

NSP Phase 2 Hibbard Park Project
Wilmette, Illinois

**VIBRATION
MONITORING
REPORT-5**

Mike Warning
V3 Companies
7325 Janes Avenue
Woodridge, IL 60517

April 12, 2021

Cti



4262 Old Grand Ave
Suite 102
Chicago, IL 60031

April 12, 2021

Mike Warning
V3 Companies
7325 Janes Avenue
Woodridge, IL 60517

RE: **Report: 5** - *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 **March 29, 2021 through April 12, 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.

April 9, 2021	491 Skokie Boulevard	Unit #3817	V	0.145 (in/s)
March 31, 2021	3005 Wilmette Avenue	Unit #3559	V	0.278 (in/s)
April 7, 2021	3000 Hill Street	Unit #3734	T	0.125 (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: 03/29/2021 **Time:** 06:40:00
Event: 45
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

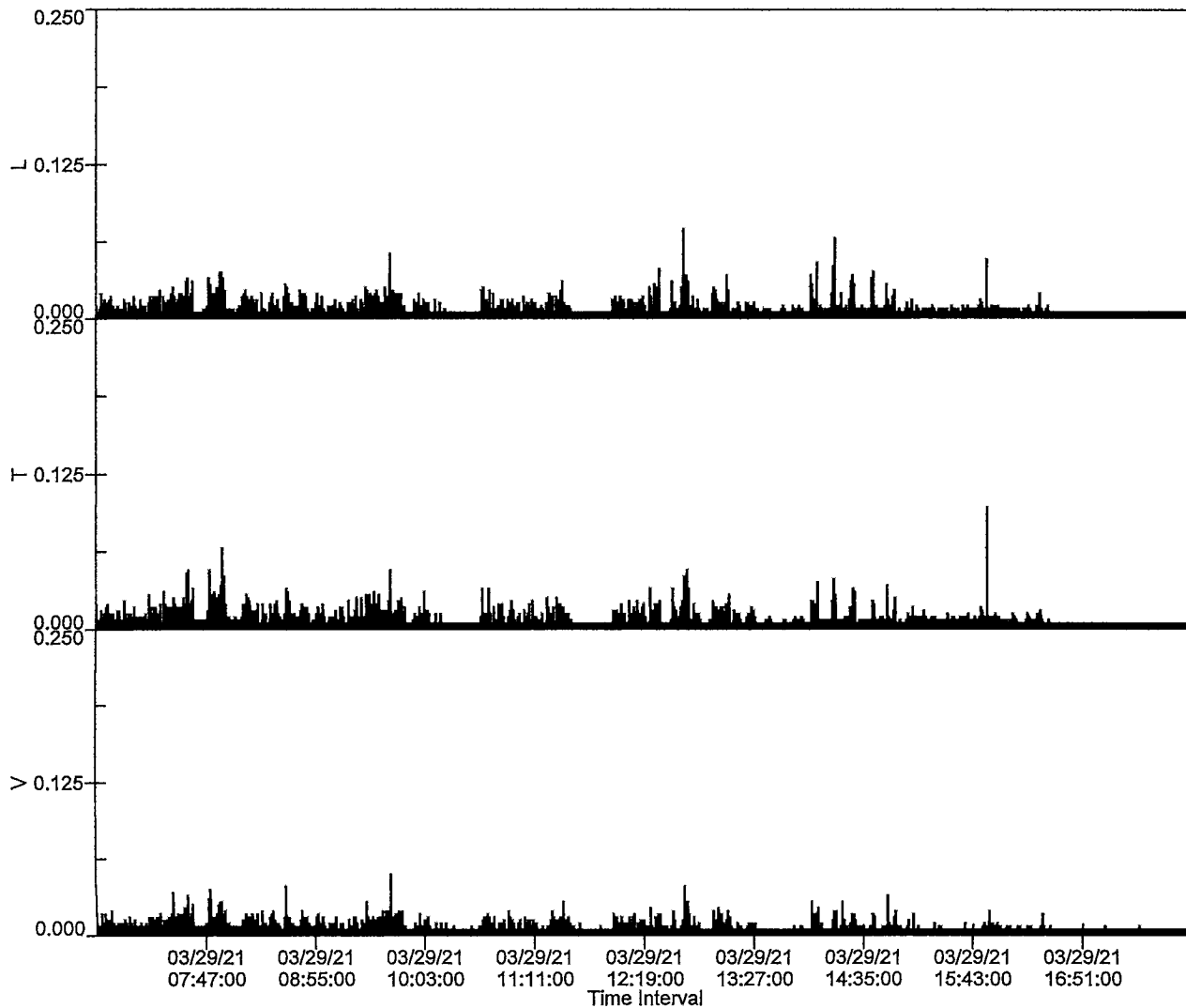
	L	T	V
PPV (in/s)	0.073	0.098	0.050
FREQ (Hz)	12.5	17.9	8.5
Peak Air Pressure:	78 db		
Recording Time:	679 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 45

Record Max PPV: 0.098 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 03/30/2021 **Time:** 06:01:00
Event: 46
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)	0.065	0.095	0.095
FREQ (Hz)	12.5	16.1	14.3
Peak Air Pressure: 78 db			

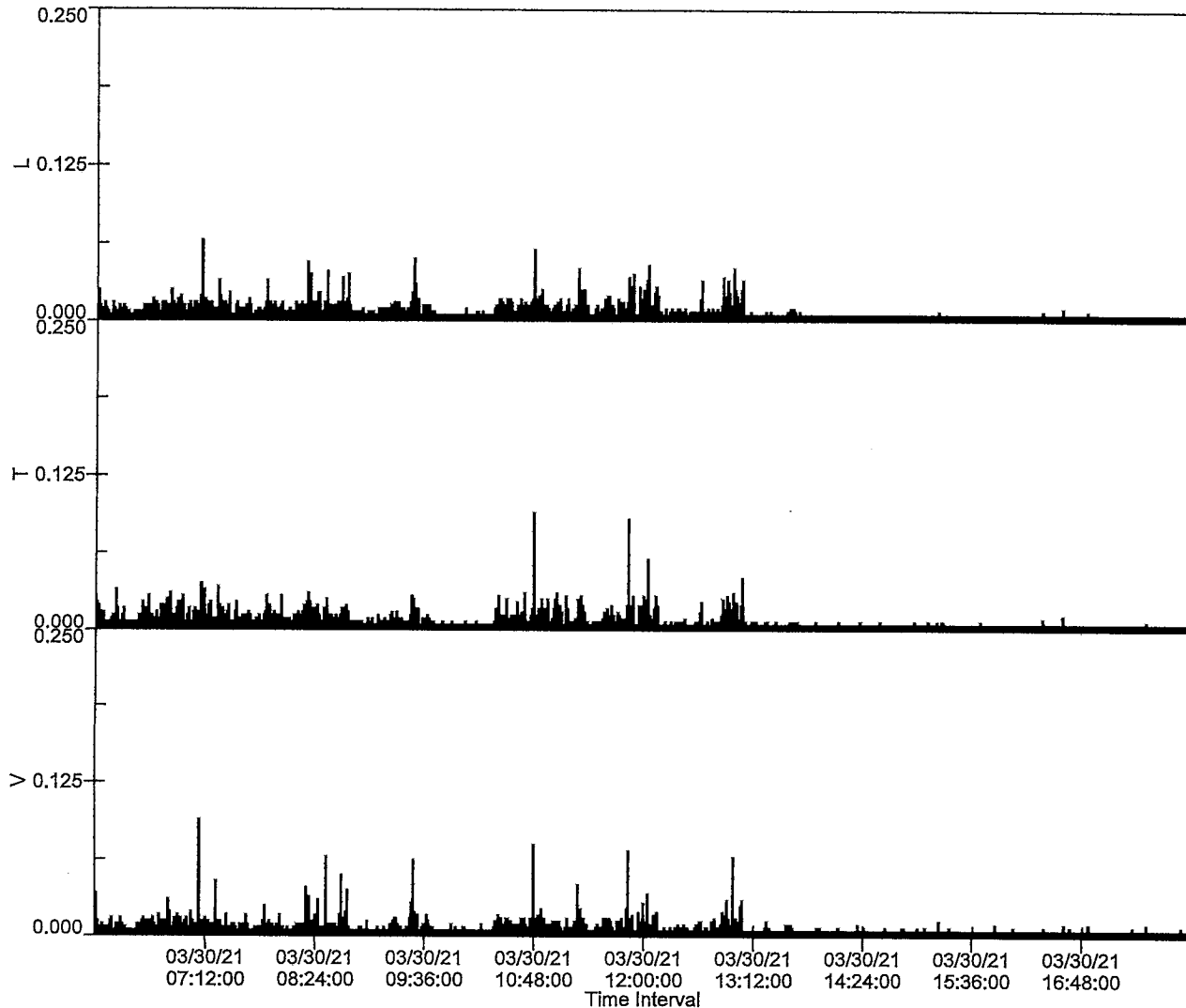
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 46

Record Max PPV: 0.095 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 03/31/2021 **Time:** 06:01:00
Event: 47
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)	0.058	0.050	0.075
FREQ (Hz)	14.7	14.7	13.2
Peak Air Pressure: 78 db			

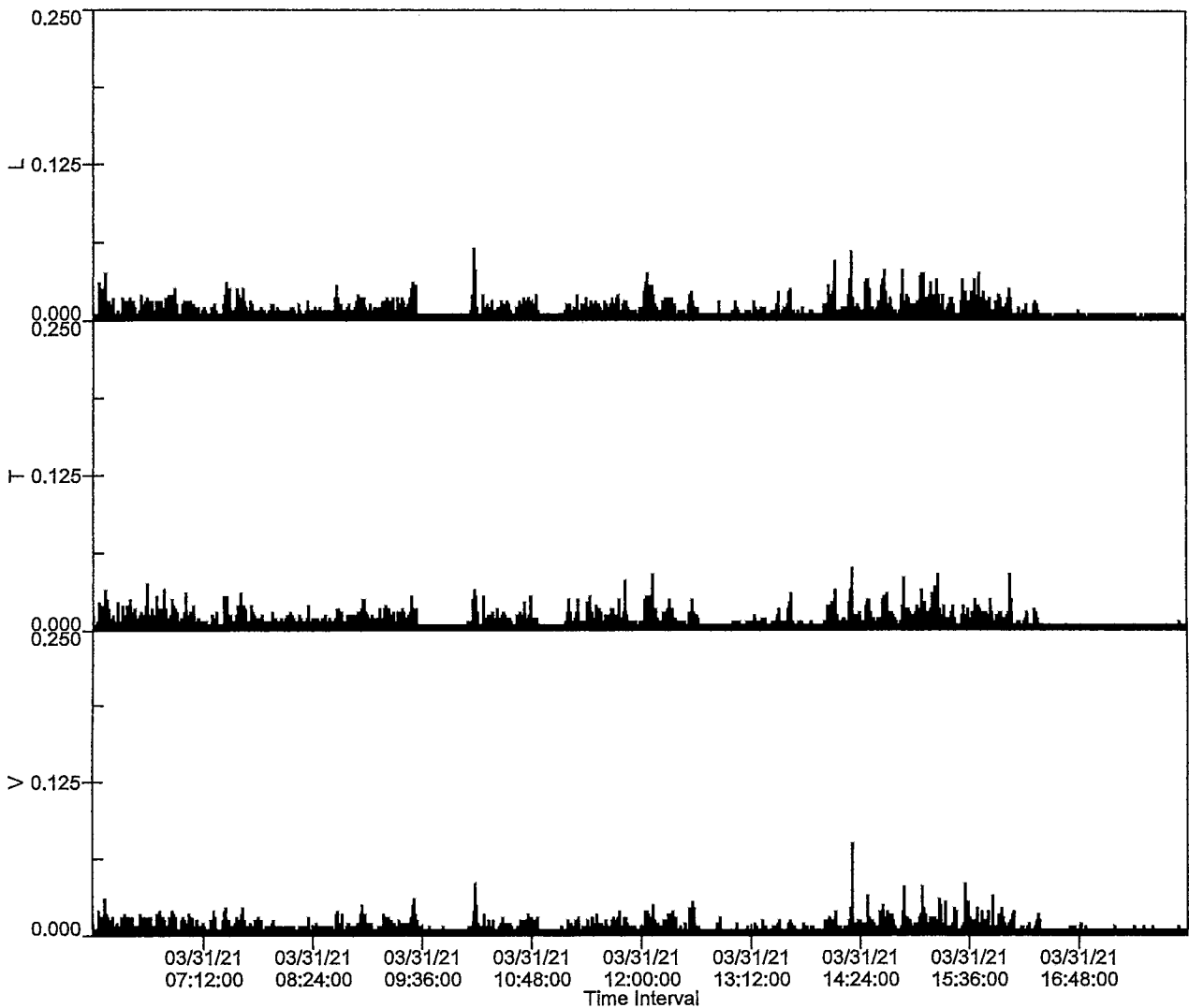
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 47

