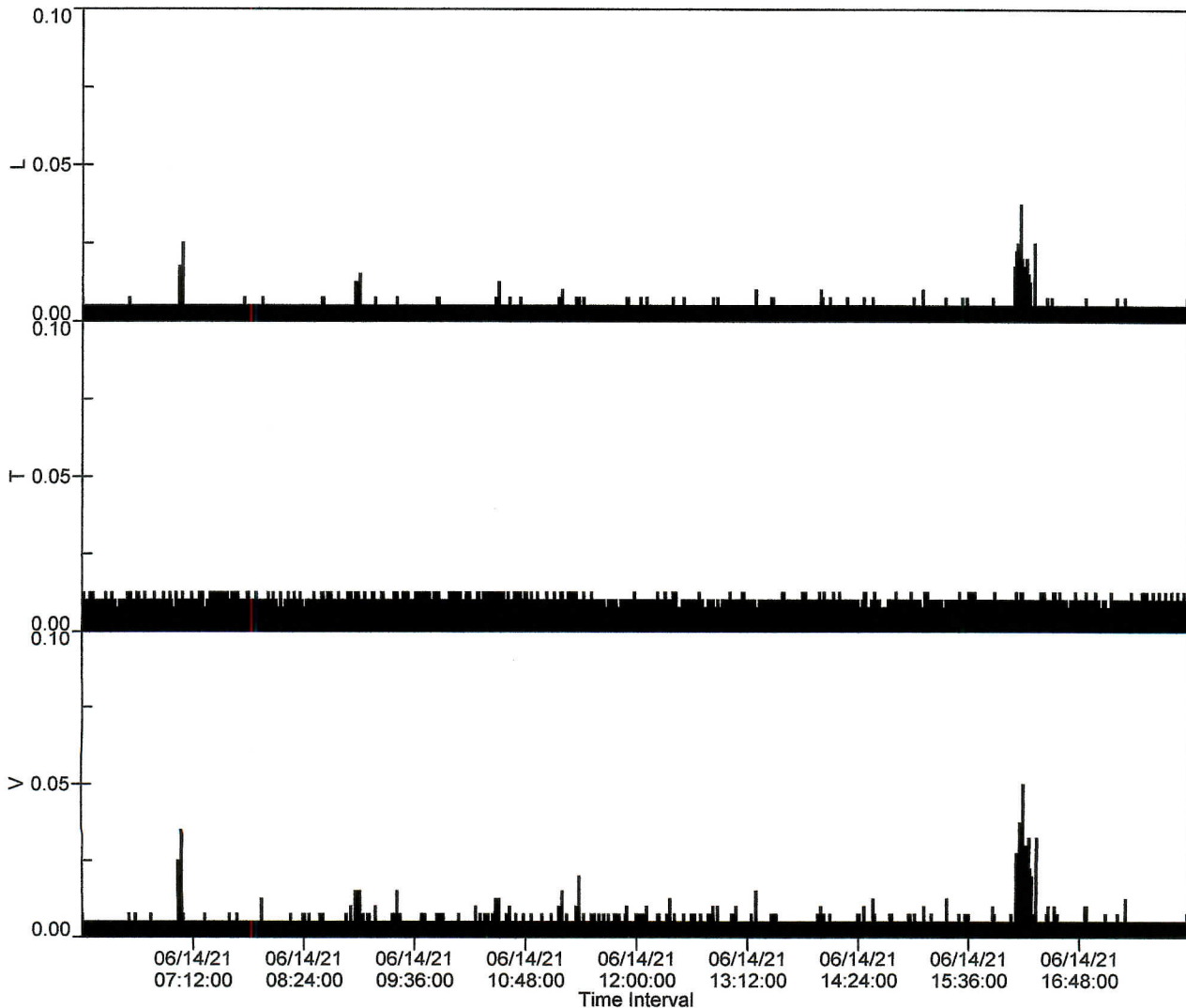
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 127

Record Max PPV: 0.050 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/15/2021 **Time:** 06:01:00
Event: 128
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.035	0.015	0.043
FREQ (Hz)	71.4	14.3	83.3
Peak Air Pressure:	79 db		

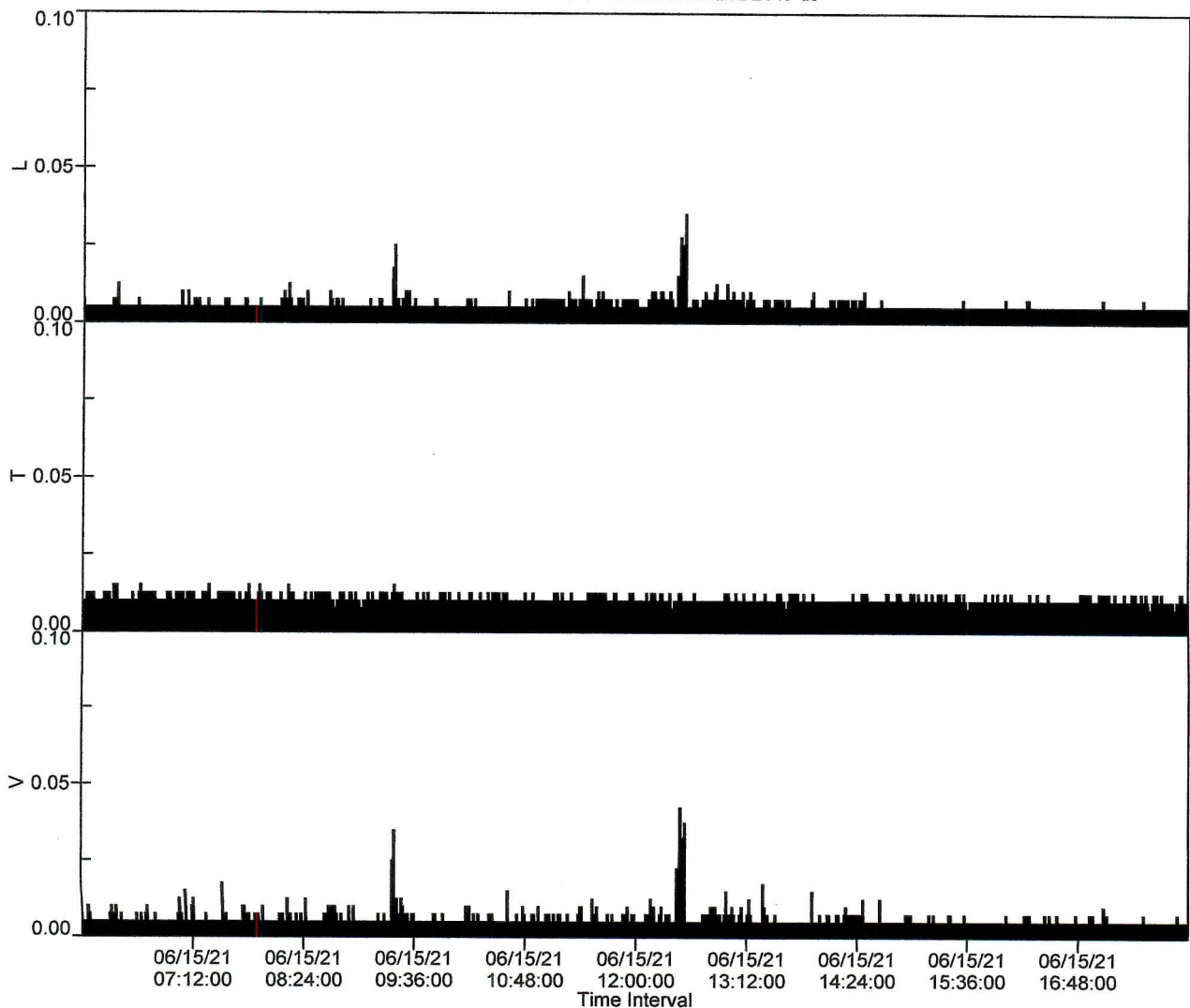
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 128

Record Max PPV: 0.043 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/16/2021 **Time:** 06:01:00
Event: 129
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.025	0.025	0.033
FREQ (Hz)	100.0	83.3	62.5
Peak Air Pressure:	79 db		

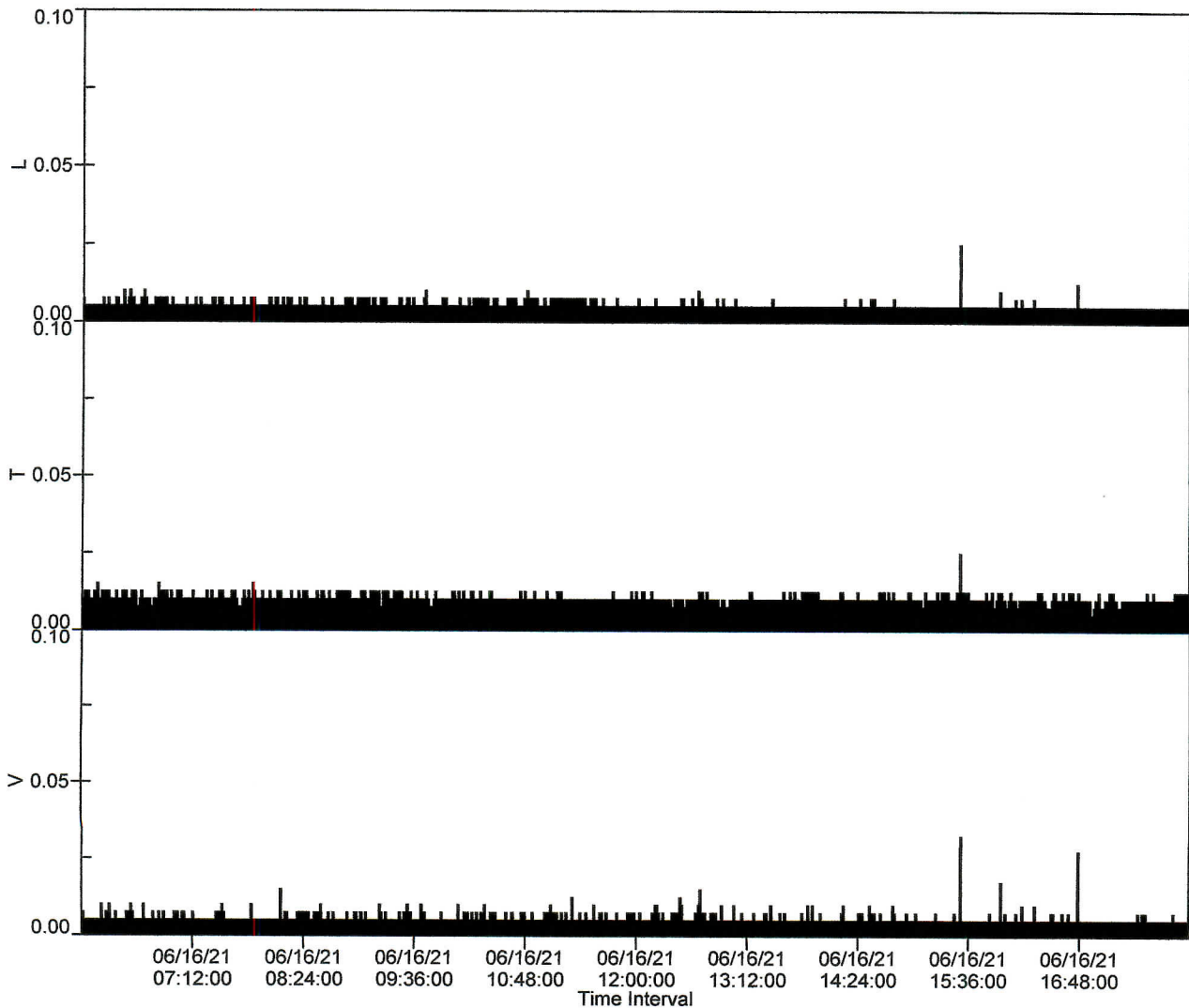
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 129

Record Max PPV: 0.033 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/17/2021 **Time:** 06:01:00
Event: 130
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.020	0.015	0.015
FREQ (Hz)	14.7	250.0	17.2
Peak Air Pressure:	79 db		

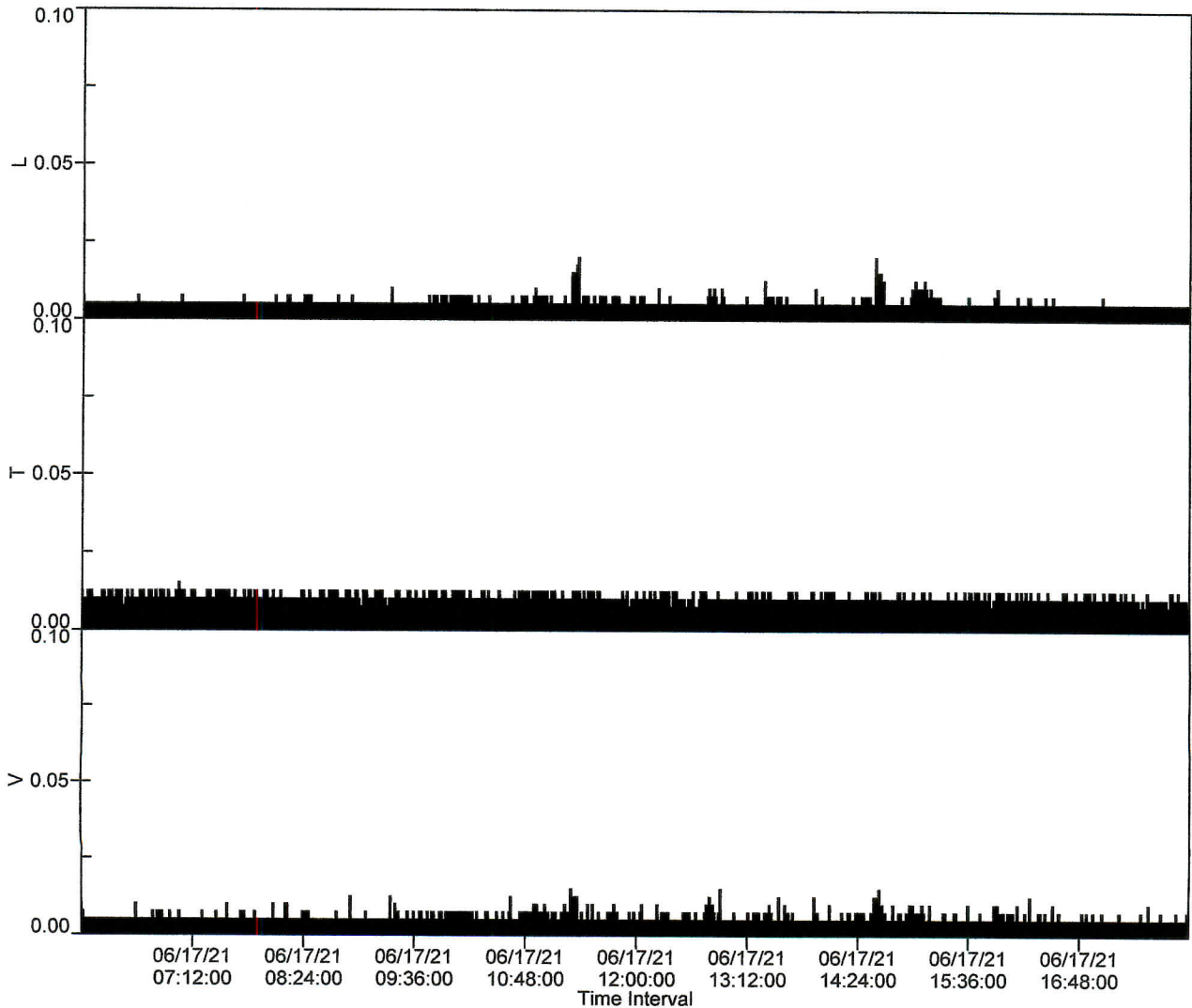
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 130

Record Max PPV: 0.020 in/s Record Max DB: 79 db



SN: 3817 v3.22
Date: 06/18/2021 **Time:** 06:01:00
Event: 131
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.040	0.030	0.028
FREQ (Hz)	250.0	125.0	250.0
Peak Air Pressure:	108 db		