Record Max PPV: 0.075 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/01/2021 **Time:** 06:01:00
Event: 48
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

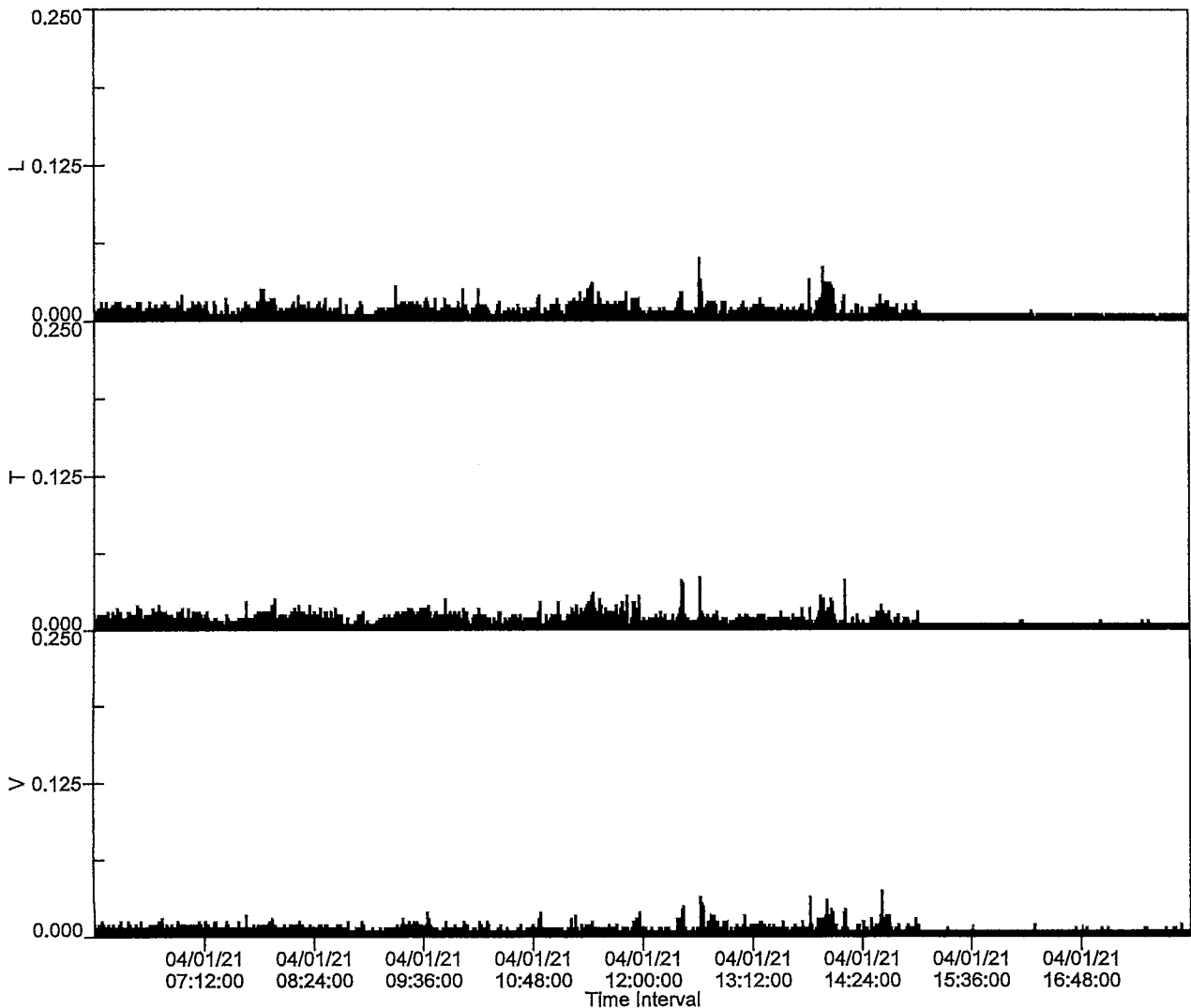
	L	T	V
PPV (in/s)	0.050	0.043	0.038
FREQ (Hz)	18.5	15.6	10.2
Peak Air Pressure: 79 db			
Recording Time: 718 minutes			
Sample Size: 1440			
Interval Size: 60 seconds			

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: 48

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



SN: 3817 v3.22
Date: 04/02/2021 **Time:** 06:01:00
Event: 49
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

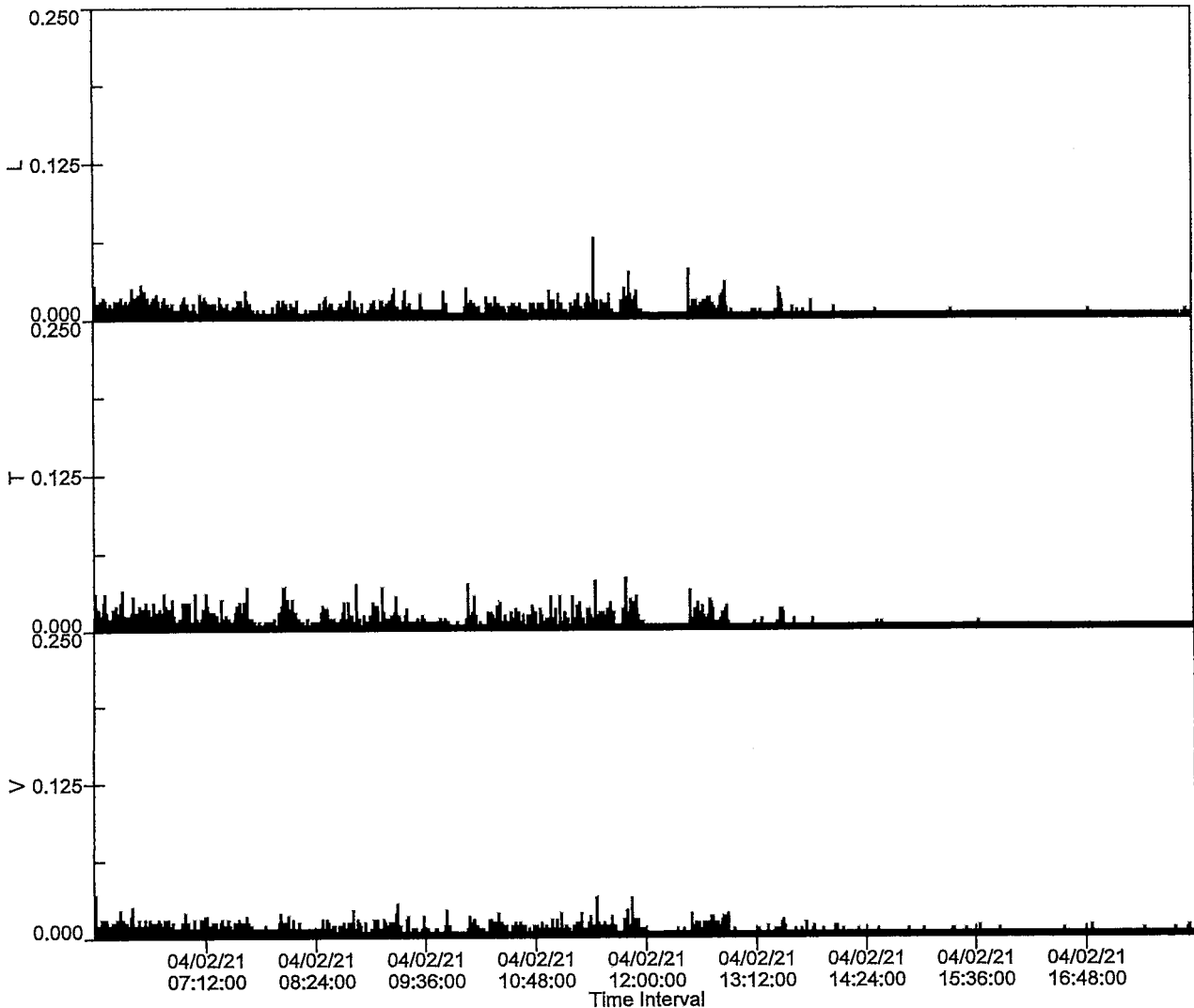
	L	T	V
PPV (in/s)	0.065	0.043	0.035
FREQ (Hz)	13.5	13.2	12.8
Peak Air Pressure:	79 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 3817 Event: 49

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



SN: 3817 v3.22
Date: 04/03/2021 **Time:** 06:01:00
Event: 50
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

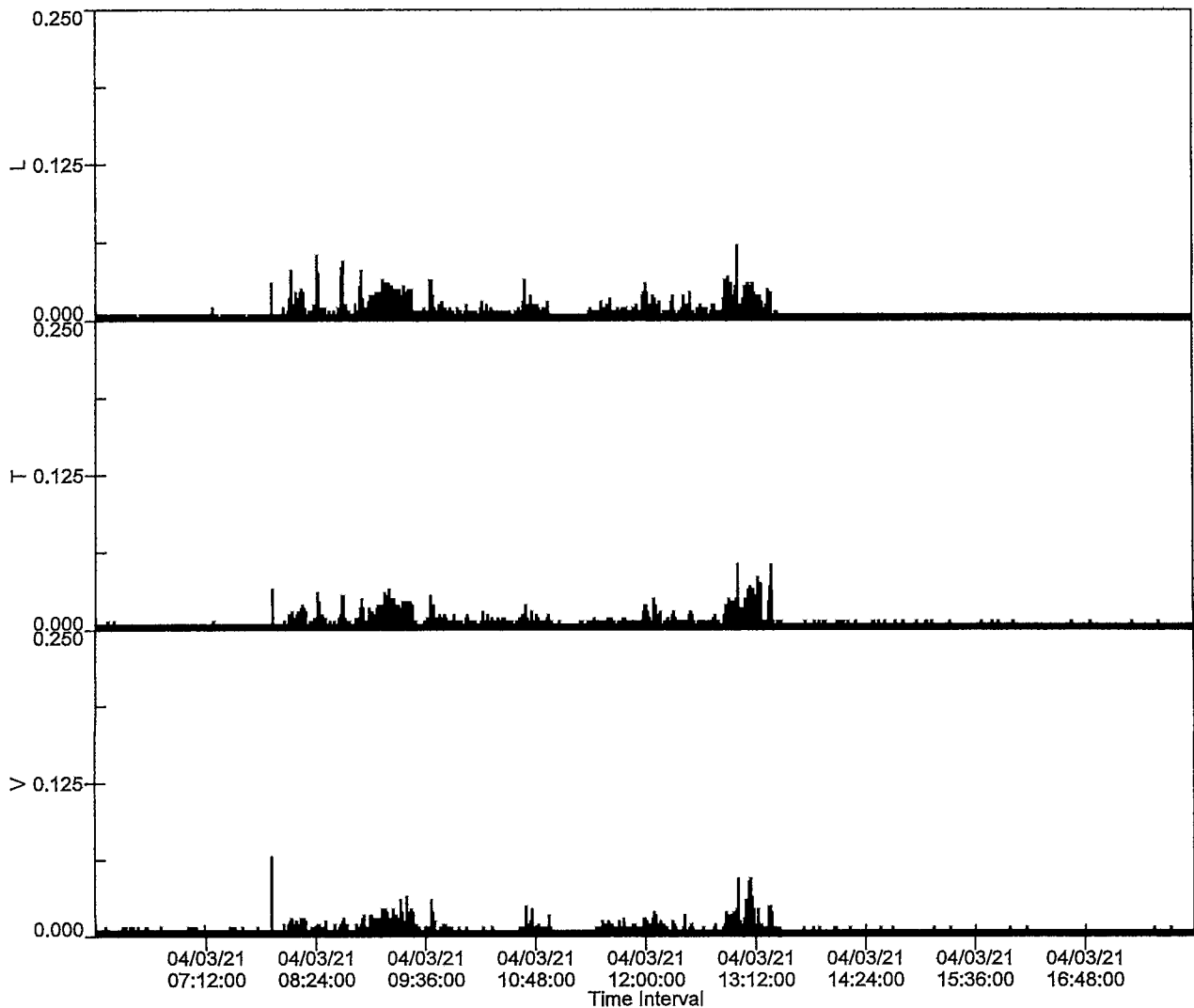
	L	T	V
PPV (in/s)	0.060	0.053	0.065
FREQ (Hz)	19.2	29.4	13.9
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 50

Record Max PPV: 0.065 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/04/2021 **Time:** 06:01:00
Event: 51
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	0.010	0.013
FREQ (Hz)	14.7	2.5	16.1
Peak Air Pressure:	78 db		

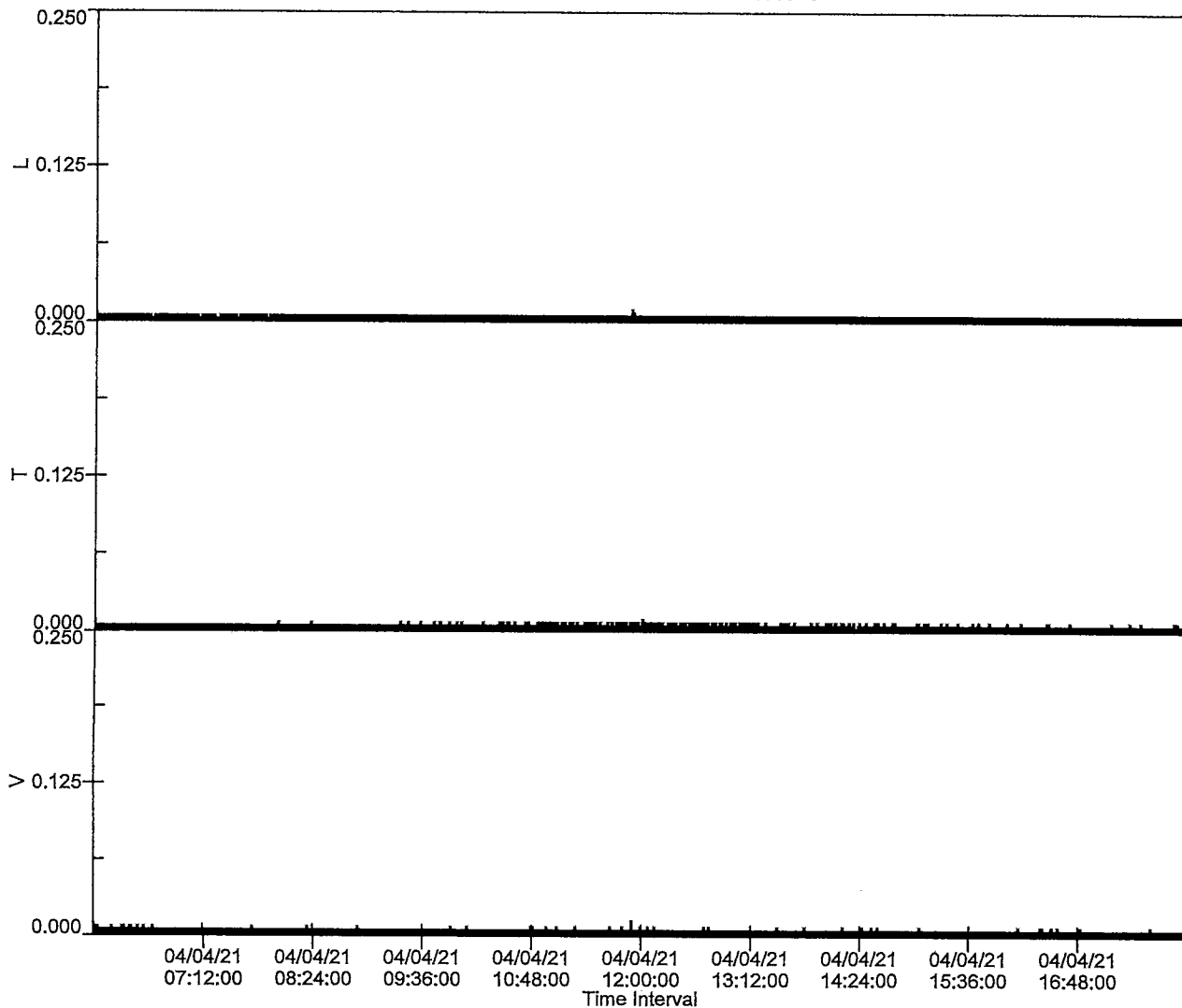
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 51

Record Max PPV: 0.013 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/05/2021 **Time:** 06:01:00
Event: 52
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

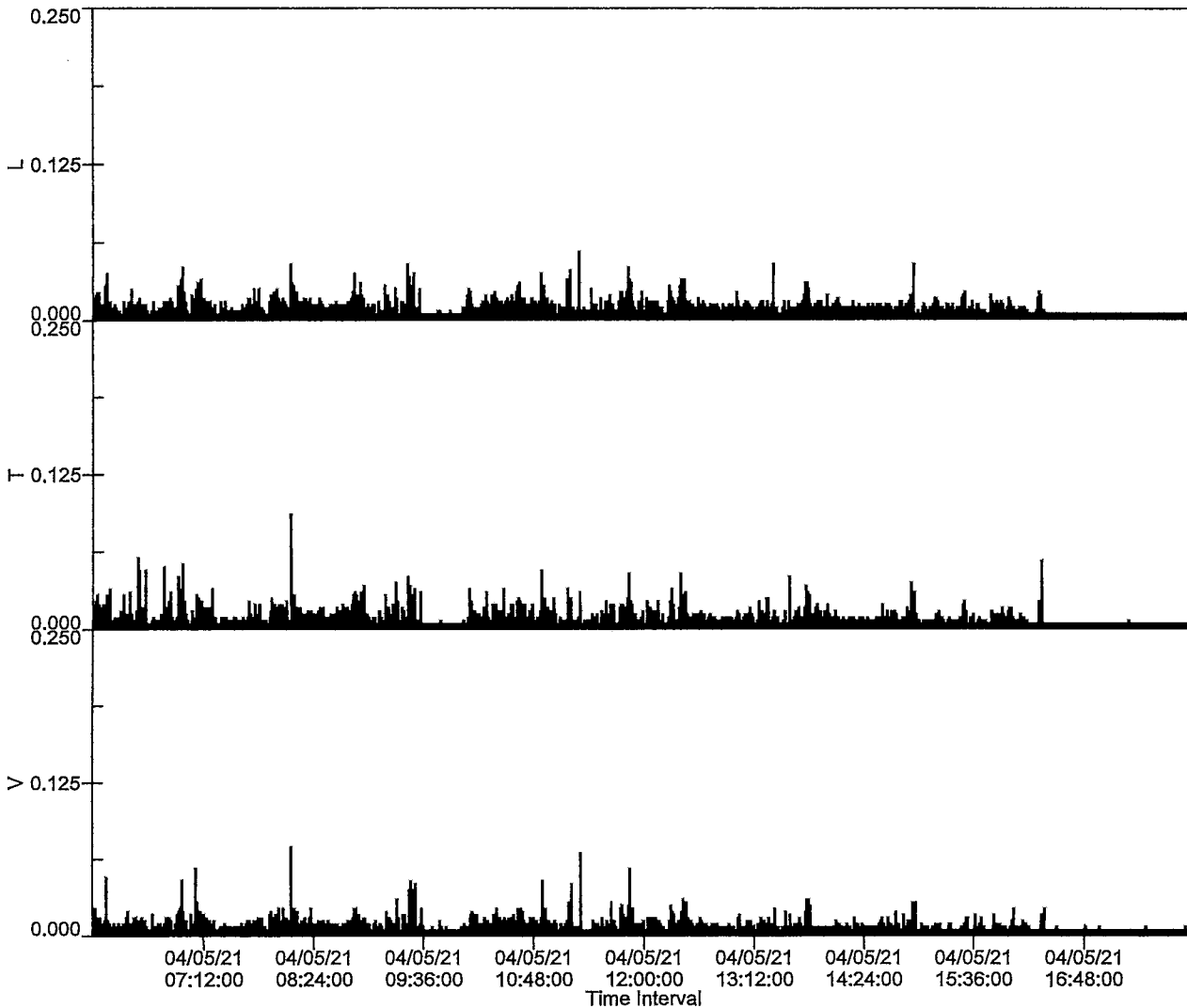
	L	T	V
PPV (in/s)	0.055	0.093	0.073
FREQ (Hz)	20.8	15.6	15.2
Peak Air Pressure: 78 db			
Recording Time: 718 minutes			
Sample Size: 1440			
Interval Size: 60 seconds			

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: 52

Record Max PPV: 0.093 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/06/2021 Time: 06:01:00
Event: 53
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

Continuous Monitor Recording

Summary Data

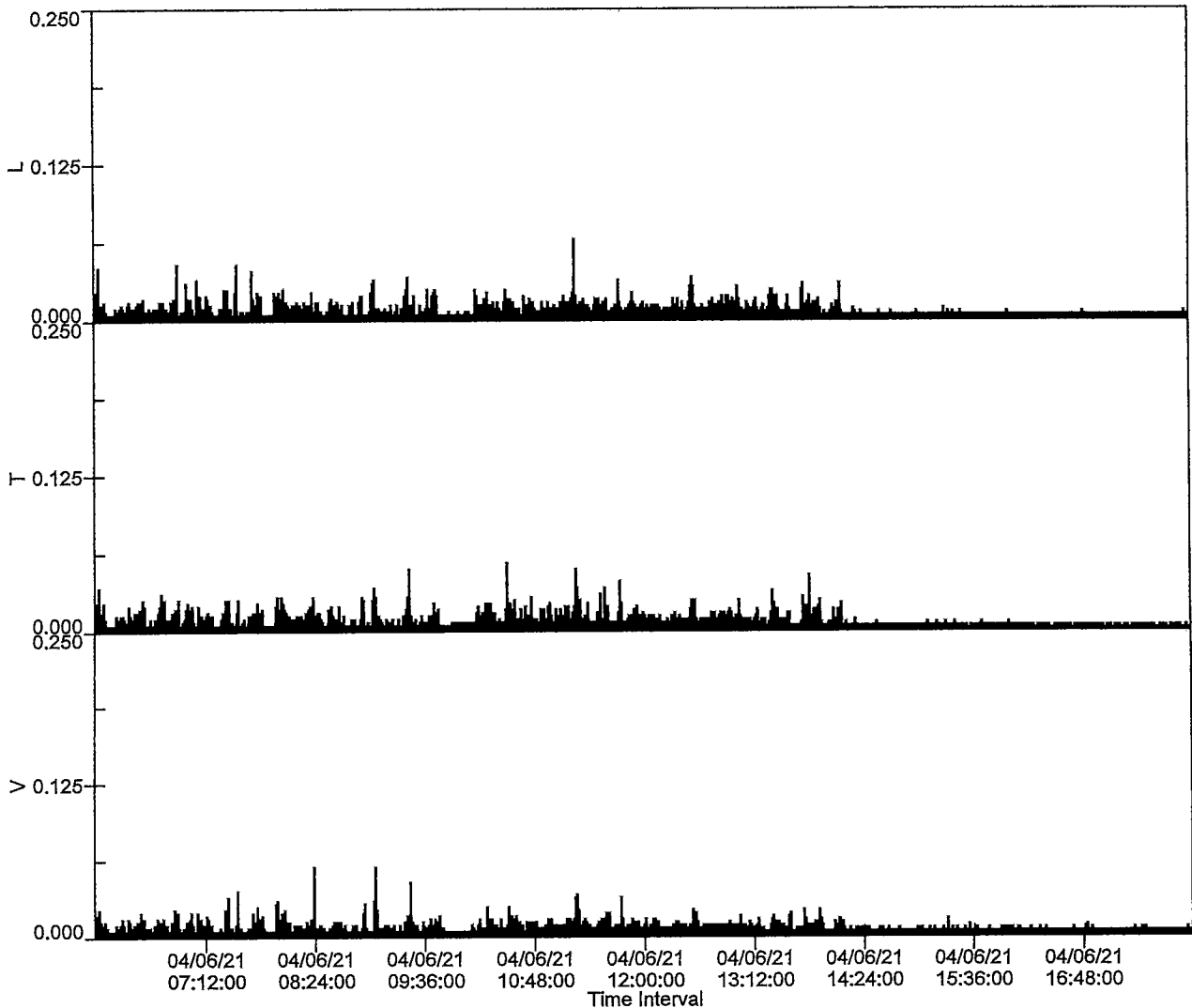
	L	T	V
PPV (in/s)	0.065	0.055	0.058
FREQ (Hz)	14.3	23.8	14.7
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 53