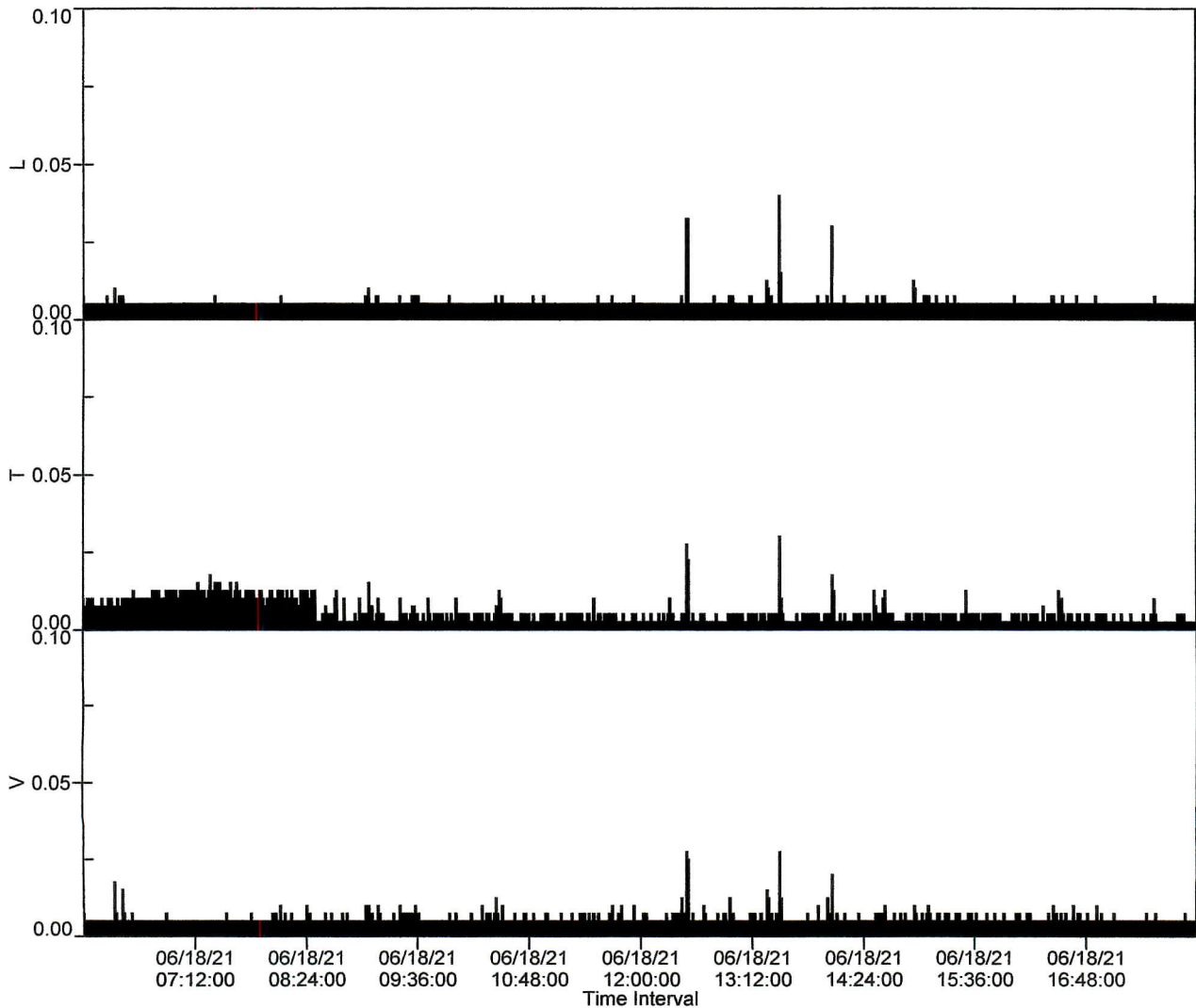
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 131

Record Max PPV: 0.040 in/s Record Max DB: 108 db



SN: 3817 v3.22
Date: 06/19/2021 **Time:** 06:01:00
Event: 132
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.048	0.030	0.060
FREQ (Hz)	62.5	83.3	83.3
Peak Air Pressure:	108 db		

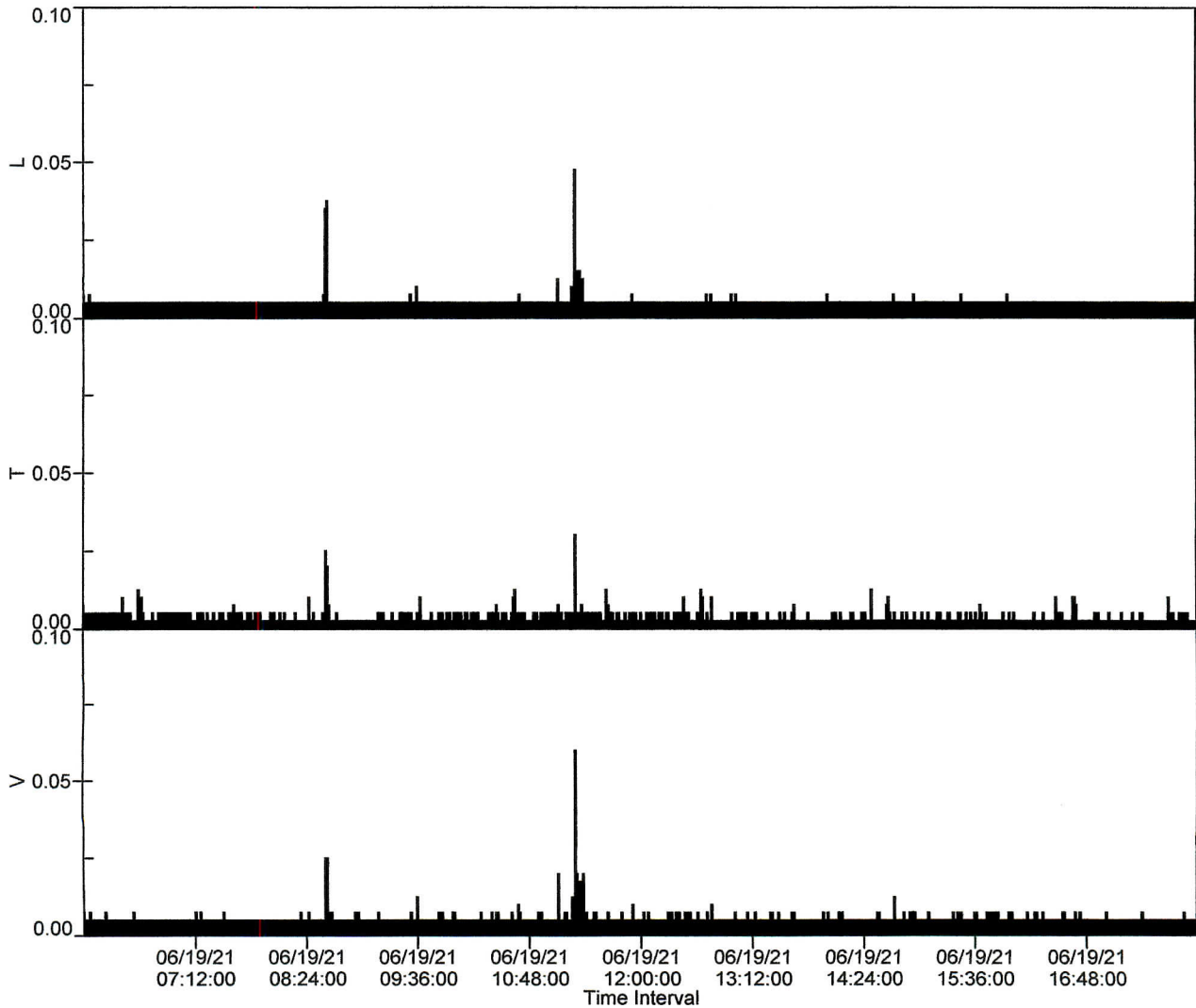
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 132

Record Max PPV: 0.060 in/s Record Max DB: 108 db



SN: 3817 v3.22
Date: 06/20/2021 **Time:** 06:01:00
Event: 133
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.053	0.038	0.035
FREQ (Hz)	62.5	250.0	250.0
Peak Air Pressure:	111 db		

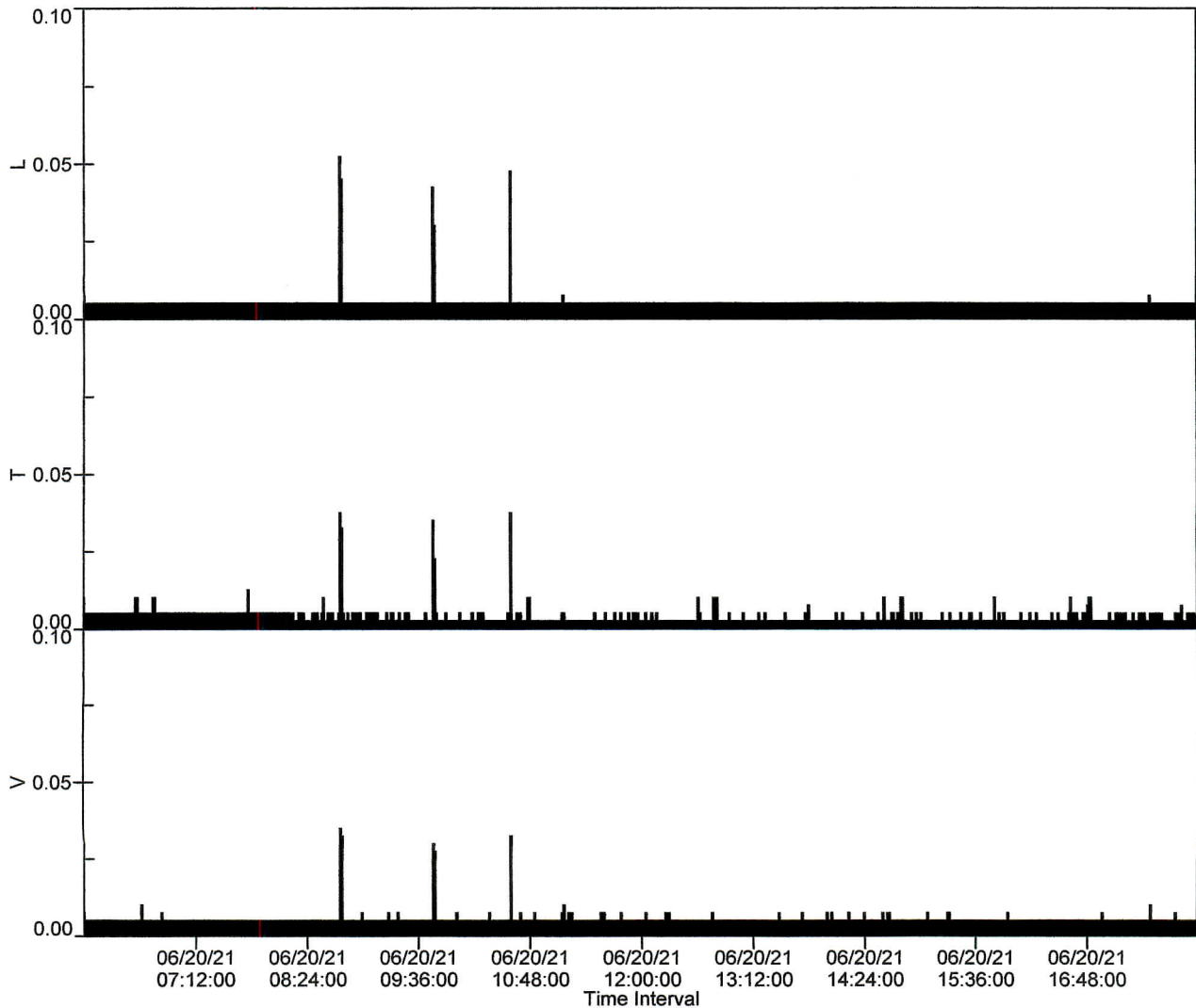
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 133

Record Max PPV: 0.053 in/s Record Max DB: 111 db



SN: 3817 v3.22
Date: 06/21/2021 **Time:** 06:01:00
Event: 134
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.035	0.053	0.068
FREQ (Hz)	35.7	50.0	35.7
Peak Air Pressure:	107 db		

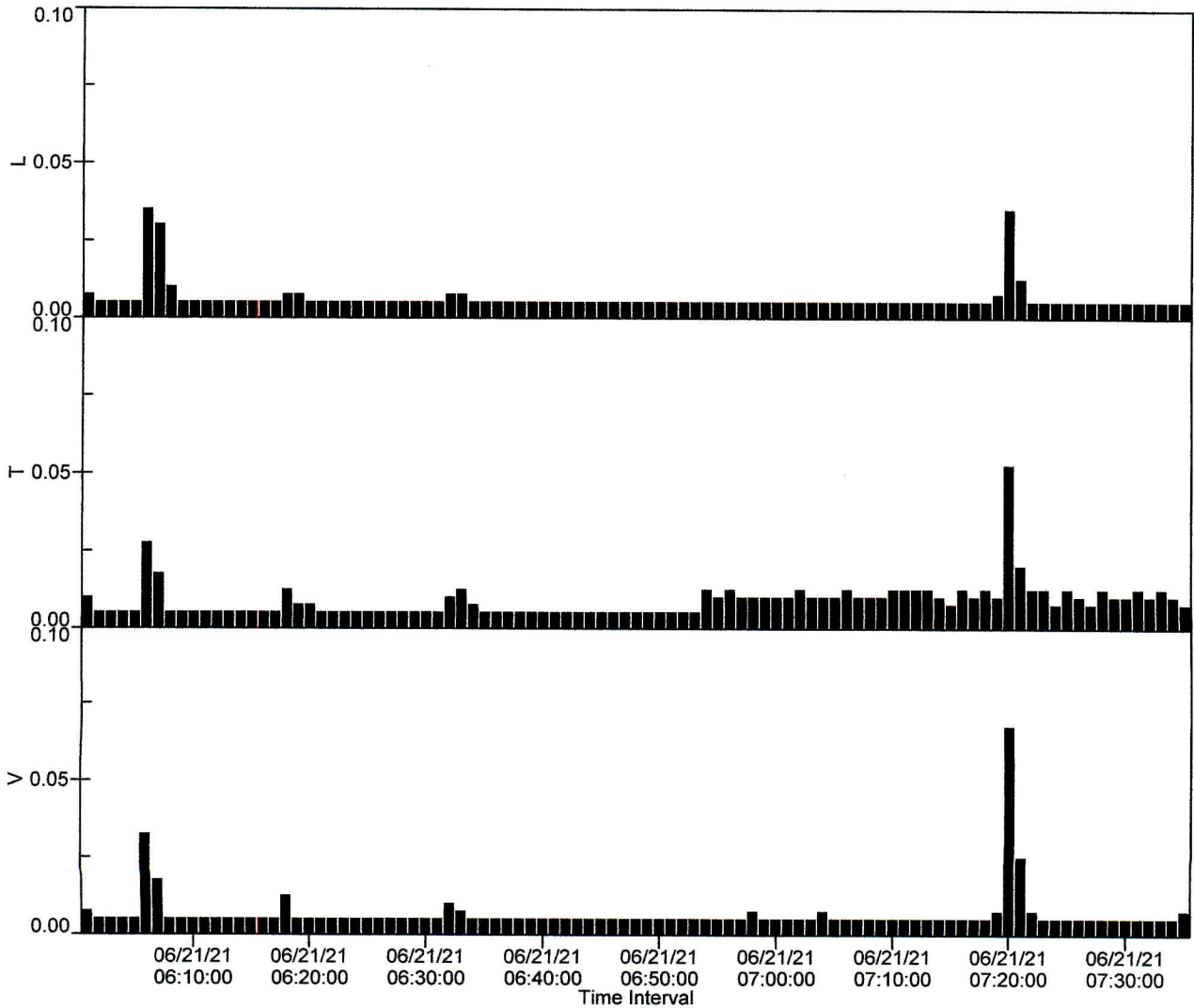
Recording Time: 95 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3817 Event: 134

Record Max PPV: 0.068 in/s Record Max DB: 107 db



SN: 3559 v2.75
Date: 06/08/2021 **Time:** 06:01:00
Event: 122
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.060	0.048	0.035
FREQ (Hz)	45.5	31.3	33.3
Peak Air Pressure:	76 db		

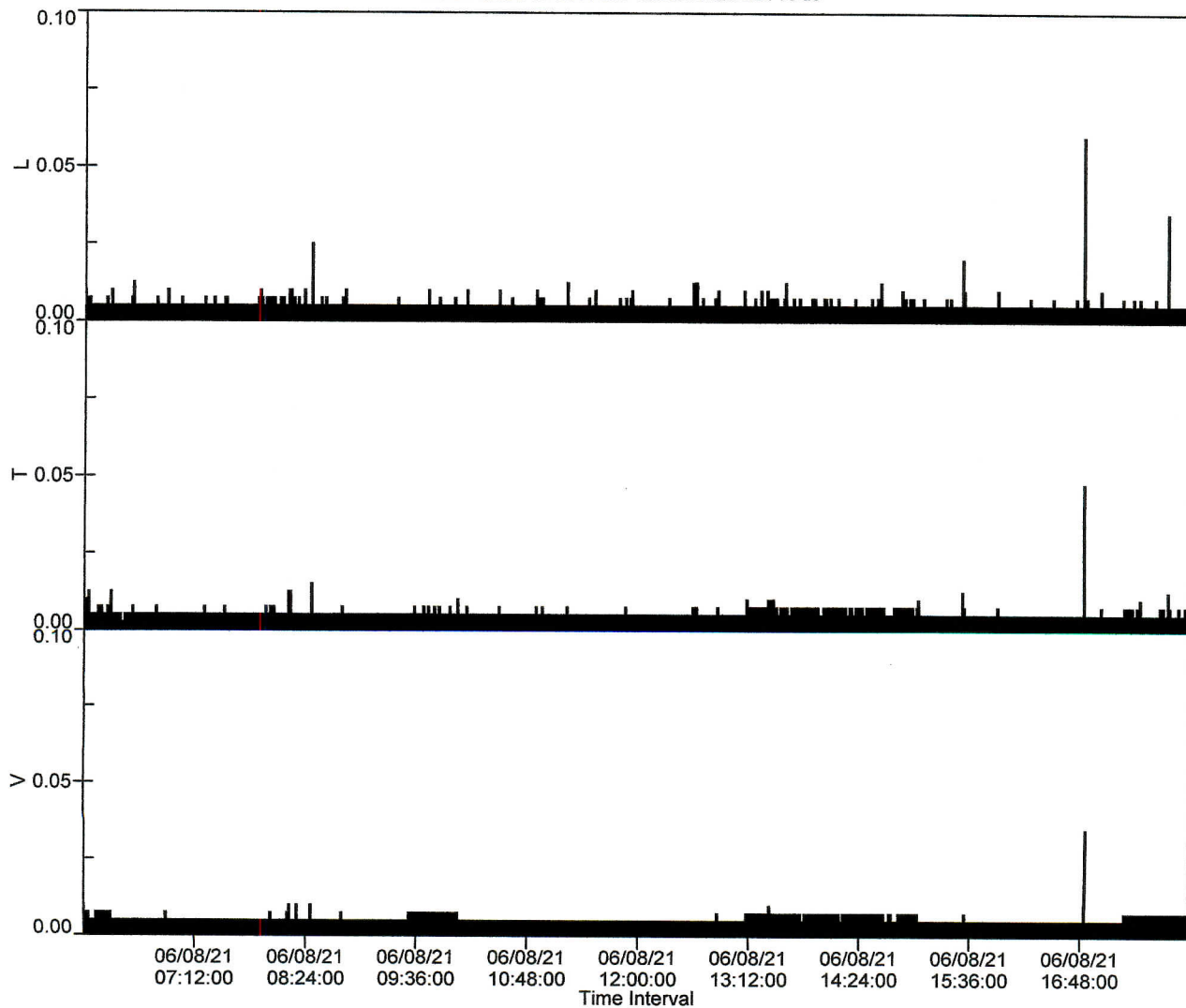
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 122

Record Max PPV: 0.060 in/s Record Max DB: 76 db



SN: 3559 v2.75
Date: 06/09/2021 **Time:** 06:01:00
Event: 123
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.025	0.028	0.018
FREQ (Hz)	12.8	45.5	12.5
Peak Air Pressure:	76 db		

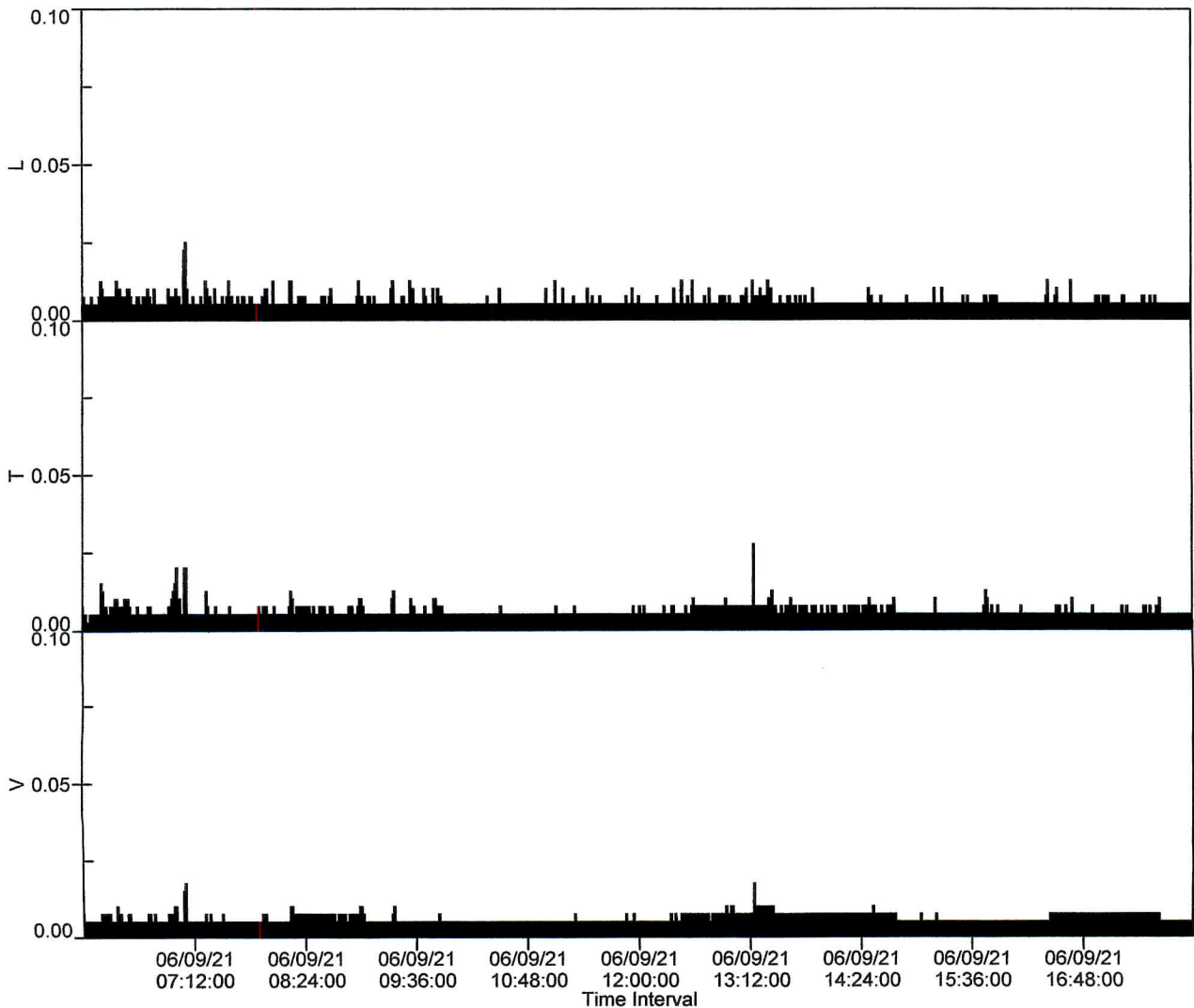
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 123

Record Max PPV: 0.028 in/s Record Max DB: 76 db



SN: 3559 v2.75
Date: 06/10/2021 **Time:** 06:01:00
Event: 124
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

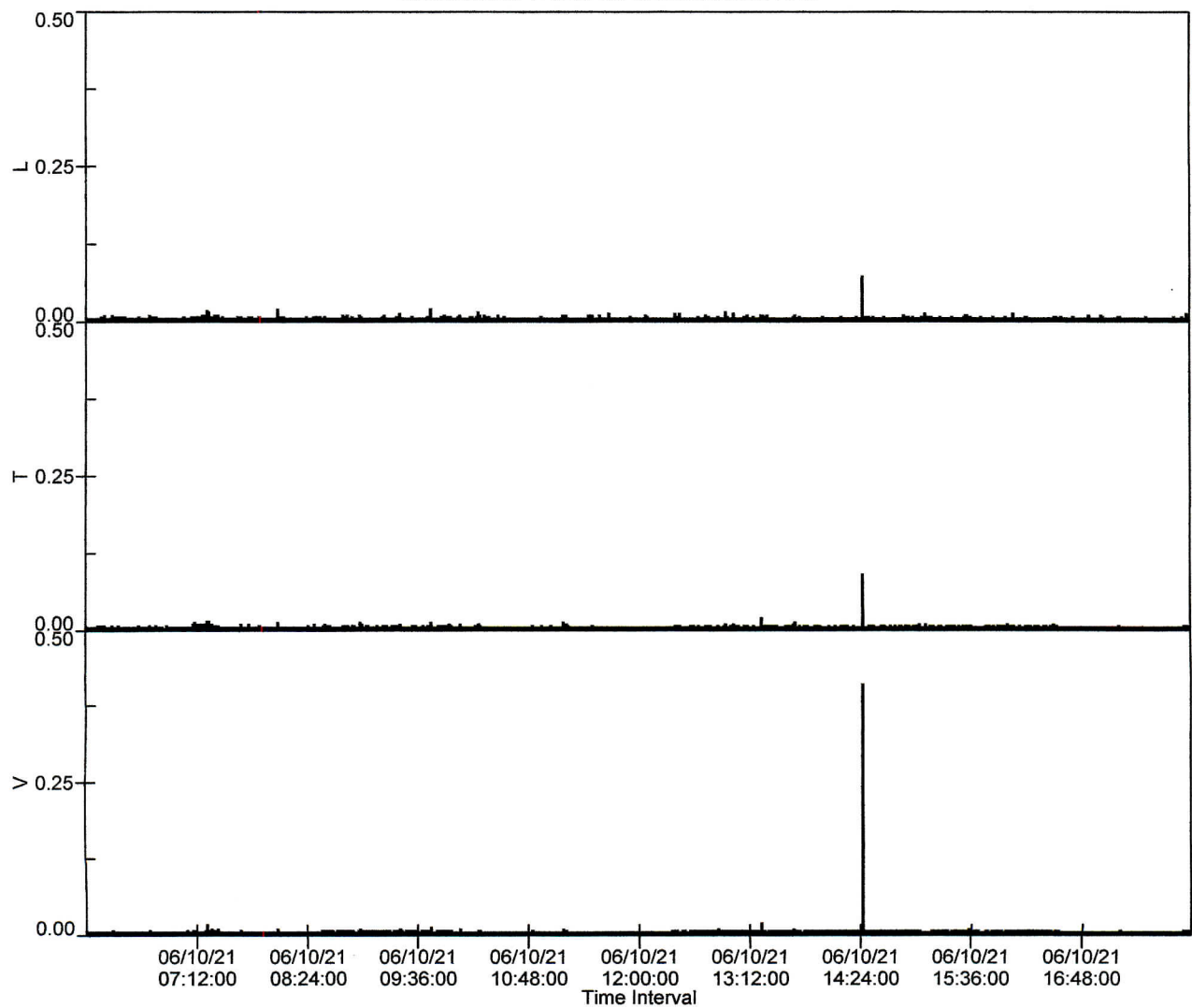
	L	T	V
PPV (in/s)	0.073	0.090	0.410
FREQ (Hz)	3.1	2.3	6.3
Peak Air Pressure:	76 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 124

Record Max PPV: 0.410 in/s Record Max DB: 76 db



SN: 3559 v2.75
Date: 06/11/2021 **Time:** 06:01:00
Event: 125
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.025	0.015	0.013
FREQ (Hz)	15.2	15.2	14.3
Peak Air Pressure:	78 db		

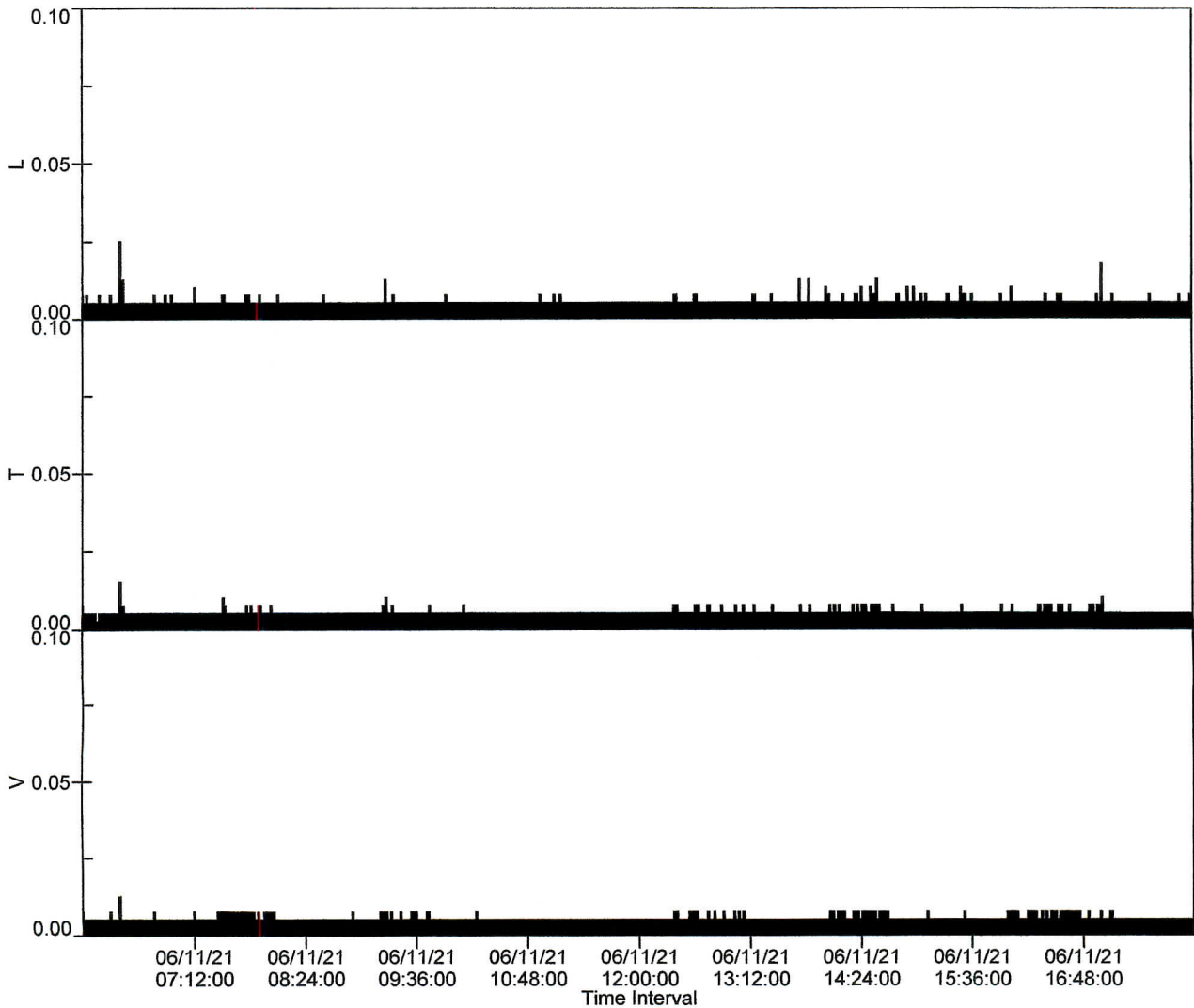
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 125

Record Max PPV: 0.025 in/s Record Max DB: 78 db



SN: 3559 v2.75
Date: 06/12/2021 **Time:** 06:01:00
Event: 126
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.013	0.013	0.013
FREQ (Hz)	17.9	83.3	1.0
Peak Air Pressure:	79 db		

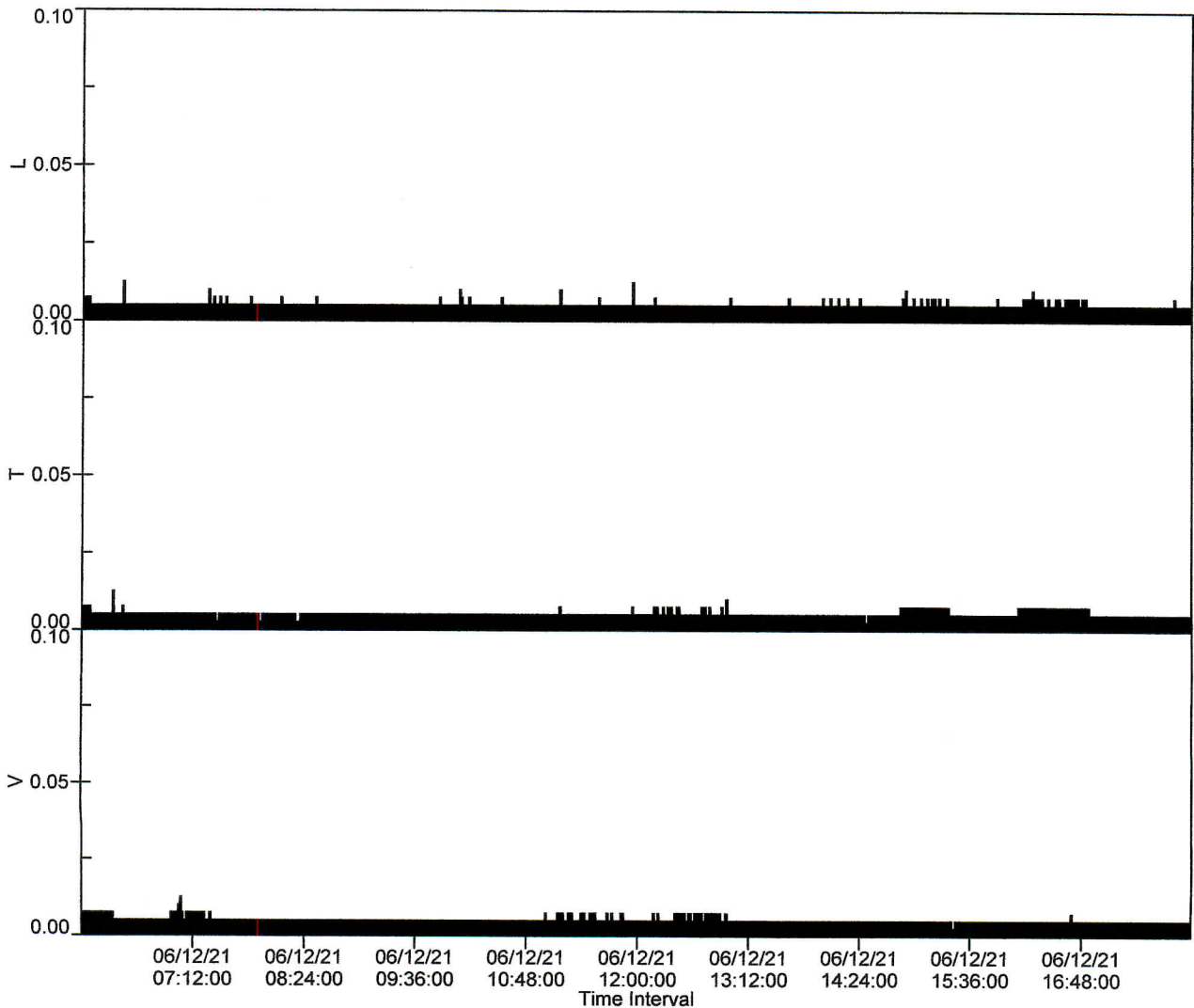
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 126

Record Max PPV: 0.013 in/s Record Max DB: 79 db



SN: 3559 v2.75
Date: 06/13/2021 **Time:** 06:01:00
Event: 127
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