Record Max PPV: 0.065 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/07/2021 **Time:** 06:01:00
Event: 54
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

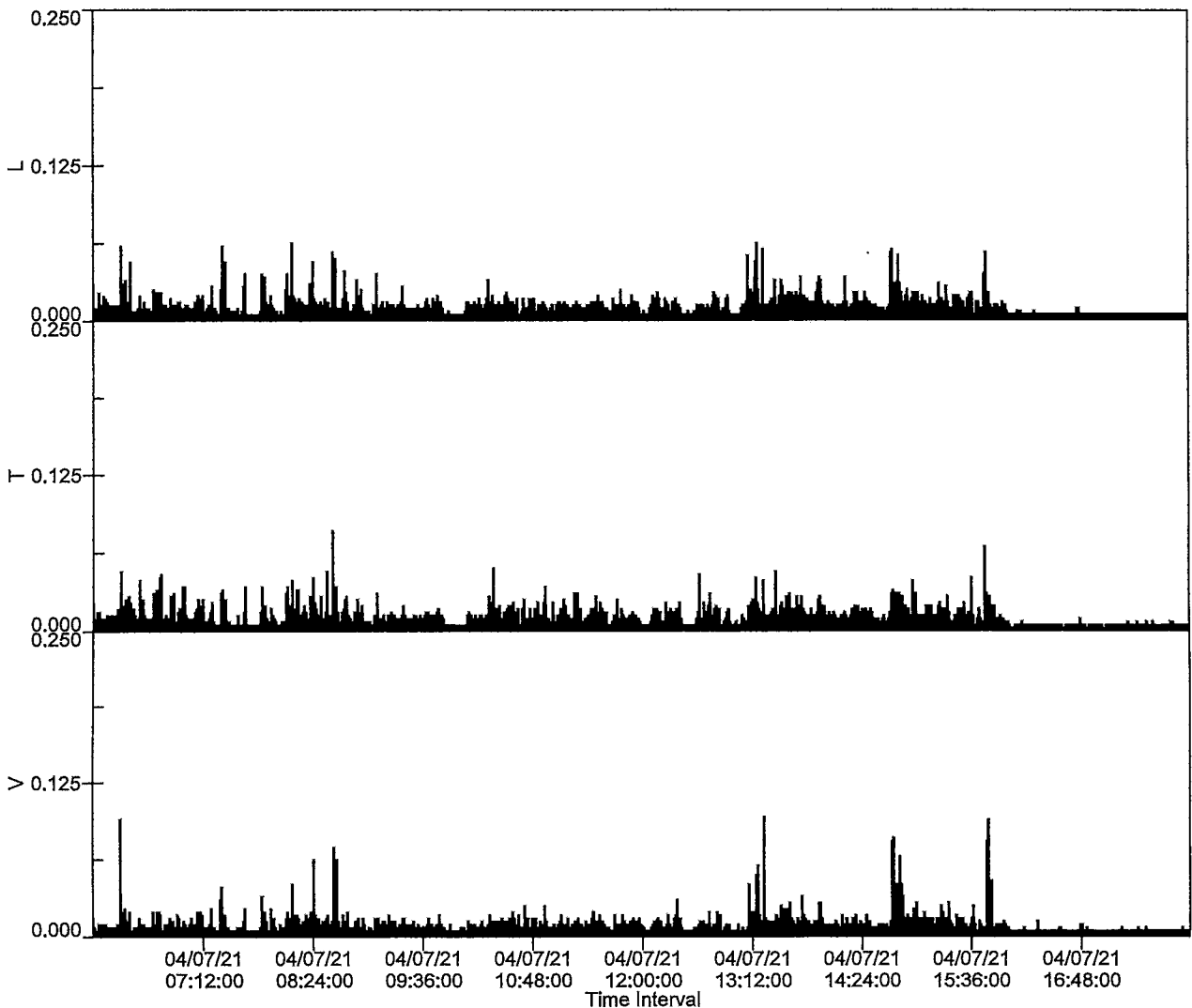
	L	T	V
PPV (in/s)	0.063	0.080	0.098
FREQ (Hz)	13.2	15.2	31.3
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 54

Record Max PPV: 0.098 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/08/2021 **Time:** 06:01:00
Event: 55
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	0.038	0.045
FREQ (Hz)	18.5	10.0	10.0
Peak Air Pressure:	78 db		

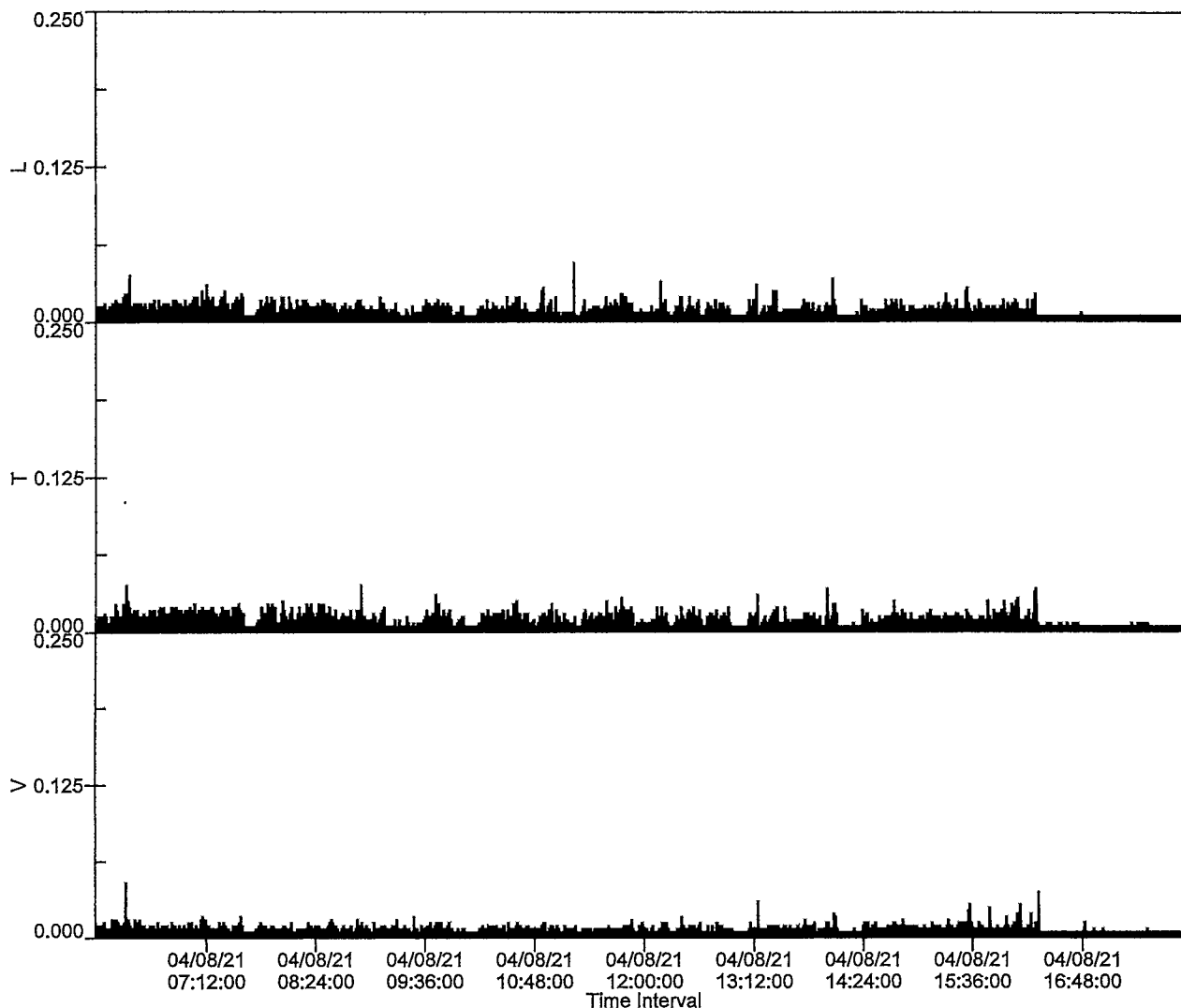
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 55

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



SN: 3817 v3.22
Date: 04/09/2021 **Time:** 06:01:00
Event: 56
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

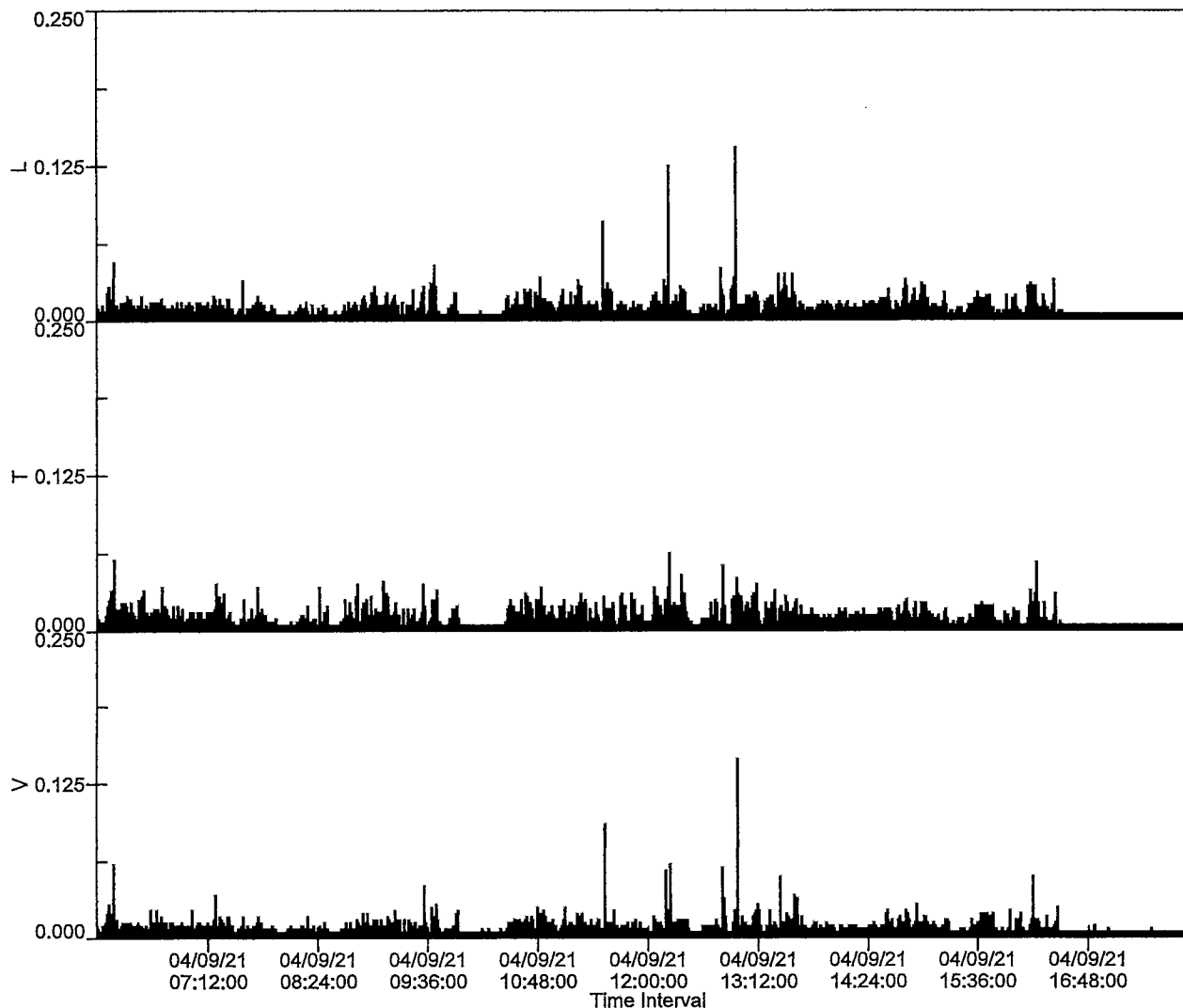
	L	T	V
PPV (in/s)	0.140	0.063	0.145
FREQ (Hz)	20.0	25.0	17.2
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 56