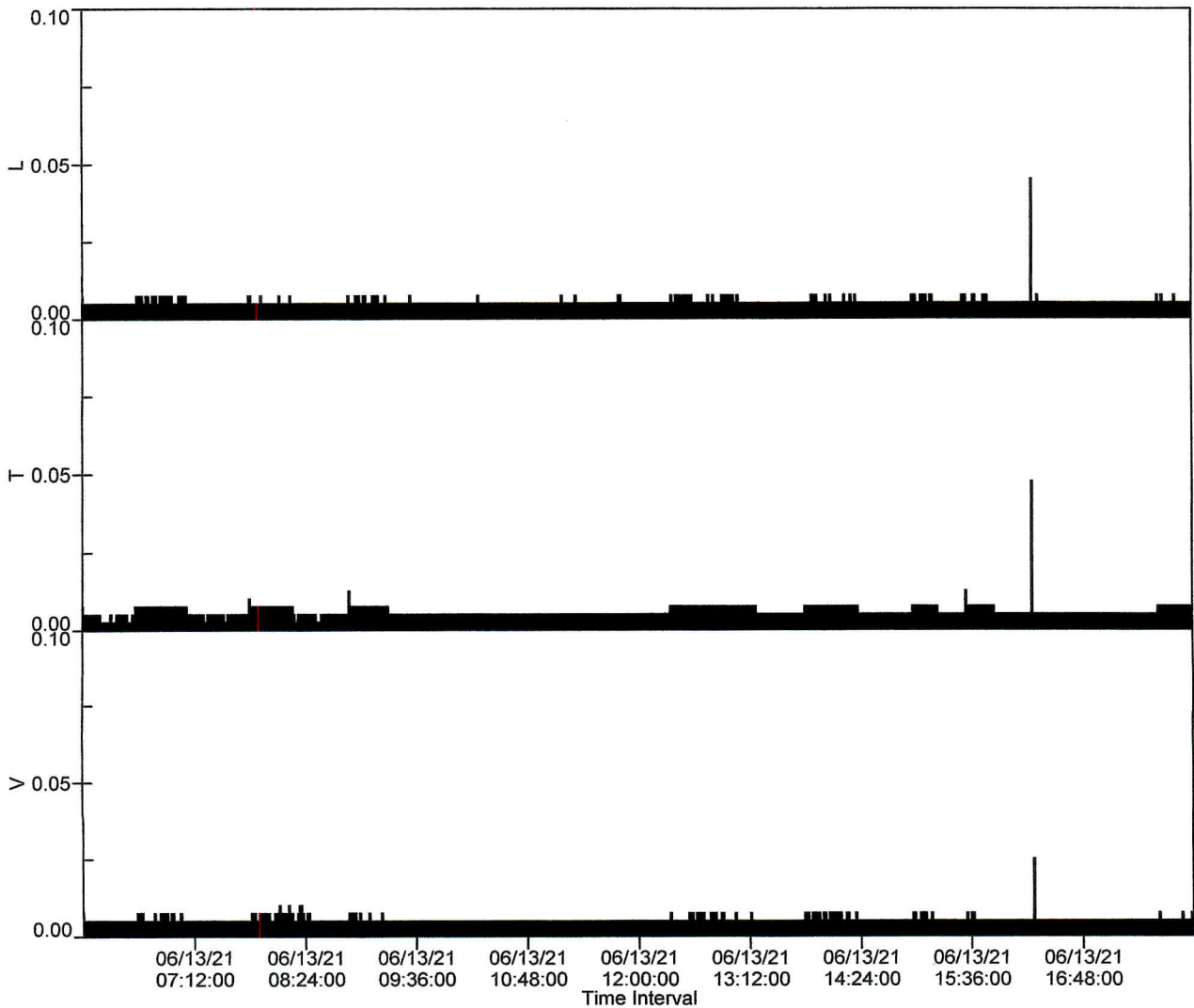
	L	T	V
PPV (in/s)	0.045	0.048	0.025
FREQ (Hz)	83.3	71.4	71.4
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 127

Record Max PPV: 0.048 in/s Record Max DB: 78 db



SN: 3559 v2.75
Date: 06/14/2021 **Time:** 06:01:00
Event: 128
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.018	0.013	0.010
FREQ (Hz)	13.5	16.7	16.7
Peak Air Pressure:	78 db		

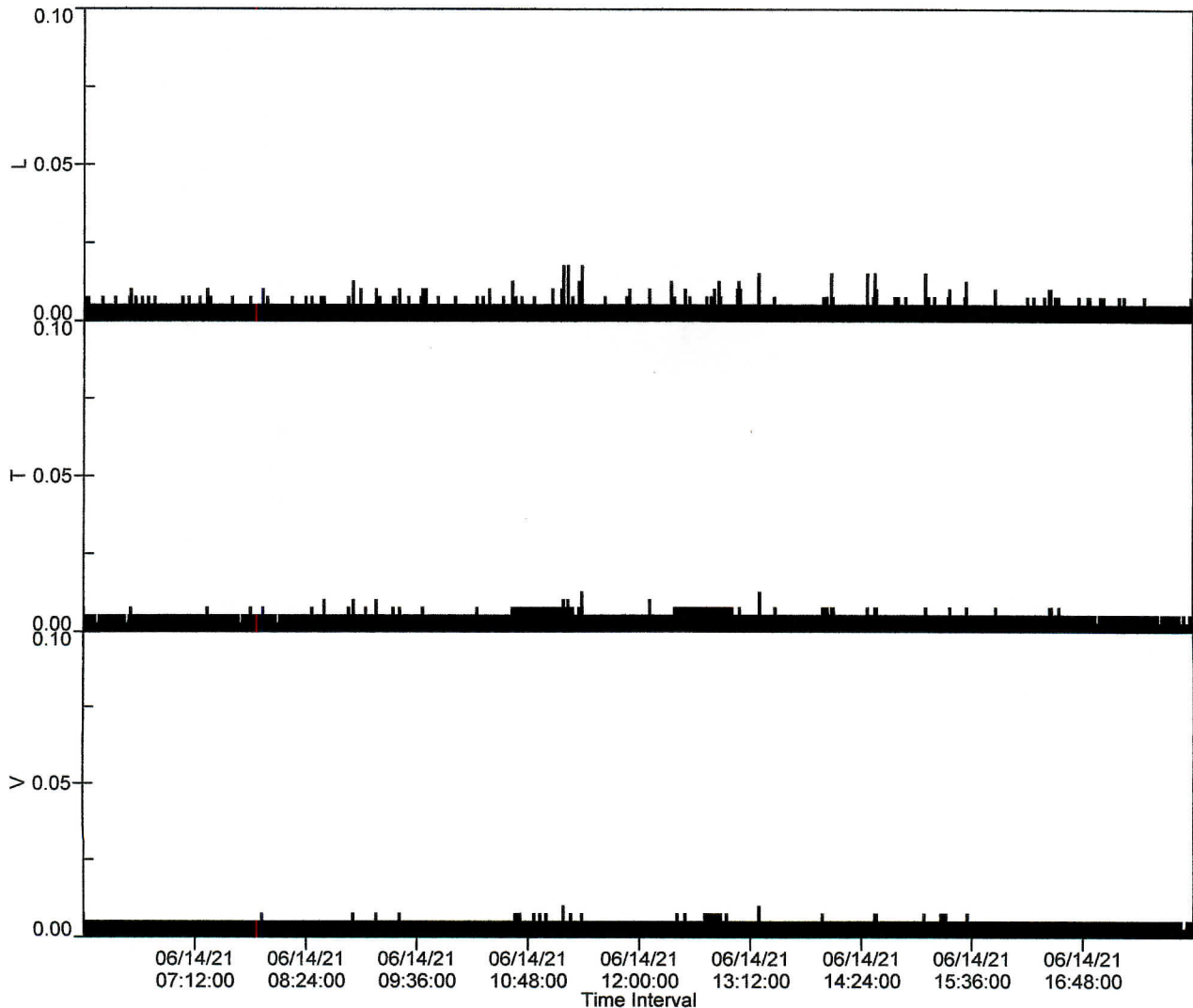
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 128

Record Max PPV: 0.018 in/s Record Max DB: 78 db



SN: 3559 v2.75
Date: 06/15/2021 **Time:** 06:01:00
Event: 129
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

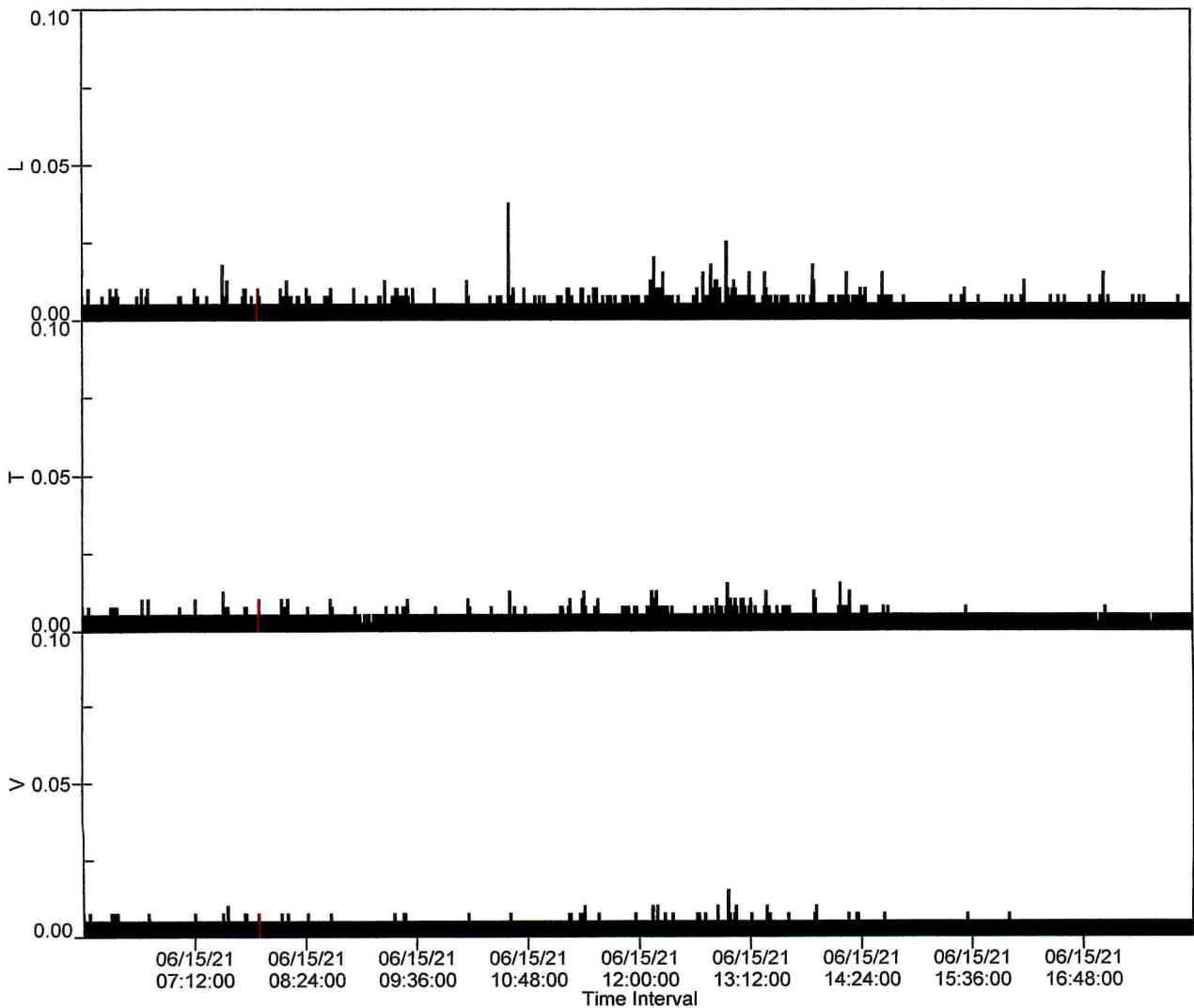
	L	T	V
PPV (in/s)	0.038	0.015	0.015
FREQ (Hz)	15.6	11.6	11.6
Peak Air Pressure:	76 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 129

Record Max PPV: 0.038 in/s Record Max DB: 76 db



SN: 3559 v2.75
Date: 06/16/2021 **Time:** 06:01:00
Event: 130
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.018	0.023	0.013
FREQ (Hz)	35.7	31.3	35.7
Peak Air Pressure:	76 db		

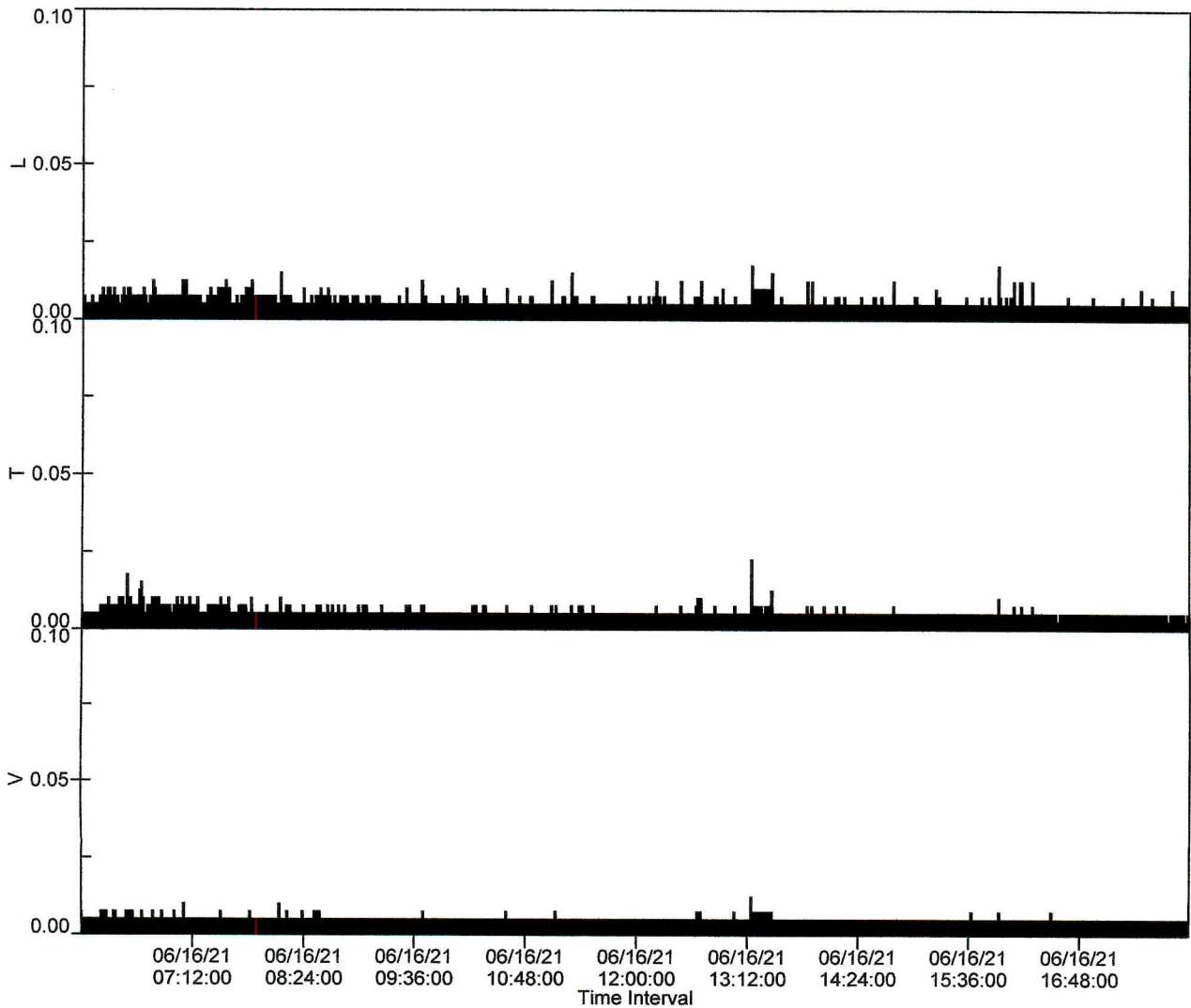
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 130

Record Max PPV: 0.023 in/s Record Max DB: 76 db



SN: 3559 v2.75
Date: 06/17/2021 **Time:** 06:01:00
Event: 131
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.025	0.023	0.015
FREQ (Hz)	16.1	16.7	21.7
Peak Air Pressure:	76 db		

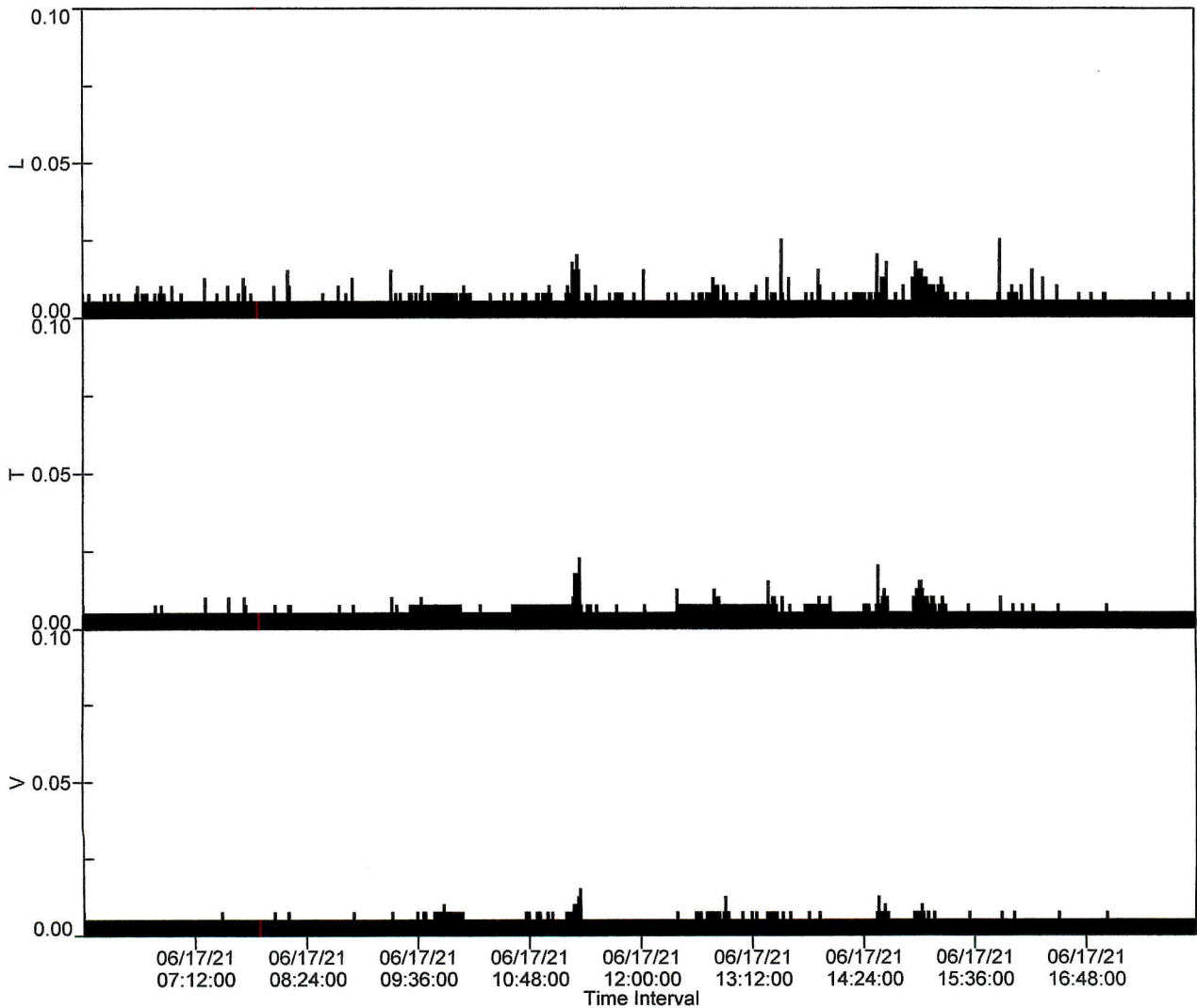
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 131

Record Max PPV: 0.025 in/s Record Max DB: 76 db



SN: 3559 v2.75
Date: 06/18/2021 **Time:** 06:01:00
Event: 132
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.018	0.013	0.010
FREQ (Hz)	15.6	15.6	4.3
Peak Air Pressure:	78 db		

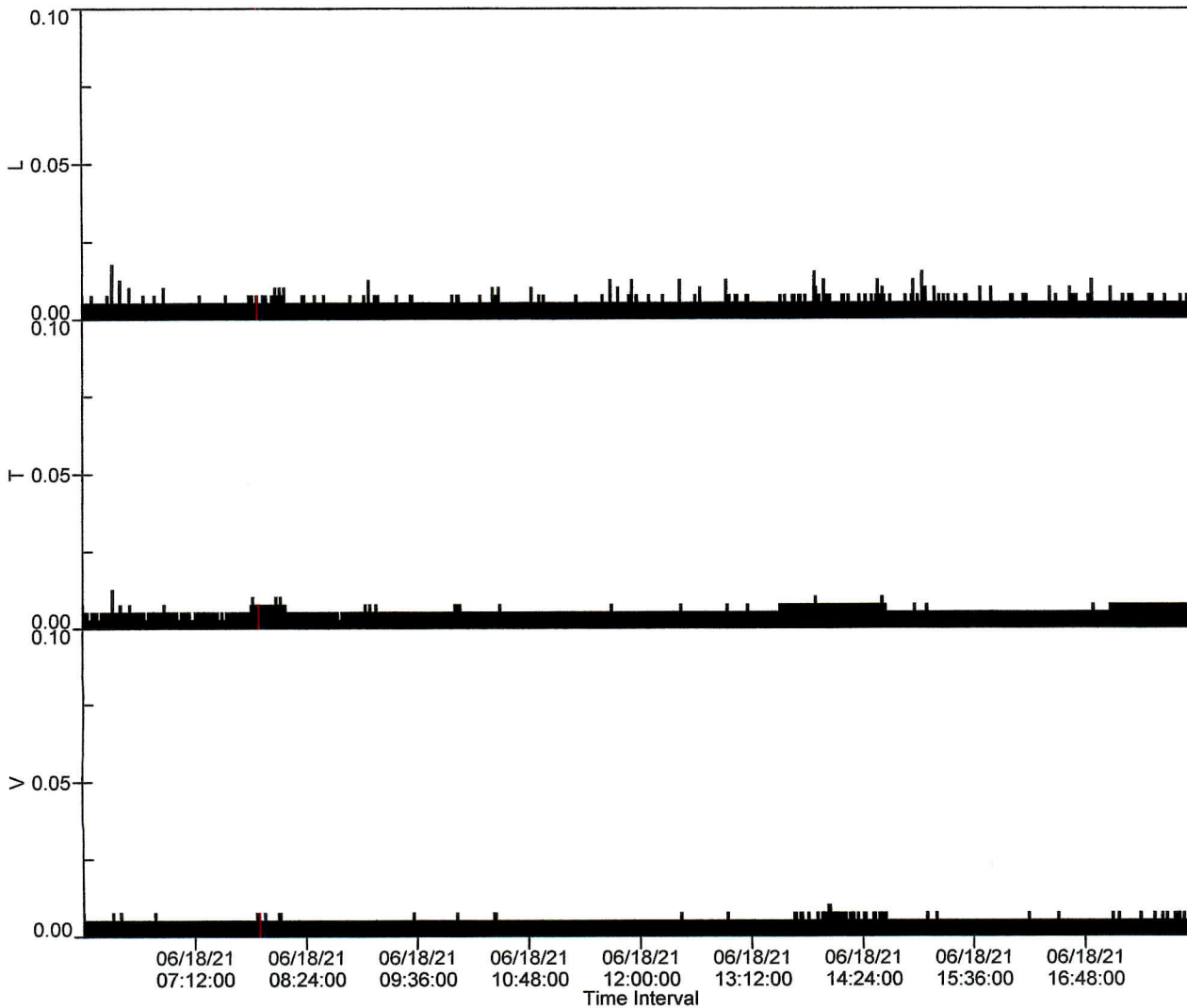
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 132

Record Max PPV: 0.018 in/s Record Max DB: 78 db



SN: 3559 v2.75
Date: 06/19/2021 **Time:** 06:01:00
Event: 133
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.110	0.128	0.328
FREQ (Hz)	11.1	26.3	6.8
Peak Air Pressure:	81 db		

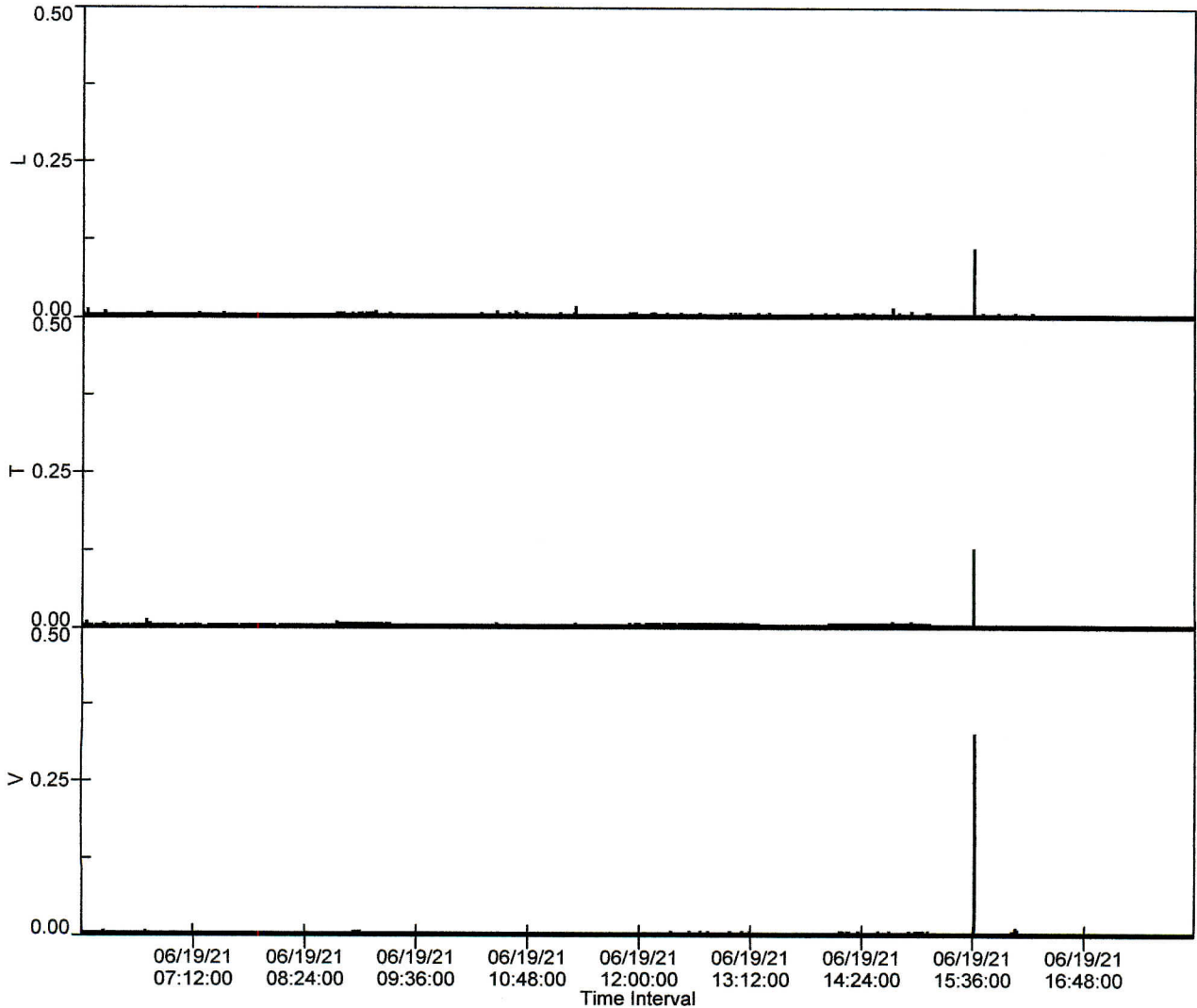
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 133

Record Max PPV: 0.328 in/s Record Max DB: 81 db



SN: 3559 v2.75
Date: 06/20/2021 **Time:** 06:01:00
Event: 134
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.010	0.010	0.015
FREQ (Hz)	17.2	83.3	.8
Peak Air Pressure:	81 db		

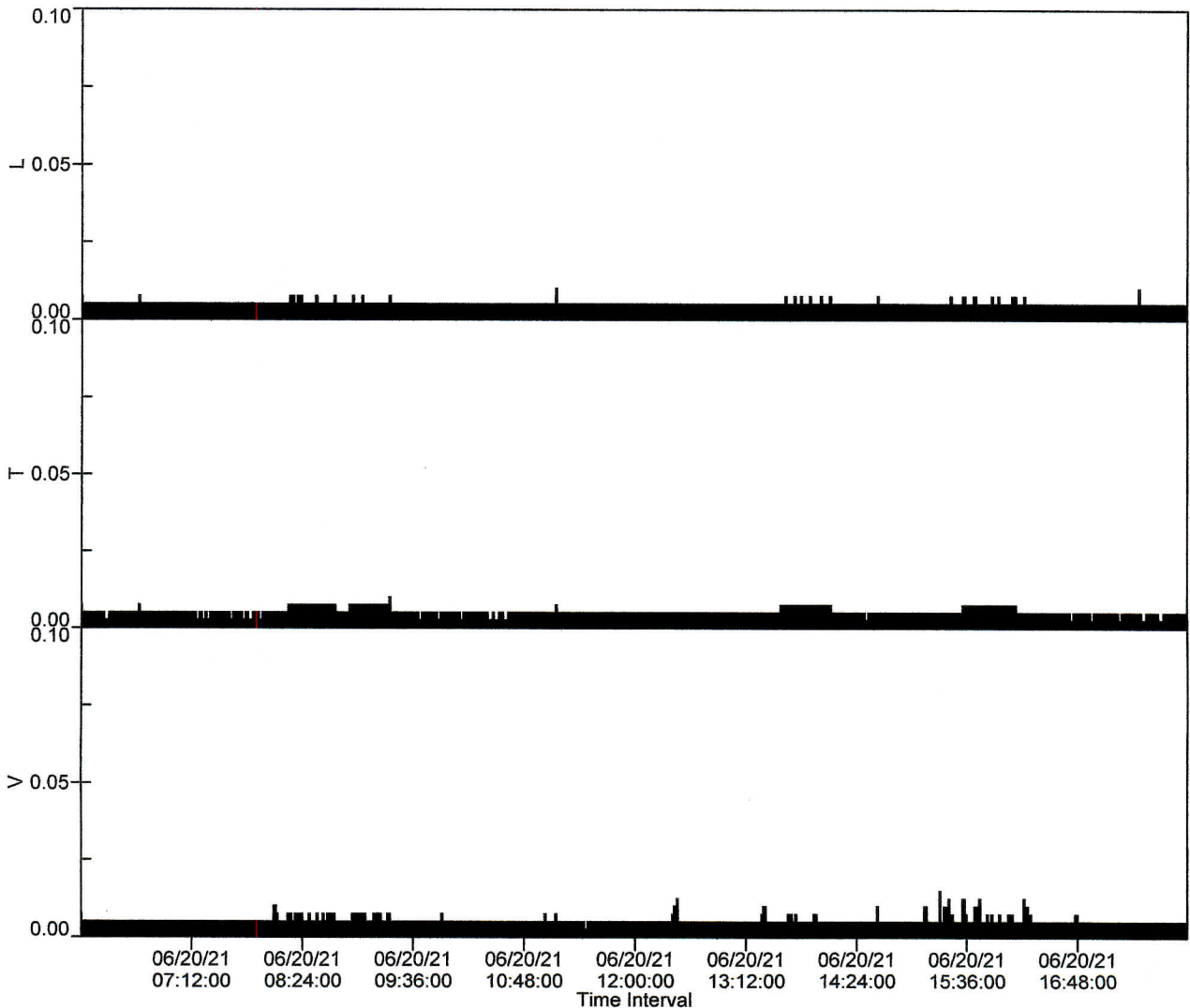
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 03/27/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3559 Event: 134

Record Max PPV: 0.015 in/s Record Max DB: 81 db



SN: 3734 v3.22
Date: 06/07/2021 **Time:** 08:29:00
Event: 120
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.315	0.355	0.220
FREQ (Hz)	27.8	31.3	31.3
Peak Air Pressure:	79 db		

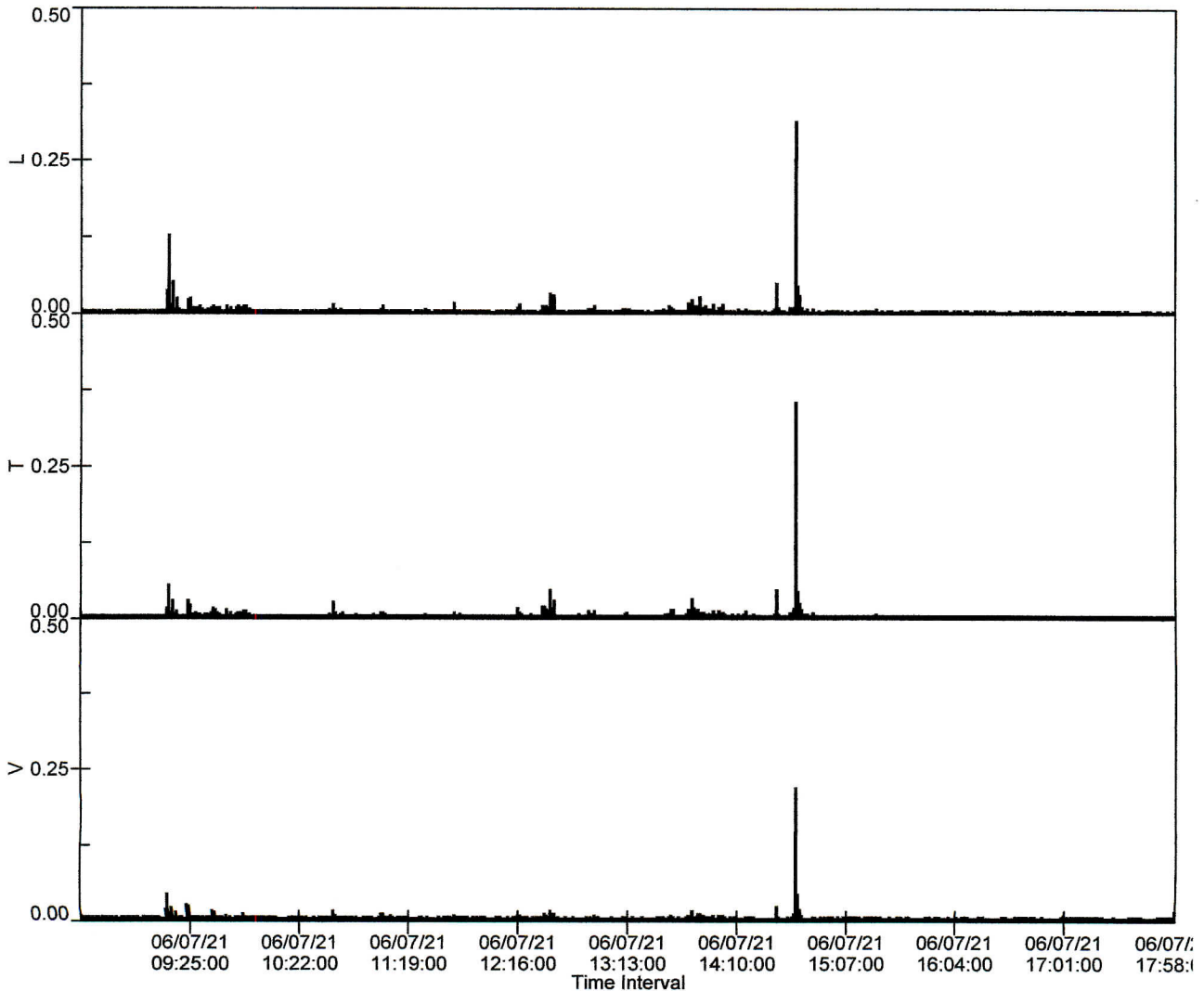
Recording Time: 570 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 120