Record Max PPV: 0.145 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/10/2021 **Time:** 06:01:00
Event: 57
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

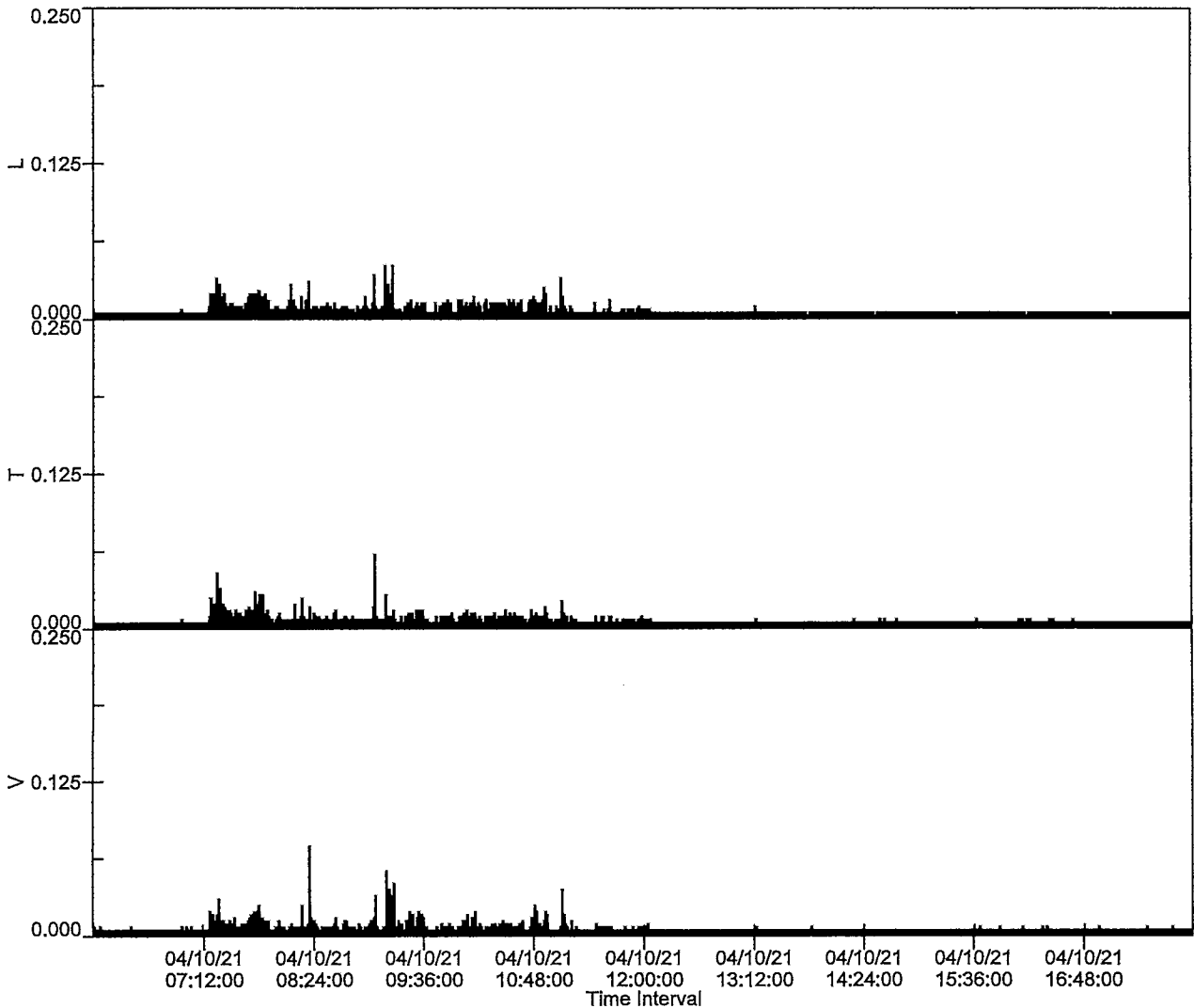
	L	T	V
PPV (in/s)	0.043	0.060	0.073
FREQ (Hz)	15.6	16.7	18.5
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 57

Record Max PPV: 0.073 in/s Record Max DB: 78 db



SN: 3817 v3.22
Date: 04/11/2021 **Time:** 06:01:00
Event: 58
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

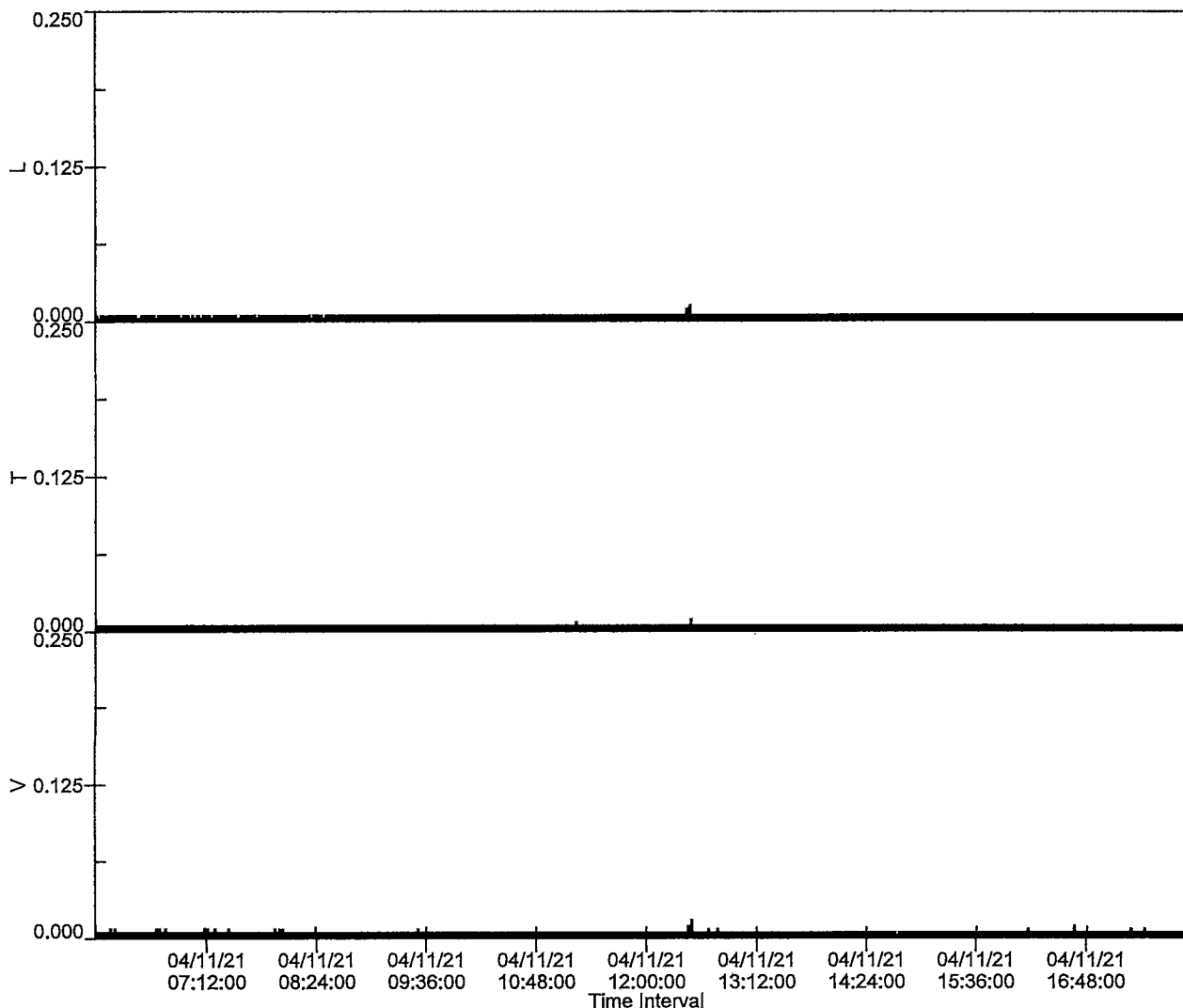
	L	T	V
PPV (in/s)	0.013	0.010	0.015
FREQ (Hz)	38.5	3.8	35.7
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 58

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



SN: 3817 v3.22
Date: 04/12/2021 **Time:** 06:01:00
Event: 59
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 491 SKOKIE BLVD