Record Max PPV: 0.355 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/08/2021 **Time:** 06:01:00
Event: 121
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.095	0.070	0.050
FREQ (Hz)	21.7	25.0	29.4
Peak Air Pressure:	79 db		

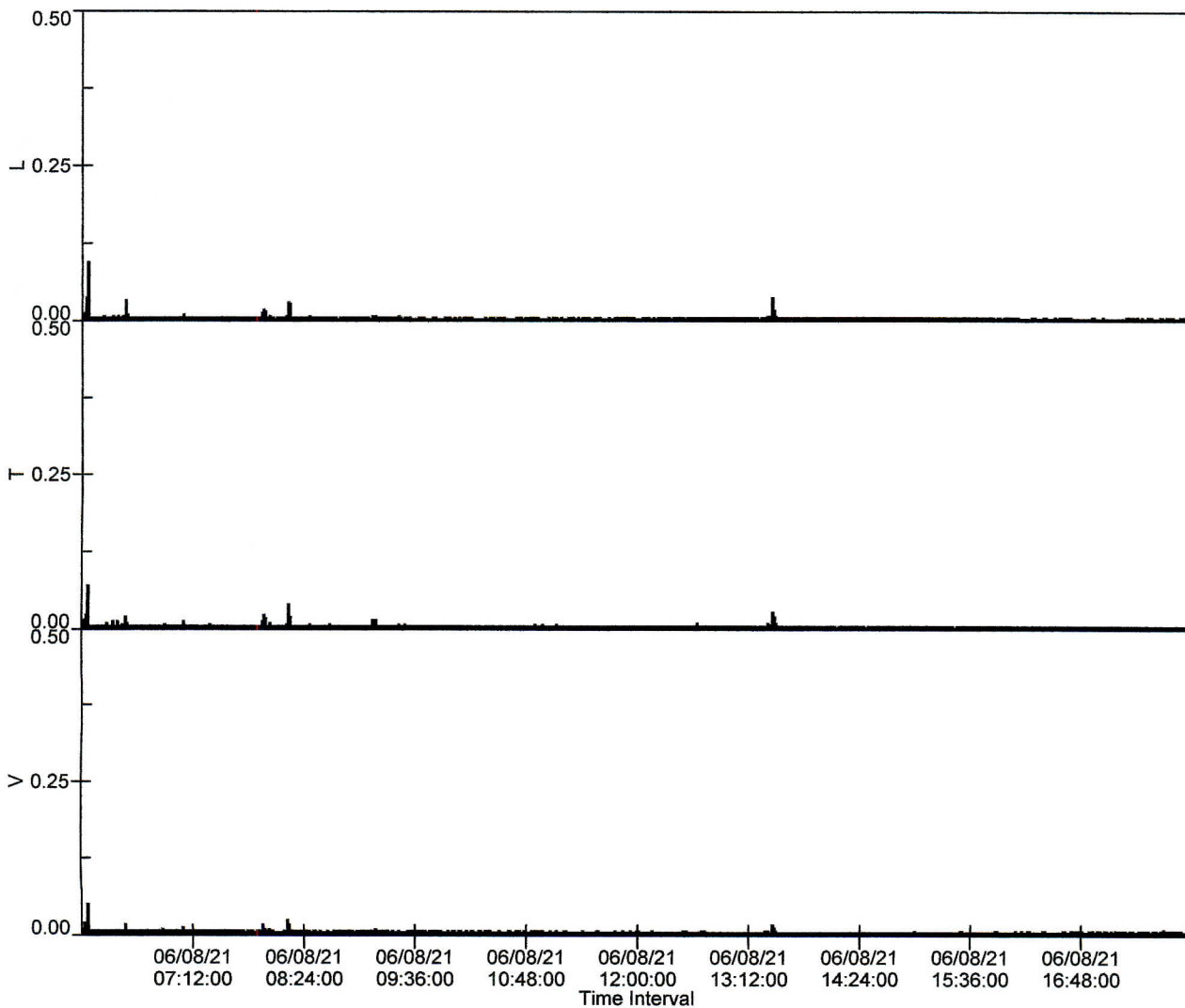
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 121

Record Max PPV: 0.095 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/09/2021 **Time:** 06:01:00
Event: 122
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

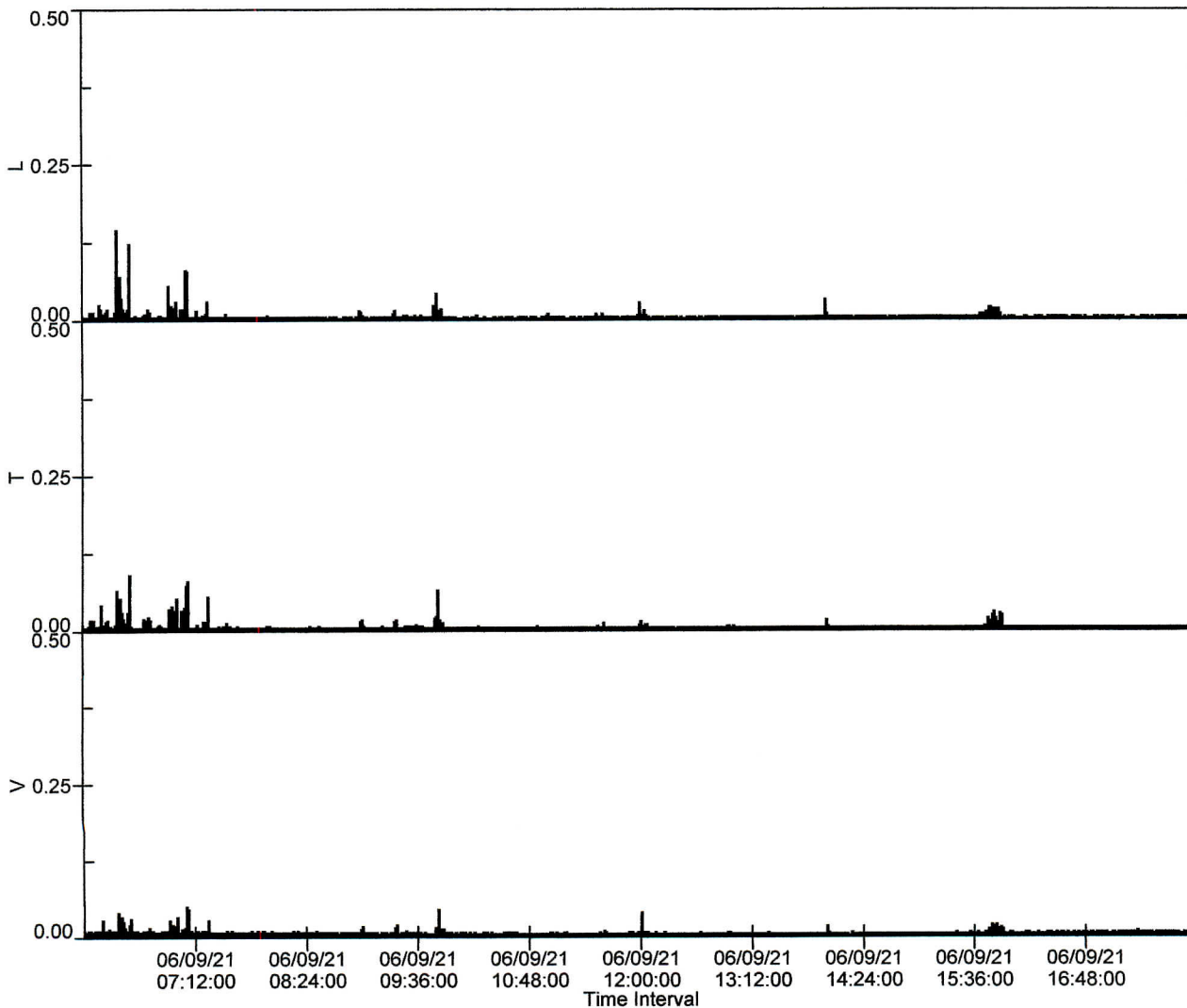
	L	T	V
PPV (in/s)	0.145	0.090	0.050
FREQ (Hz)	18.5	20.0	12.8
Peak Air Pressure:	79 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 122

Record Max PPV: 0.145 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/10/2021 **Time:** 06:01:00
Event: 123
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.128	0.078	0.068
FREQ (Hz)	15.2	25.0	19.2
Peak Air Pressure:	79 db		

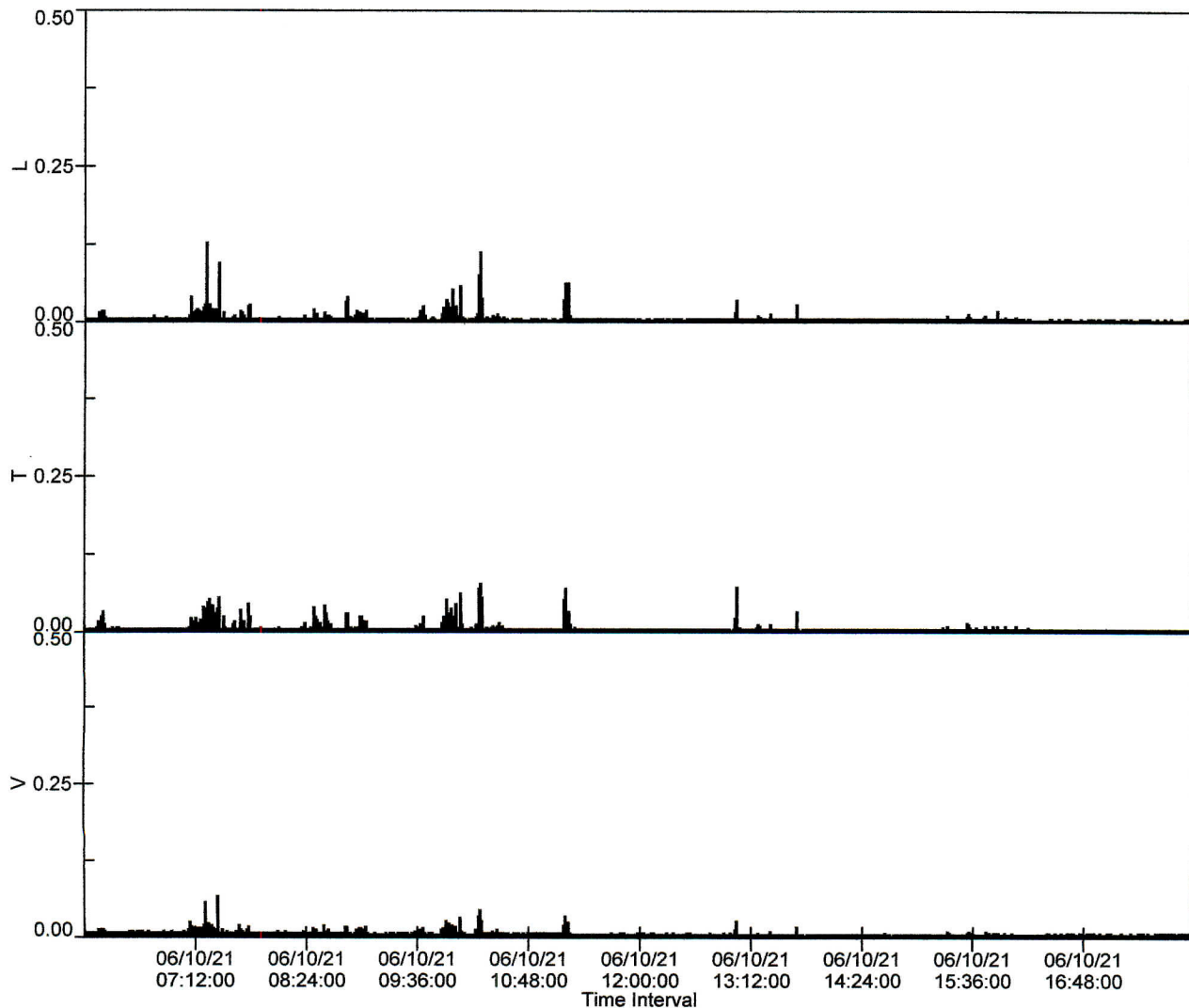
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 123

Record Max PPV: 0.128 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/11/2021 **Time:** 06:01:00
Event: 124
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.010	0.015	0.010
FREQ (Hz)	31.3	50.0	.4
Peak Air Pressure:	79 db		

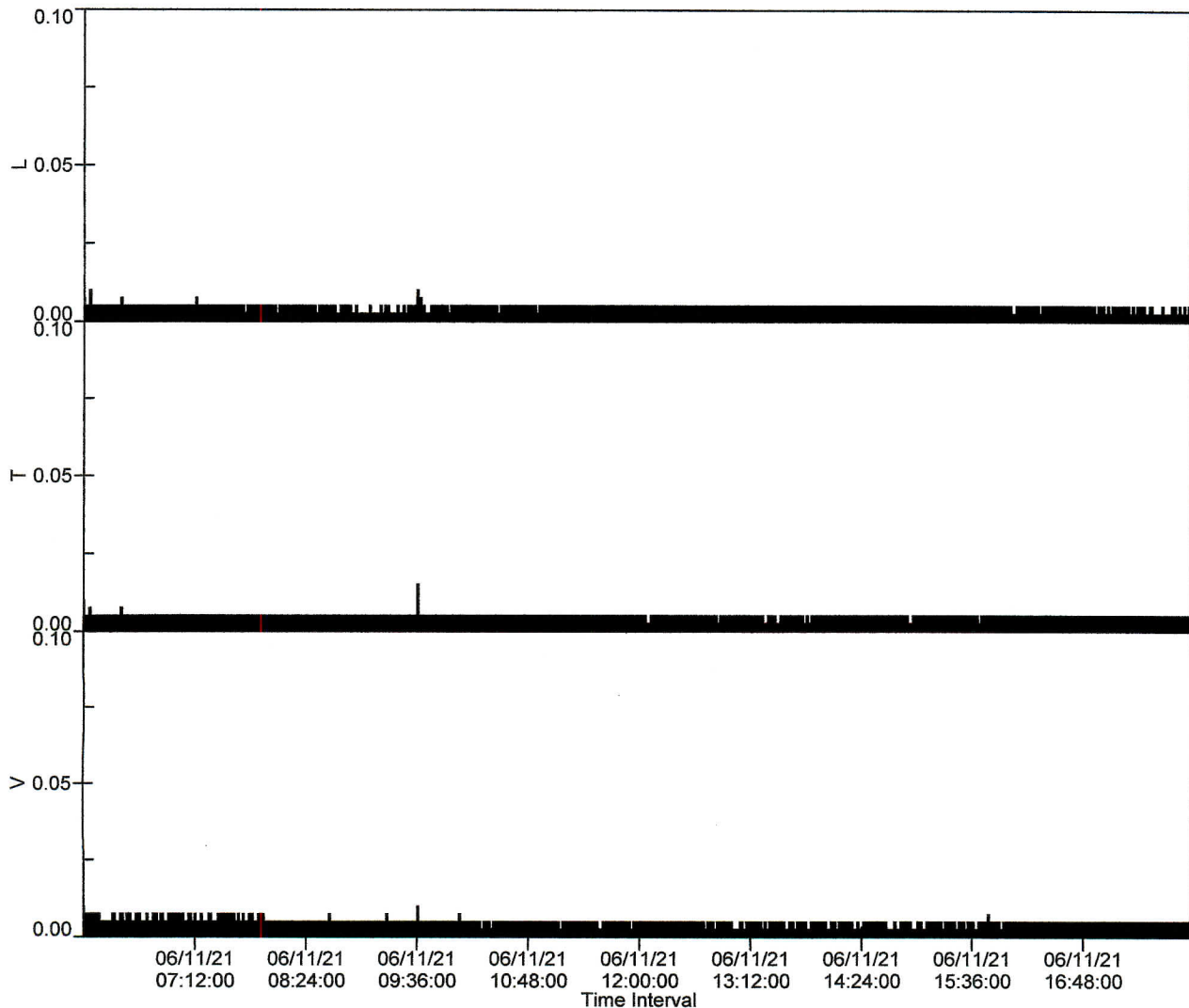
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 124

Record Max PPV: 0.015 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/12/2021 **Time:** 06:01:00
Event: 125
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

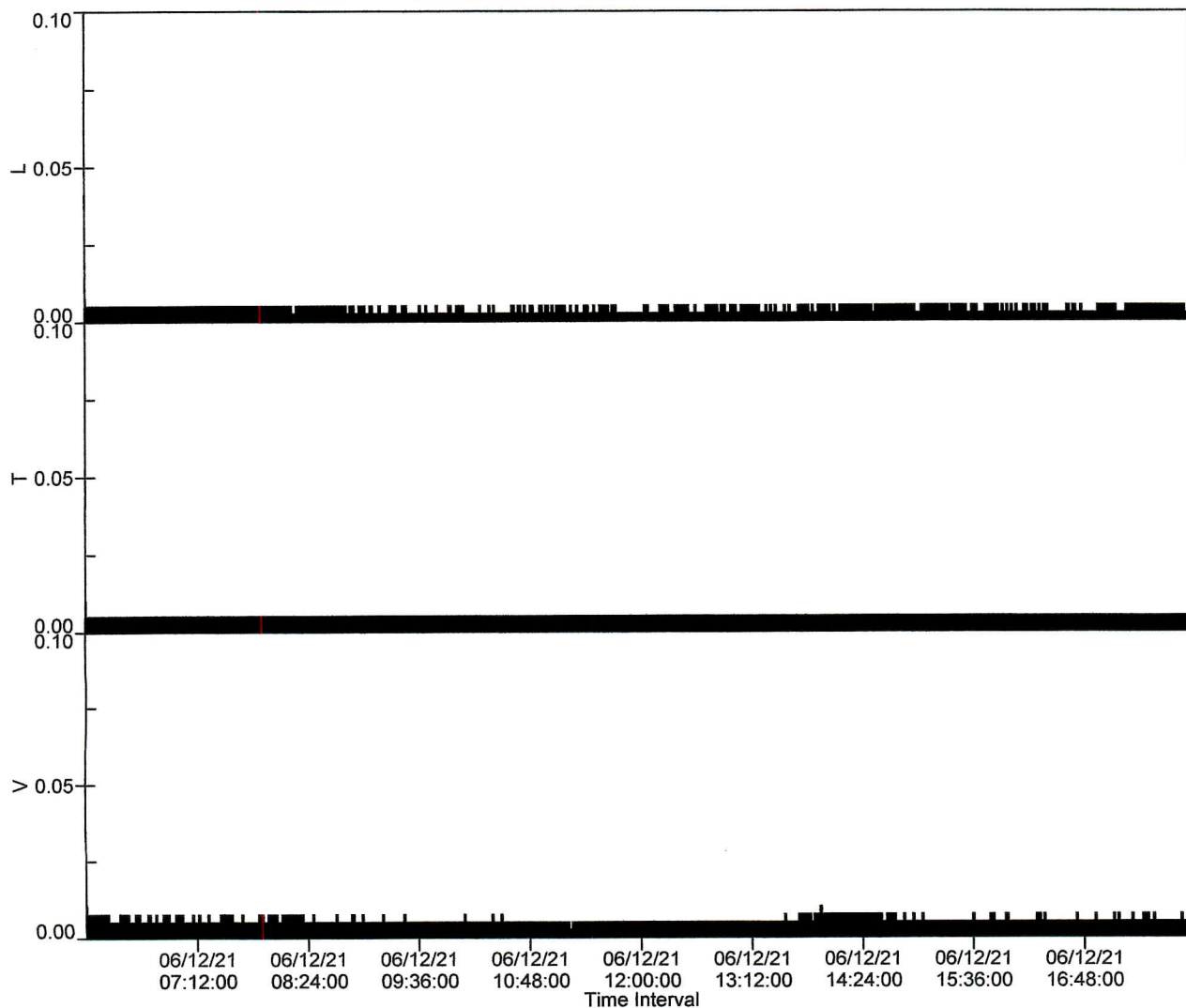
	L	T	V
PPV (in/s)	0.008	0.010	0.010
FREQ (Hz)	.3	3.6	.3
Peak Air Pressure:	79 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 125

Record Max PPV: 0.010 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/13/2021 **Time:** 06:01:00
Event: 126
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.010	0.013	0.010
FREQ (Hz)	.3	45.5	.3
Peak Air Pressure:	79 db		

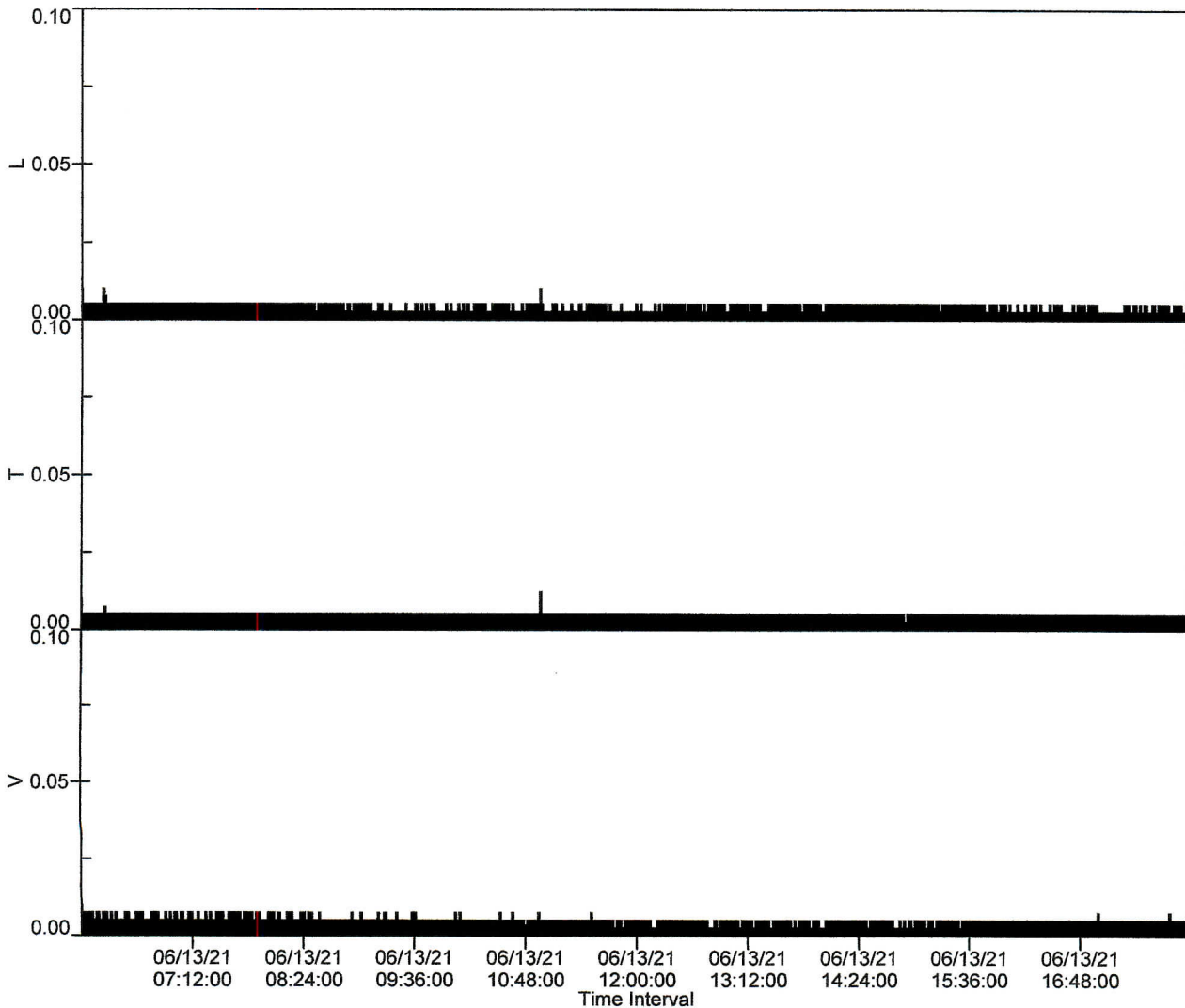
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 126

Record Max PPV: 0.013 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/14/2021 **Time:** 06:01:00
Event: 127
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

Continuous Monitor Recording

Summary Data

	L	T	V
PPV (in/s)	0.023	0.040	0.020
FREQ (Hz)	16.1	17.2	21.7
Peak Air Pressure:	79 db		

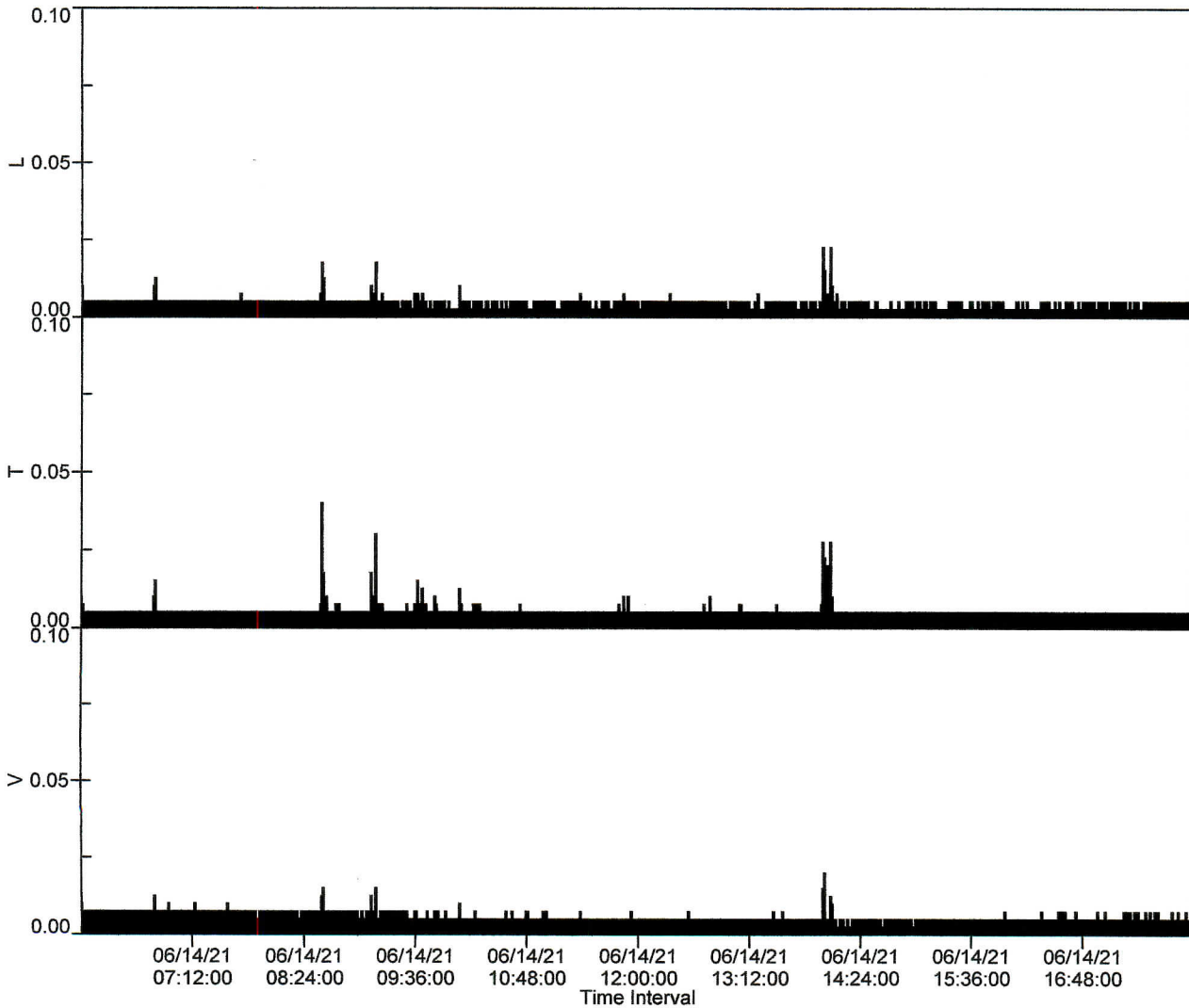
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 127

Record Max PPV: 0.040 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/15/2021 **Time:** 06:01:00
Event: 128
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.060	0.088	0.135
FREQ (Hz)	17.2	17.9	55.6
Peak Air Pressure:	79 db		

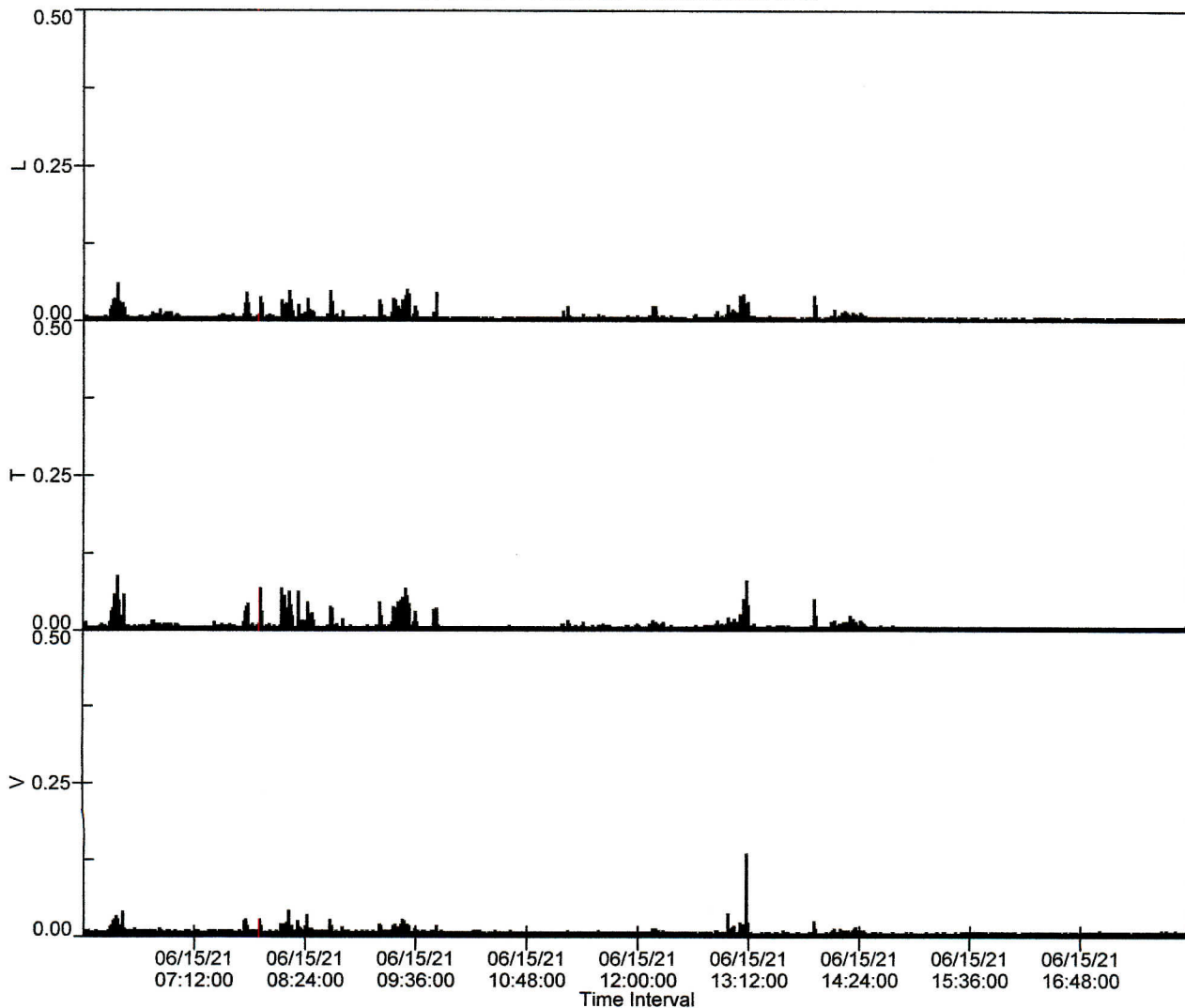
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 128

Record Max PPV: 0.135 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/16/2021 **Time:** 06:01:00
Event: 129
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.050	0.060	0.030
FREQ (Hz)	27.8	23.8	14.3
Peak Air Pressure:	79 db		

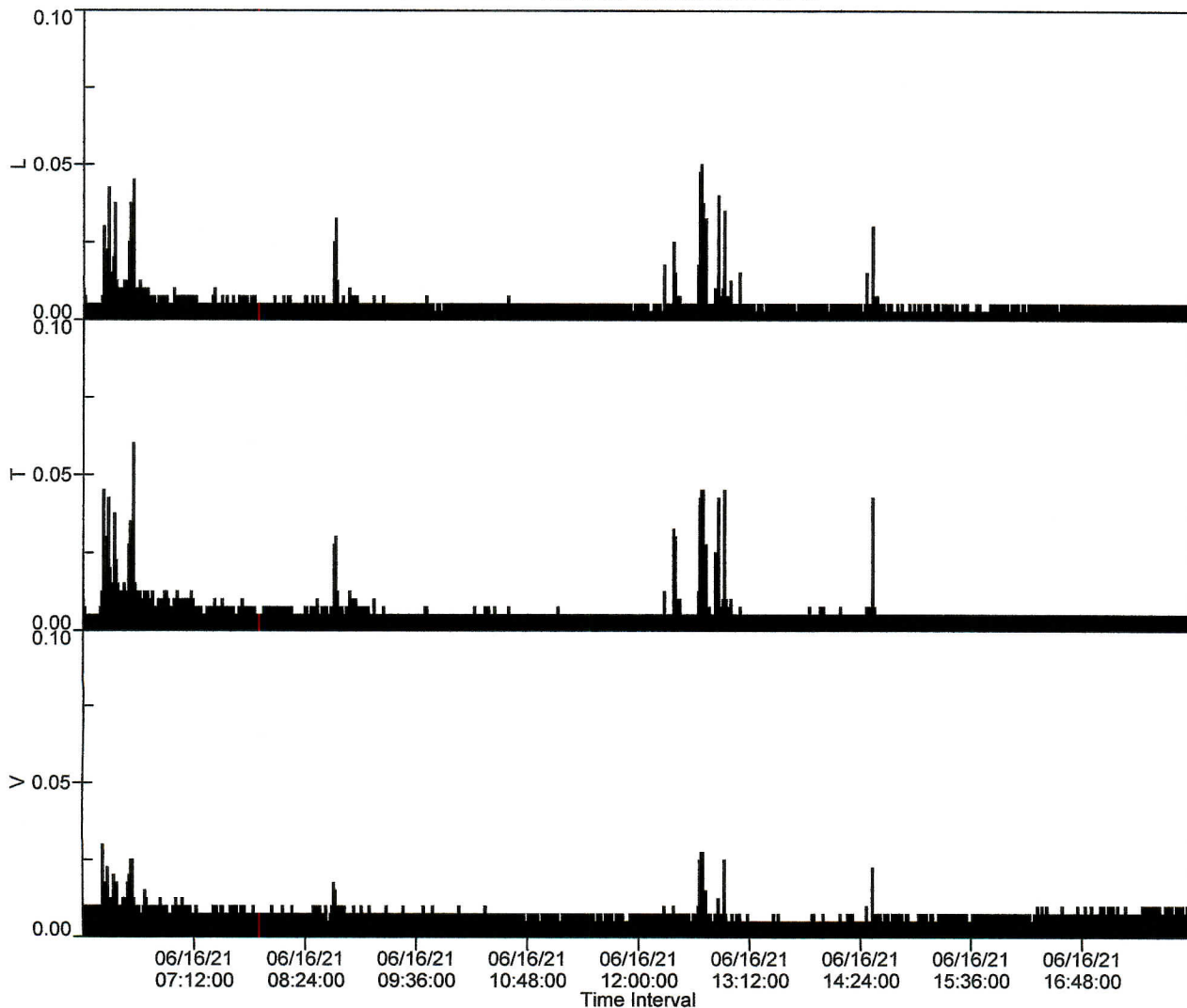
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 129