**Continuous Monitor Recording
Summary Data**

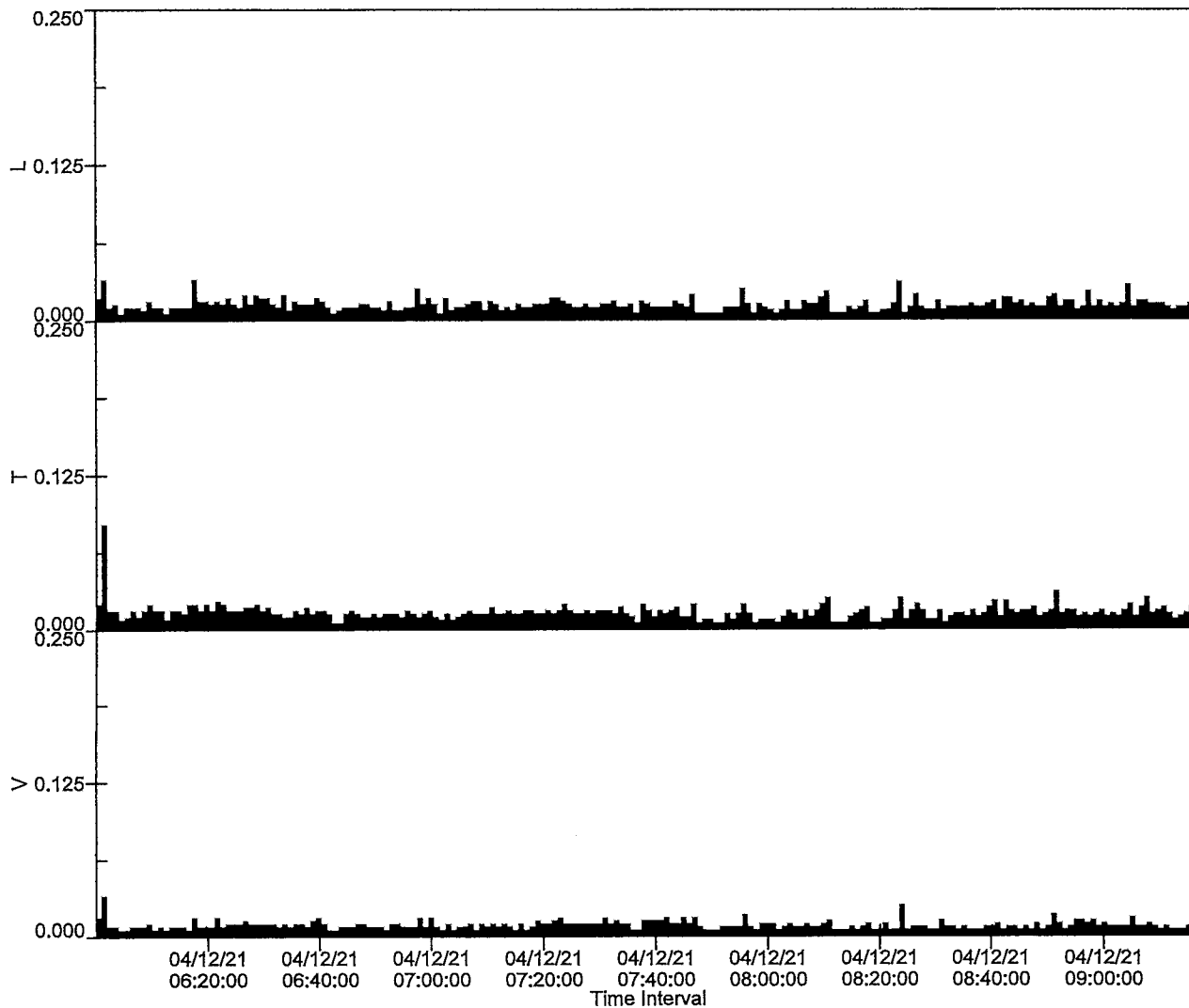
	L	T	V
PPV (in/s)	0.033	0.085	0.033
FREQ (Hz)	16.7	16.1	15.2
Peak Air Pressure:	84 db		
Recording Time:	196 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 59

Record Max PPV: 0.085 in/s Record Max DB: 84 db



SN: 3559 v2.75
Date: 03/29/2021 **Time:** 06:50:00
Event: 45
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

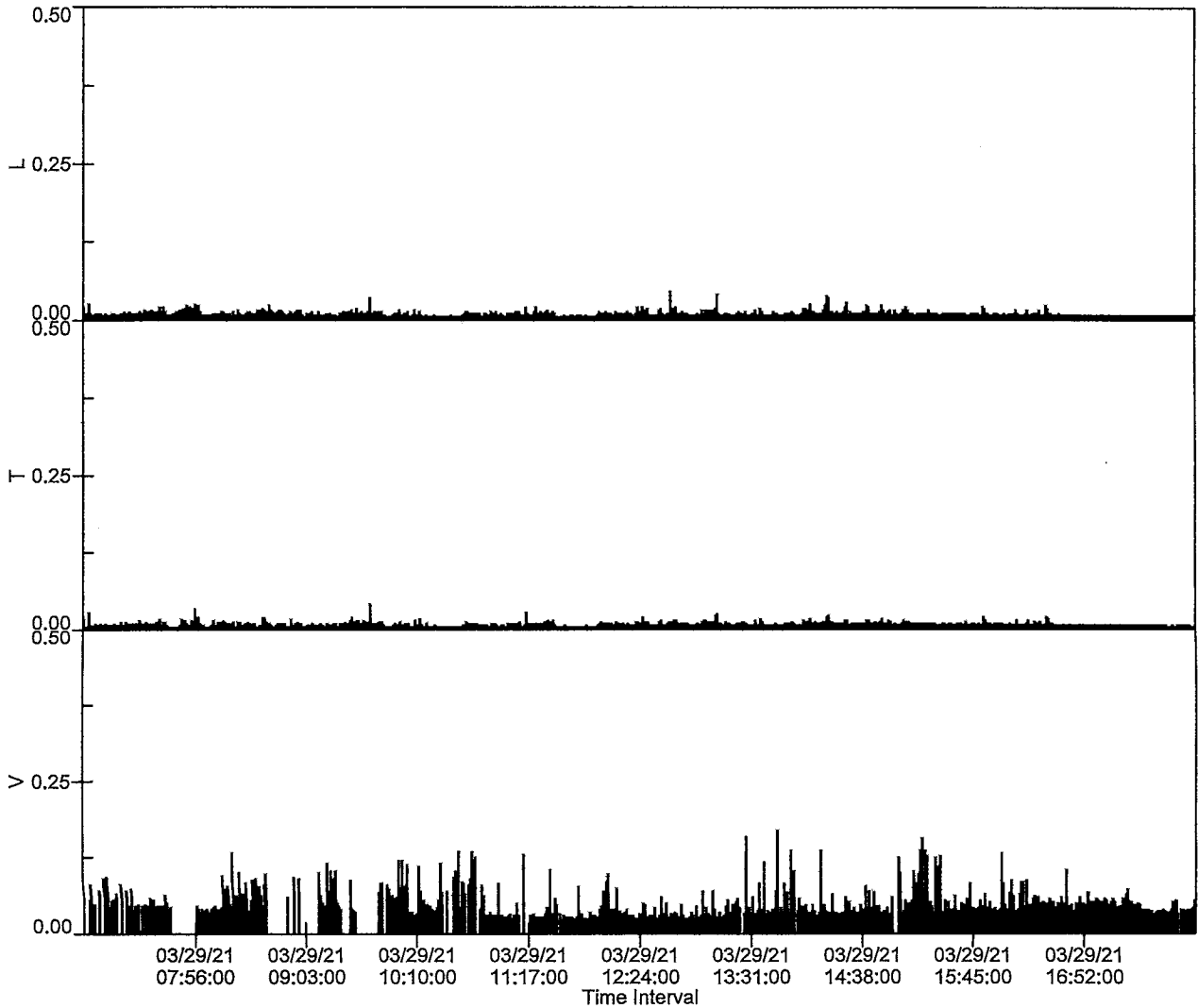
	L	T	V
PPV (in/s)	0.045	0.040	0.165
FREQ (Hz)	9.1	8.8	45.9
Peak Air Pressure:	97 db		
Recording Time:	669 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 45

Record Max PPV: 0.165 in/s Record Max DB: 97 db



SN: 3559 v2.75
Date: 03/30/2021 **Time:** 06:01:00
Event: 46
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	0.043	0.263
FREQ (Hz)	9.4	22.7	45.5
Peak Air Pressure:	94 db		

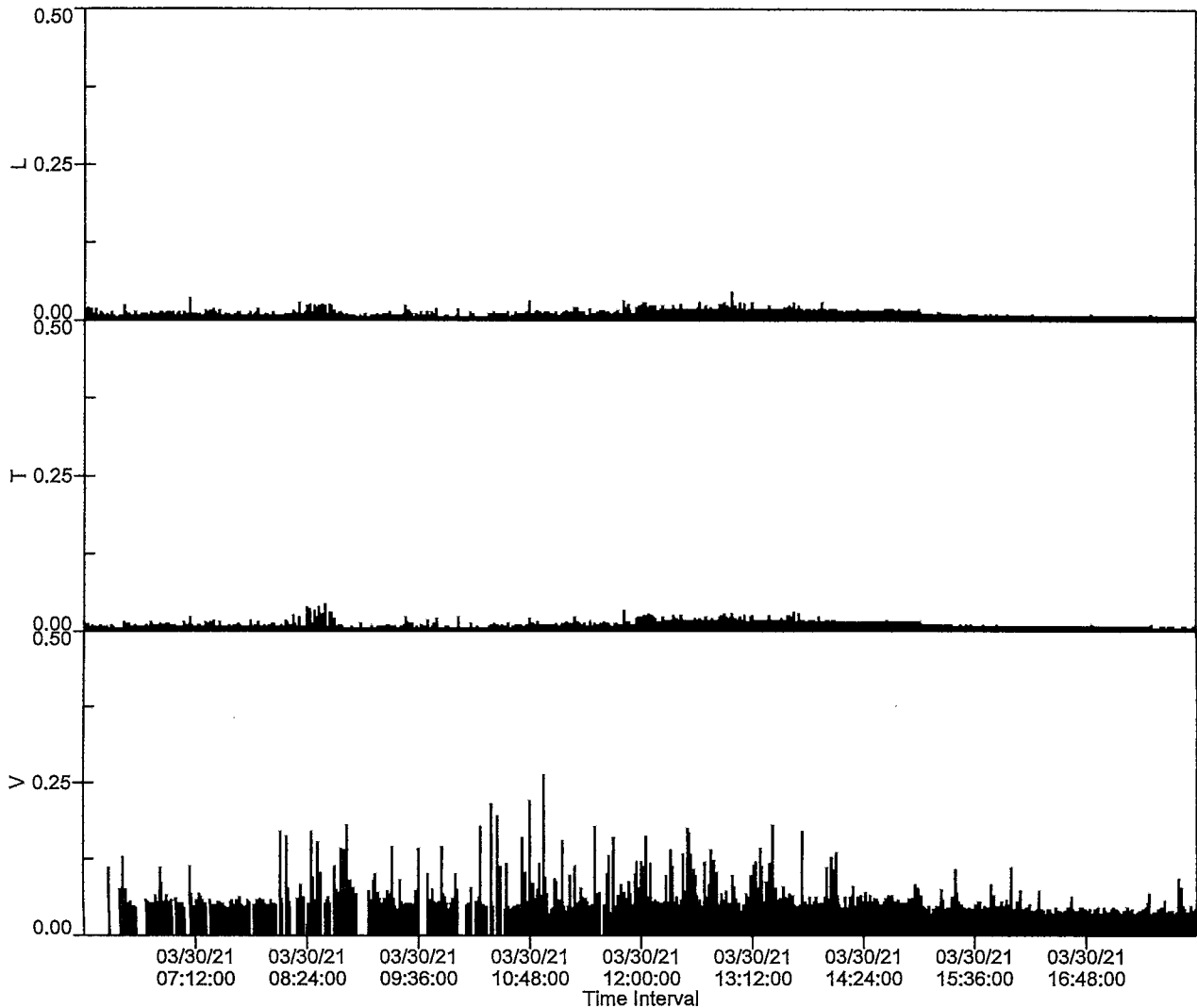
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 46

Record Max PPV: 0.263 in/s Record Max DB: 94 db



SN: 3559 v2.75
Date: 03/31/2021 **Time:** 06:01:00
Event: 47
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

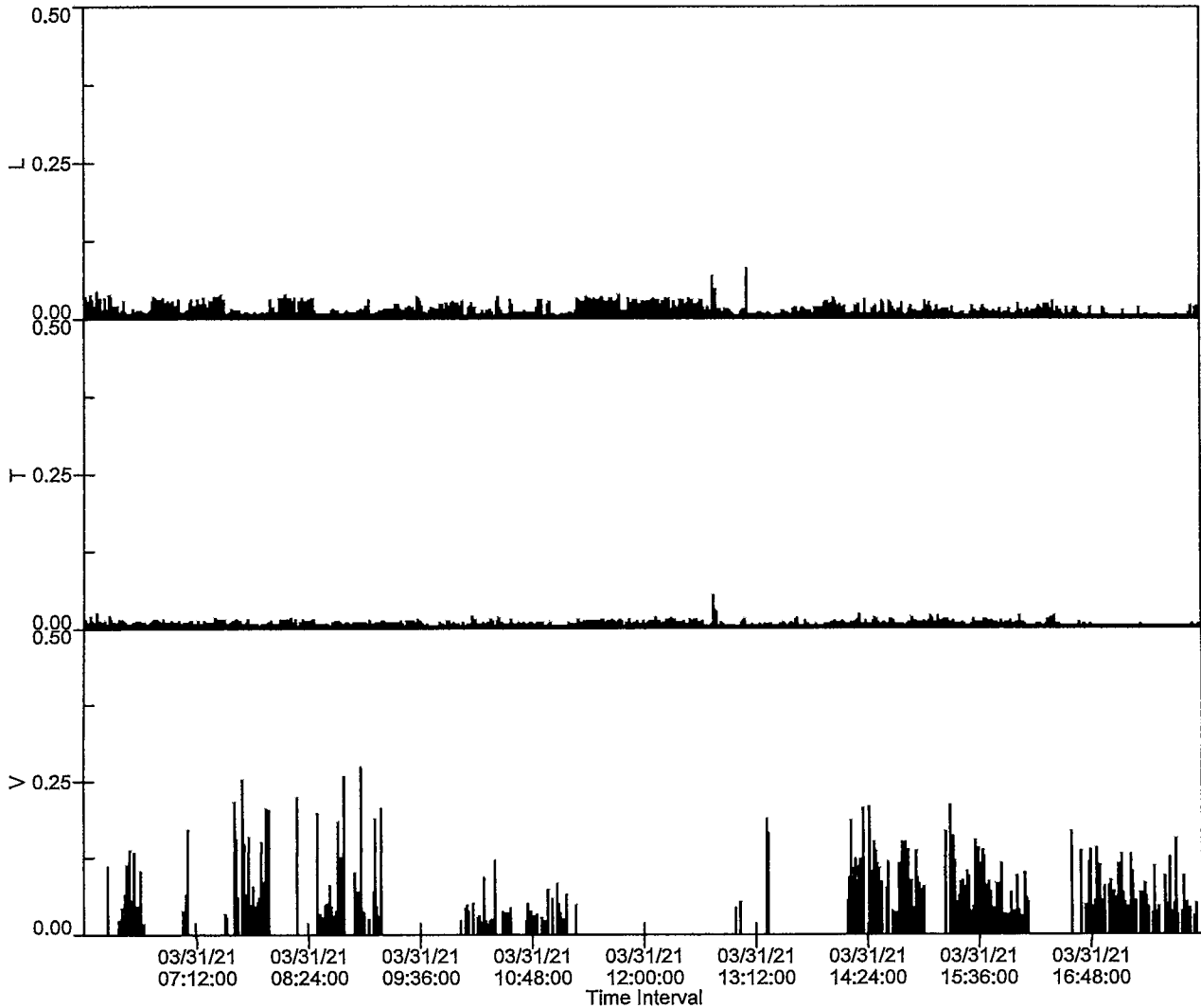
	L	T	V
PPV (in/s)	0.080	0.055	0.278
FREQ (Hz)	23.7	16.7	67.3
Peak Air Pressure:	120 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 47

Record Max PPV: 0.278 in/s Record Max DB: 120 db



SN: 3559 v2.75
Date: 04/01/2021 Time: 06:01:00
Event: 48
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording
Summary Data

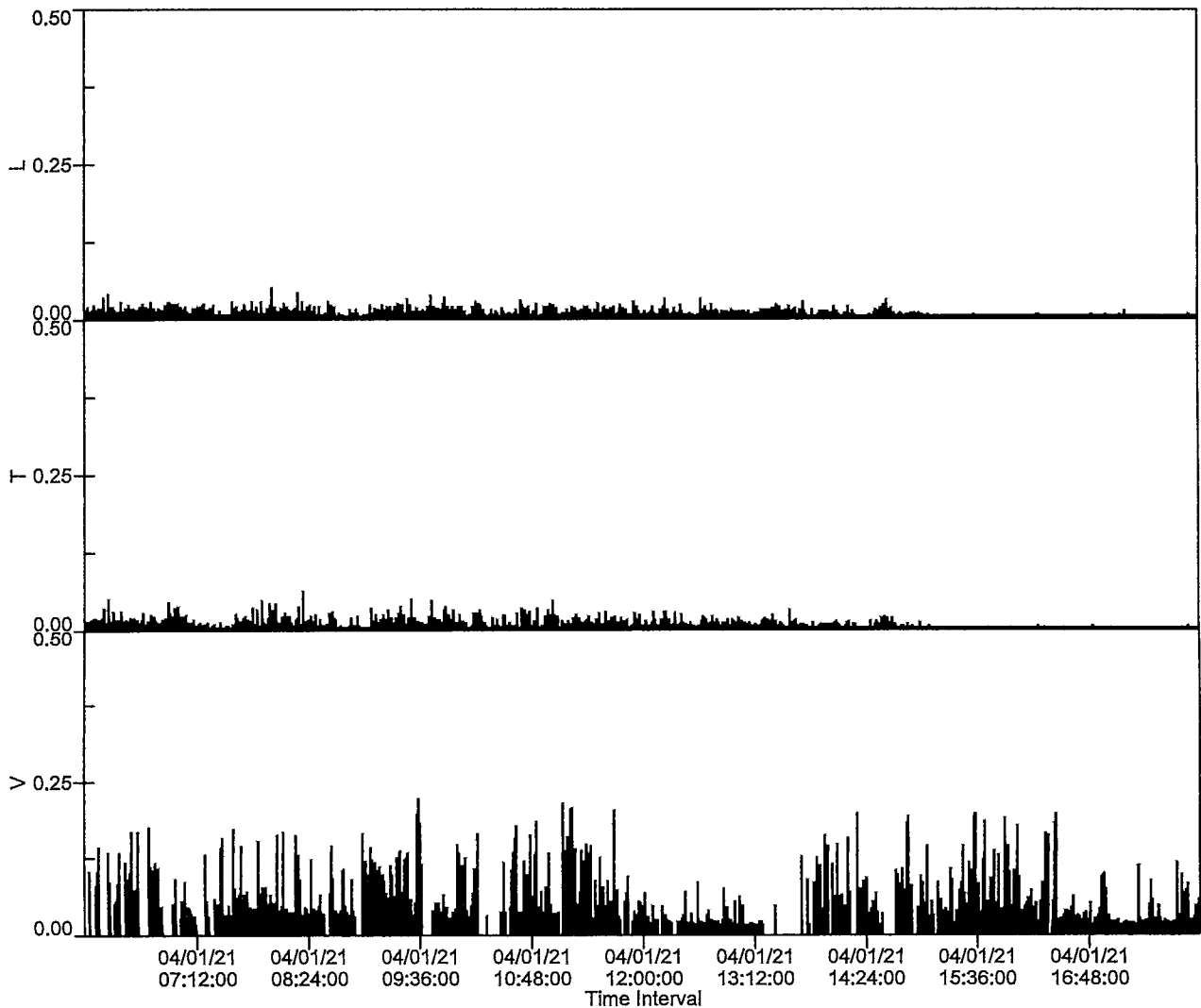
	L	T	V
PPV (in/s)	0.050	0.063	0.242
FREQ (Hz)	12.2	33.3	34.6
Peak Air Pressure:	101 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 48

Record Max PPV: 0.242 in/s Record Max DB: 101 db



SN: 3559 v2.75
Date: 04/02/2021 Time: 06:01:00
Event: 49
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording
Summary Data

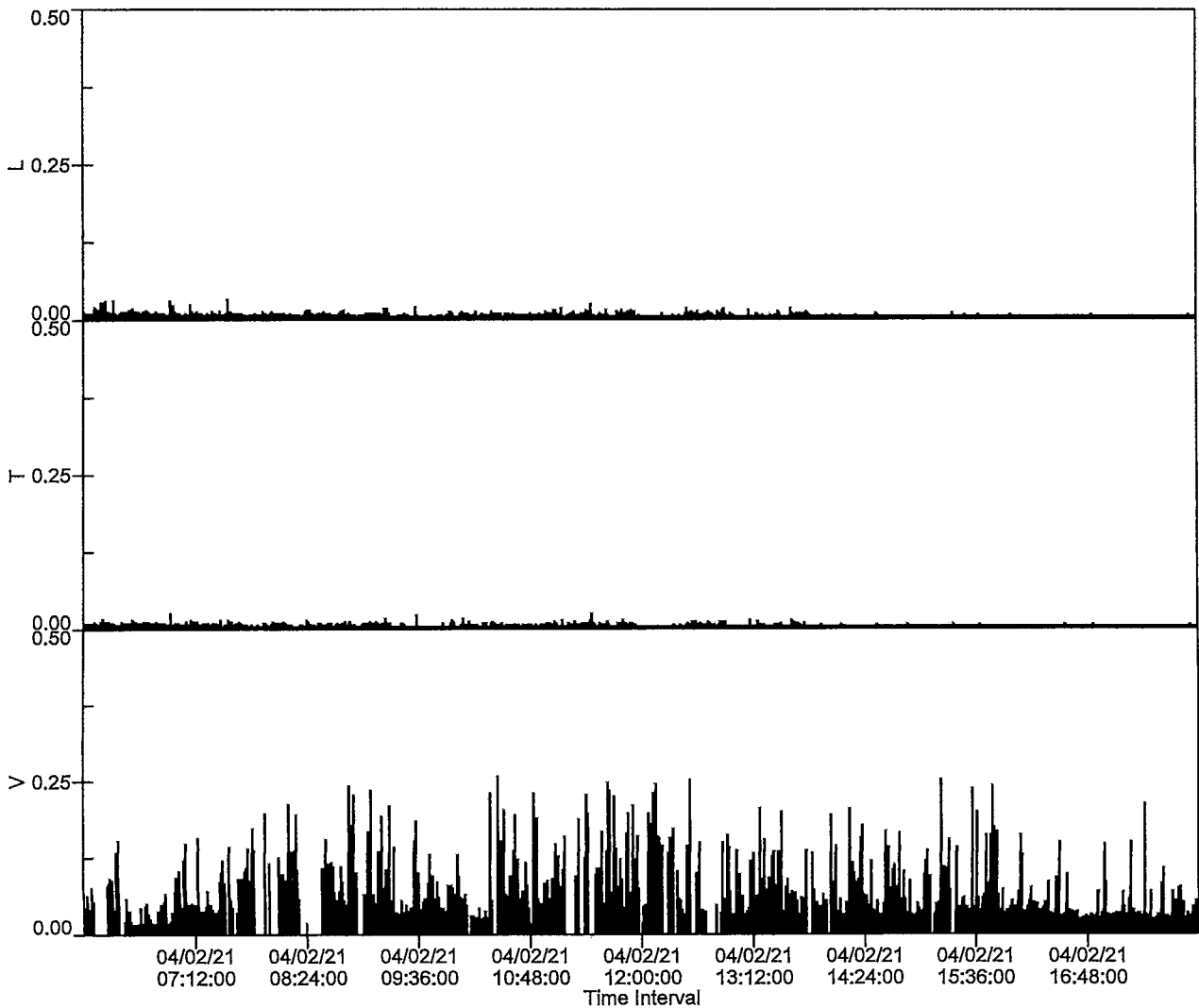
	L	T	V
PPV (in/s)	0.033	0.025	0.258
FREQ (Hz)	15.2	29.4	65.7
Peak Air Pressure:	104 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 49

Record Max PPV: 0.258 in/s Record Max DB: 104 db



SN: 3559 v2.75
Date: 04/03/2021 **Time:** 06:01:00
Event: 50
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