Record Max PPV: 0.060 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/17/2021 **Time:** 06:01:00
Event: 130
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.063	0.065	0.038
FREQ (Hz)	20.8	21.7	16.1
Peak Air Pressure:	79 db		

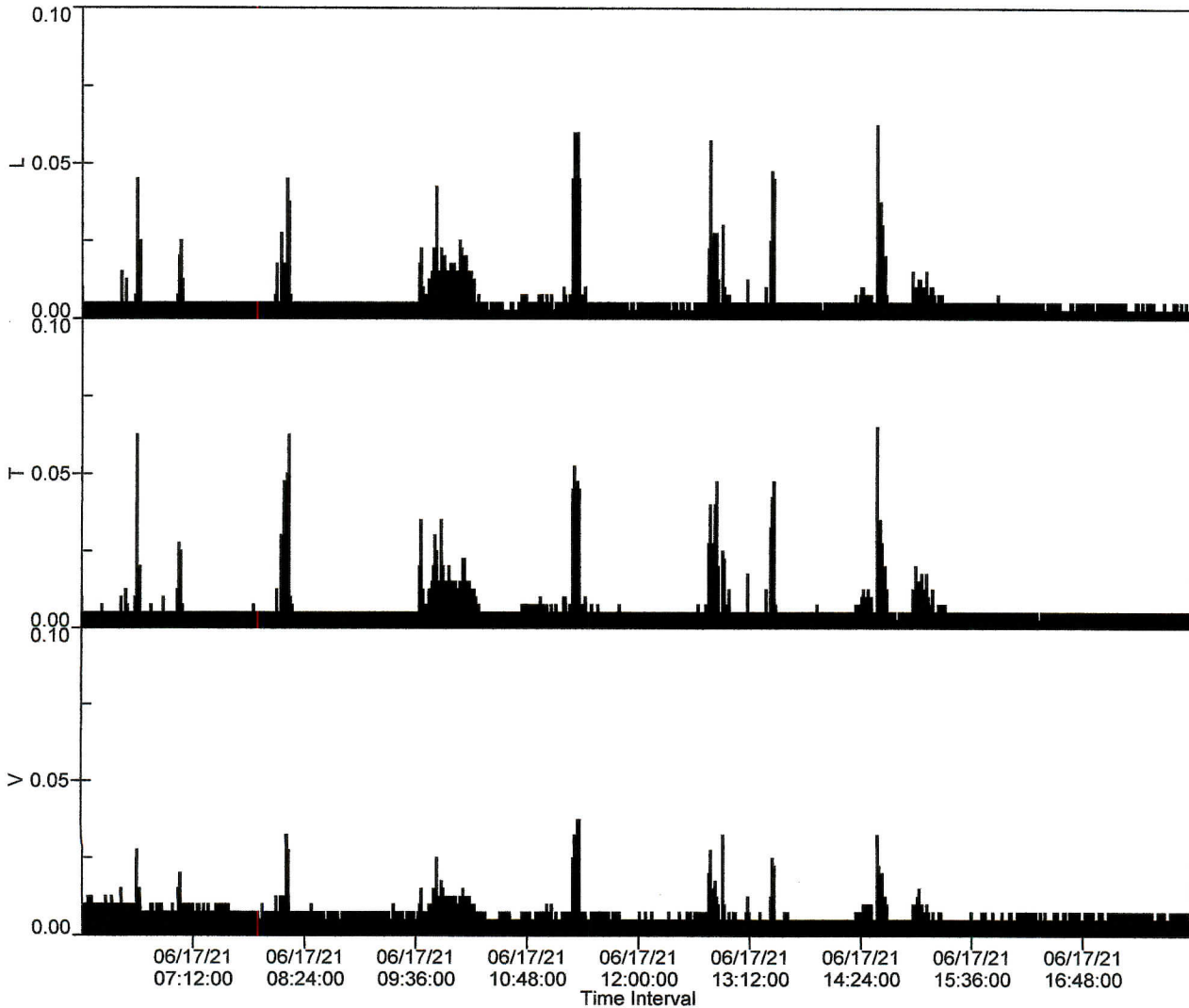
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 130

Record Max PPV: 0.065 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 06/18/2021 **Time:** 06:01:00
Event: 131
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

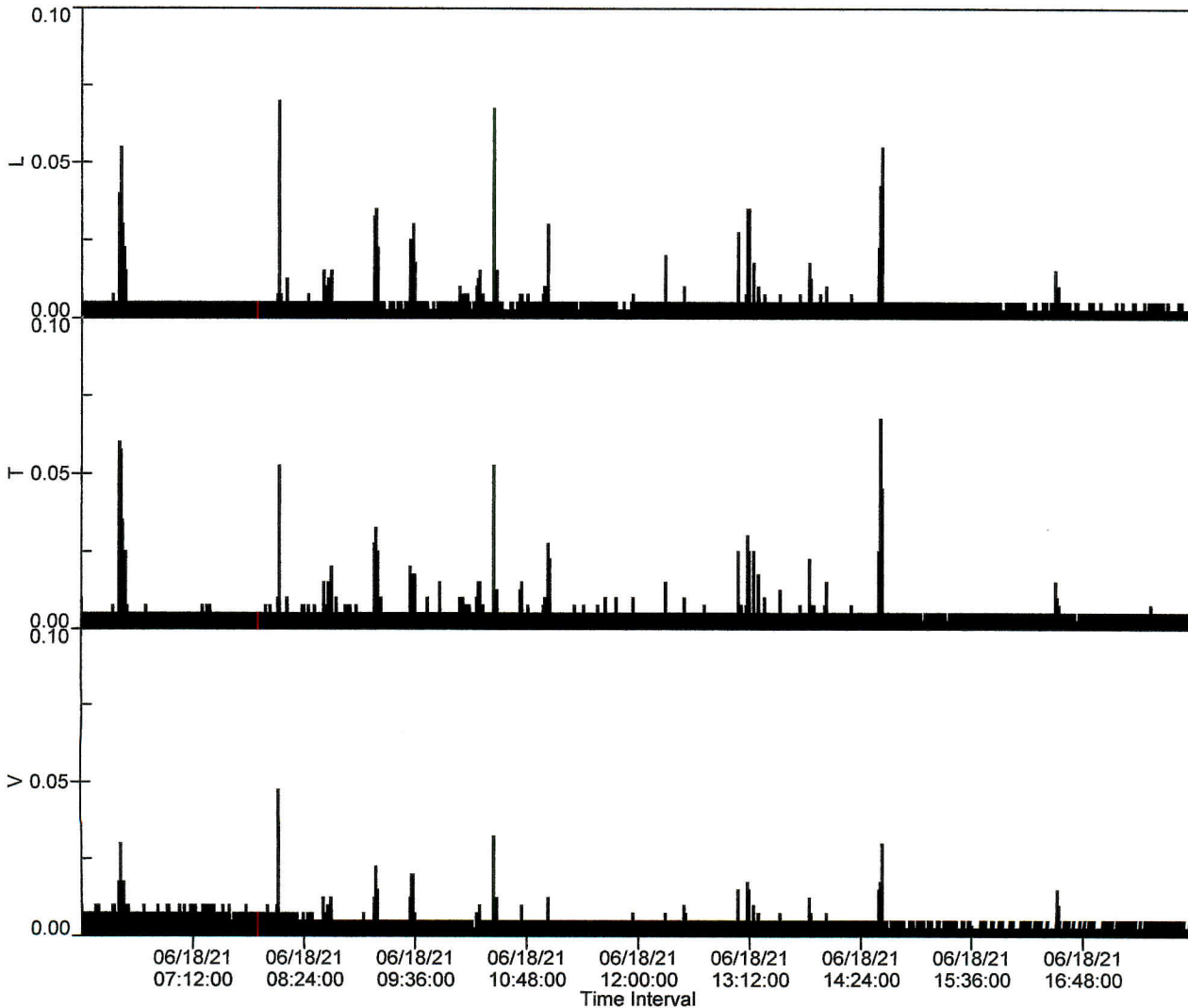
	L	T	V
PPV (in/s)	0.070	0.068	0.048
FREQ (Hz)	22.7	20.0	20.0
Peak Air Pressure: 102 db			
Recording Time: 718 minutes			
Sample Size: 1440			
Interval Size: 60 seconds			

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 131

Record Max PPV: 0.070 in/s Record Max DB: 102 db



SN: 3734 v3.22
Date: 06/19/2021 **Time:** 06:01:00
Event: 132
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.020	0.020	0.018
FREQ (Hz)	166.7	166.7	166.7
Peak Air Pressure:	103 db		

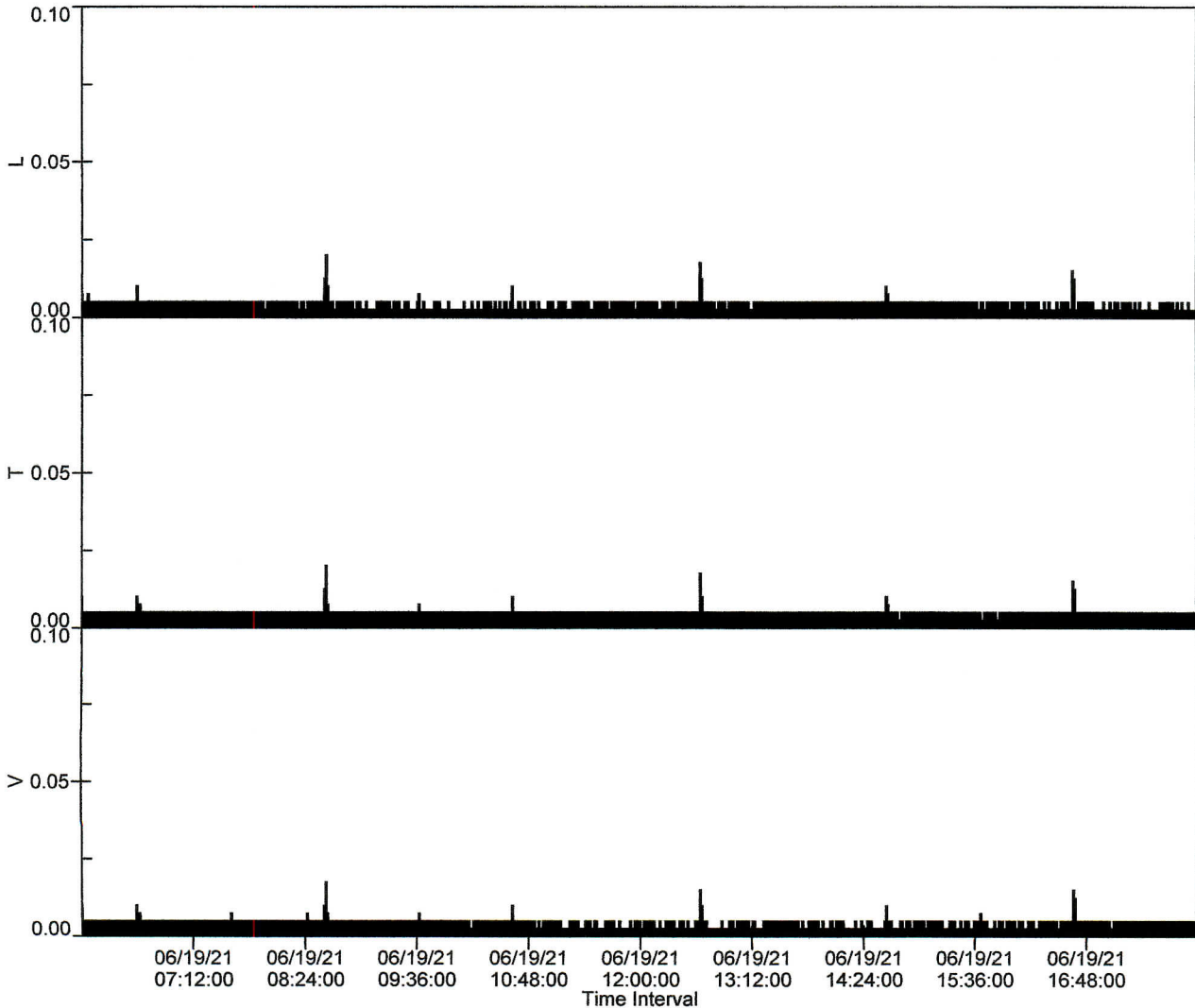
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 132

Record Max PPV: 0.020 in/s Record Max DB: 103 db



SN: 3734 v3.22
Date: 06/20/2021 **Time:** 06:01:00
Event: 133
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.020	0.018	0.015
FREQ (Hz)	166.7	166.7	250.0
Peak Air Pressure:	103 db		

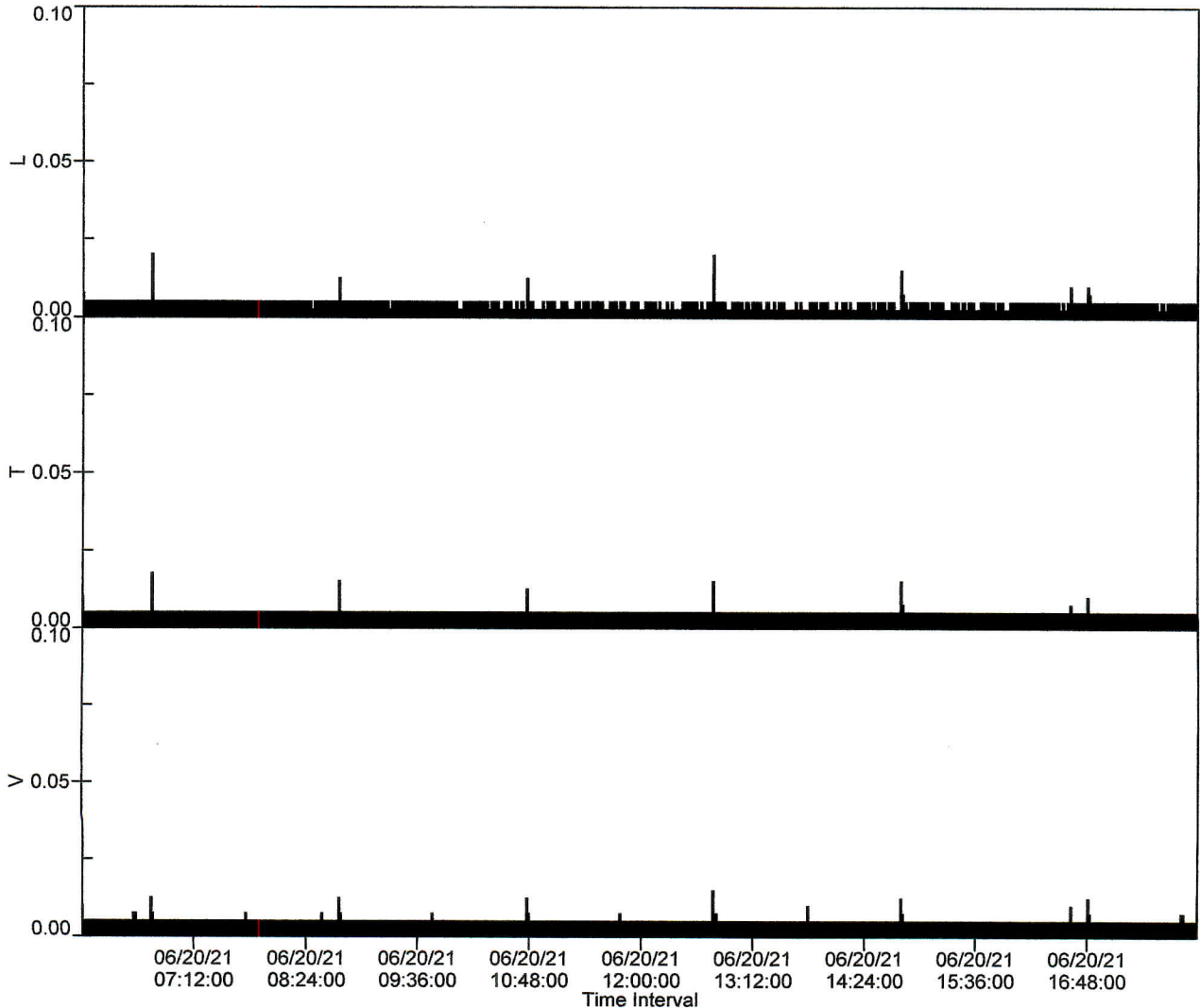
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 133

Record Max PPV: 0.020 in/s Record Max DB: 103 db



SN: 3734 v3.22
Date: 06/21/2021 **Time:** 06:01:00
Event: 134
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

	L	T	V
PPV (in/s)	0.163	0.078	0.048
FREQ (Hz)	23.8	20.8	10.0
Peak Air Pressure:	100 db		

Recording Time: 102 minutes
Sample Size: 1440
Interval Size: 60 seconds

Additional Info:

Shaketable Calibrated: 10/14/2020
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

SN: 3734 Event: 134

Record Max PPV: 0.163 in/s Record Max DB: 100 db