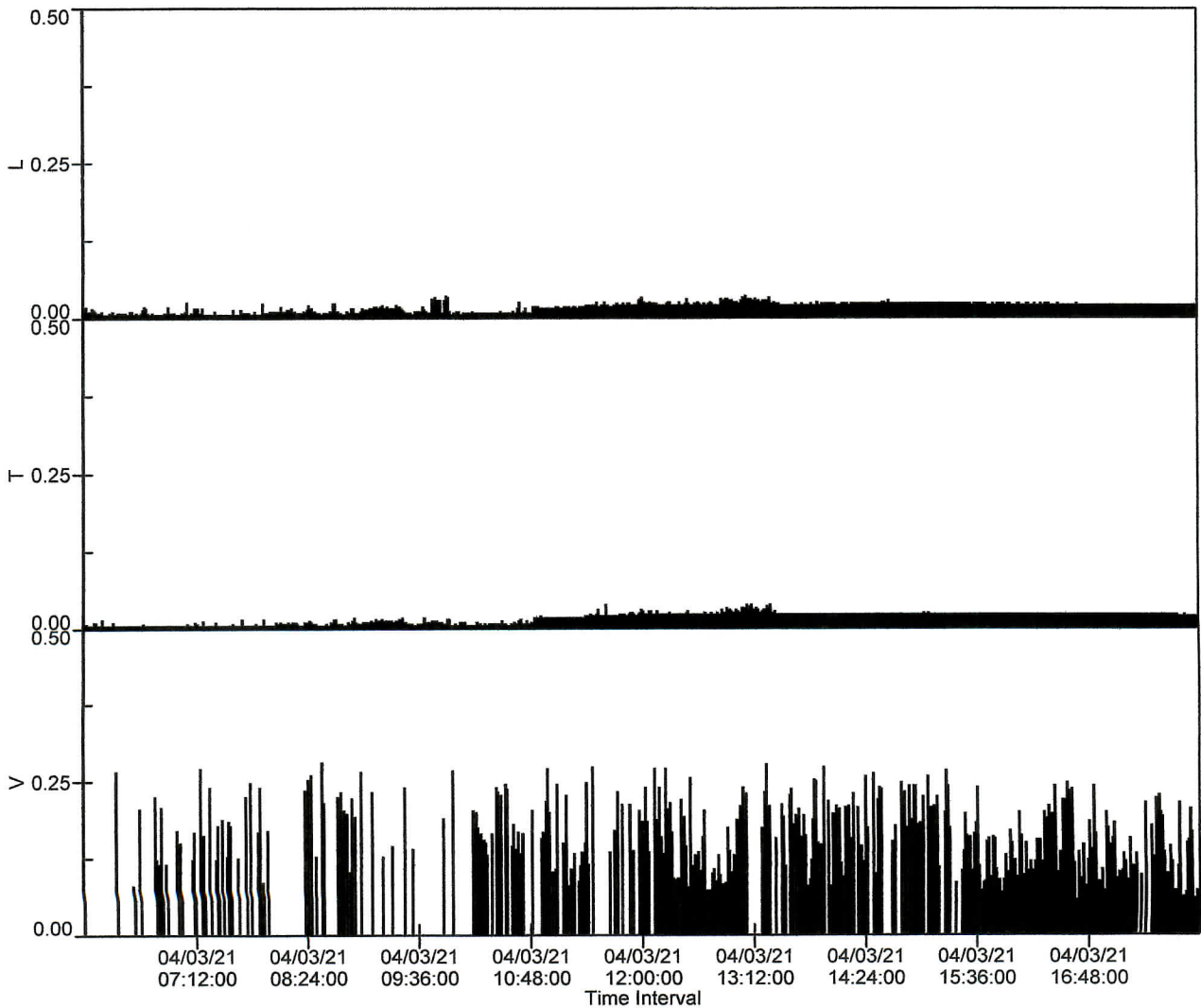
	L	T	V
PPV (in/s)	0.035	0.038	0.274
FREQ (Hz)	21.6	20.8	51.5
Peak Air Pressure: 105 db			
Recording Time: 718 minutes			
Sample Size: 1440			
Interval Size: 60 seconds			

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: 50

Record Max PPV: 0.274 in/s Record Max DB: 105 db



SN: 3559 v2.75
Date: 04/04/2021 Time: 06:01:00
Event: 51
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

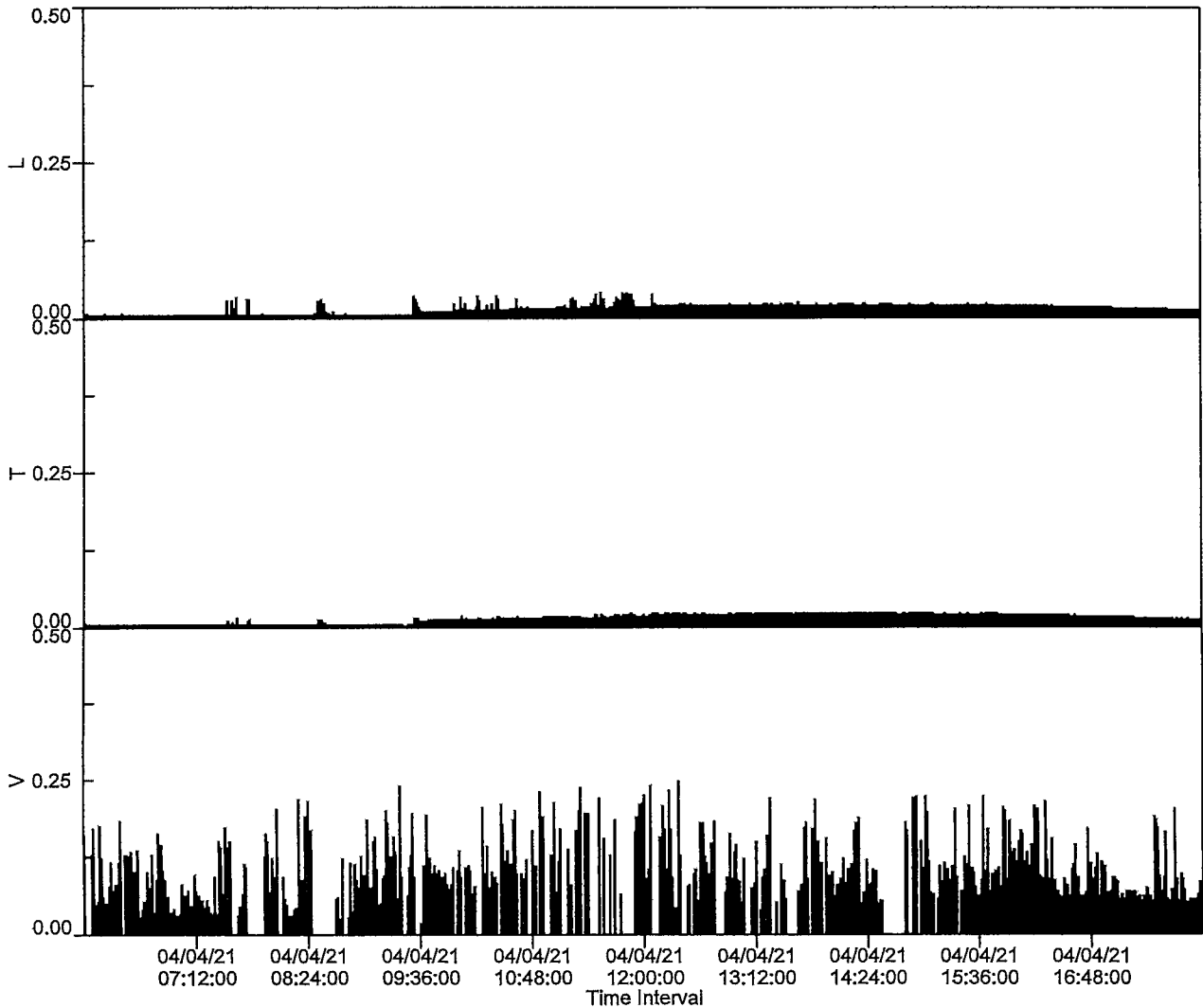
	L	T	V
PPV (in/s)	0.040	0.023	0.252
FREQ (Hz)	31.0	250.0	63.3
Peak Air Pressure:	104 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 51

Record Max PPV: 0.252 in/s Record Max DB: 104 db



SN: 3559 v2.75
Date: 04/05/2021 **Time:** 06:01:00
Event: 52
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

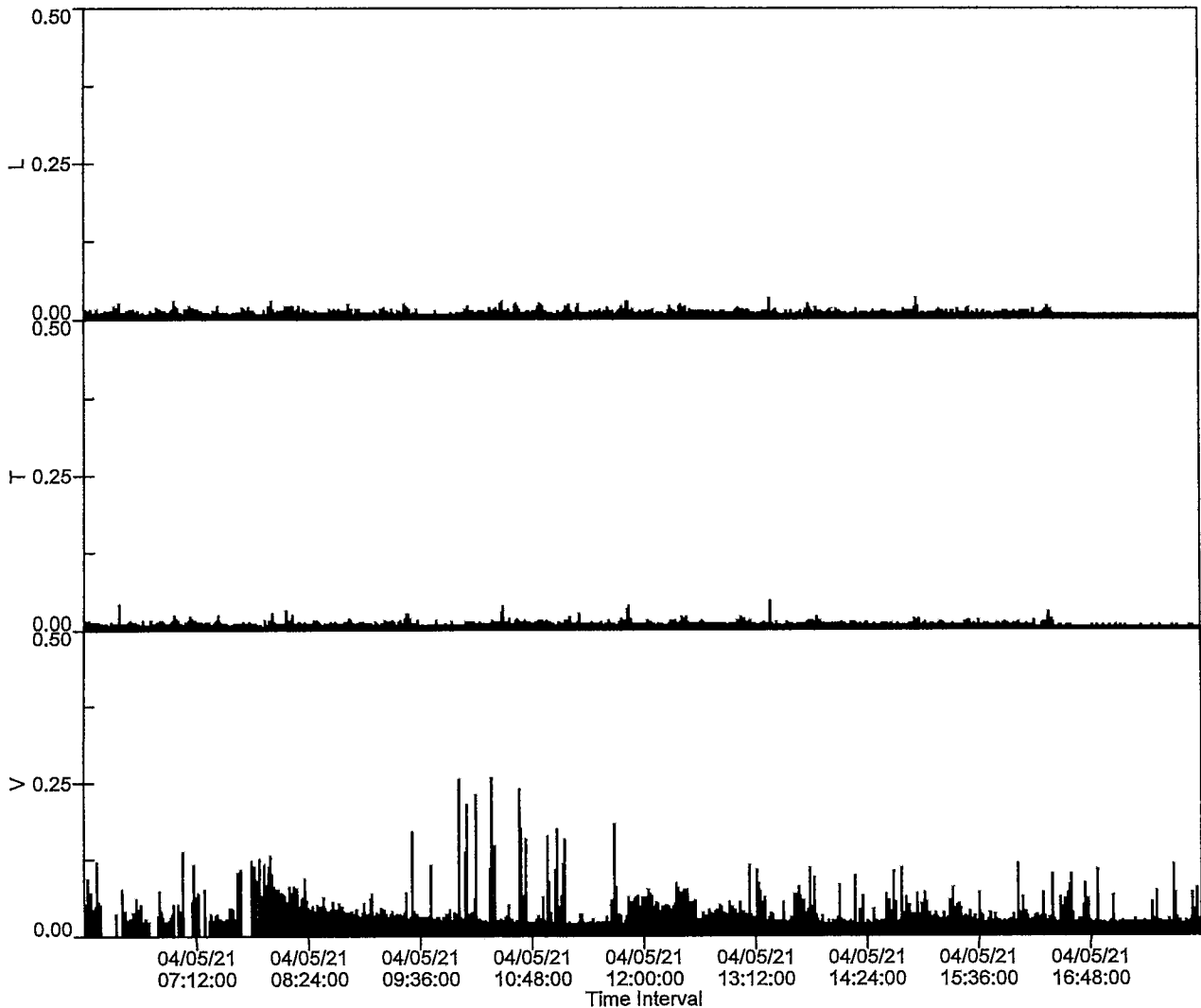
	L	T	V
PPV (in/s)	0.033	0.045	0.258
FREQ (Hz)	27.8	35.7	45.4
Peak Air Pressure:	89 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 52

Record Max PPV: 0.258 in/s Record Max DB: 89 db



SN: 3559 v2.75
Date: 04/06/2021 Time: 06:01:00
Event: 53
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

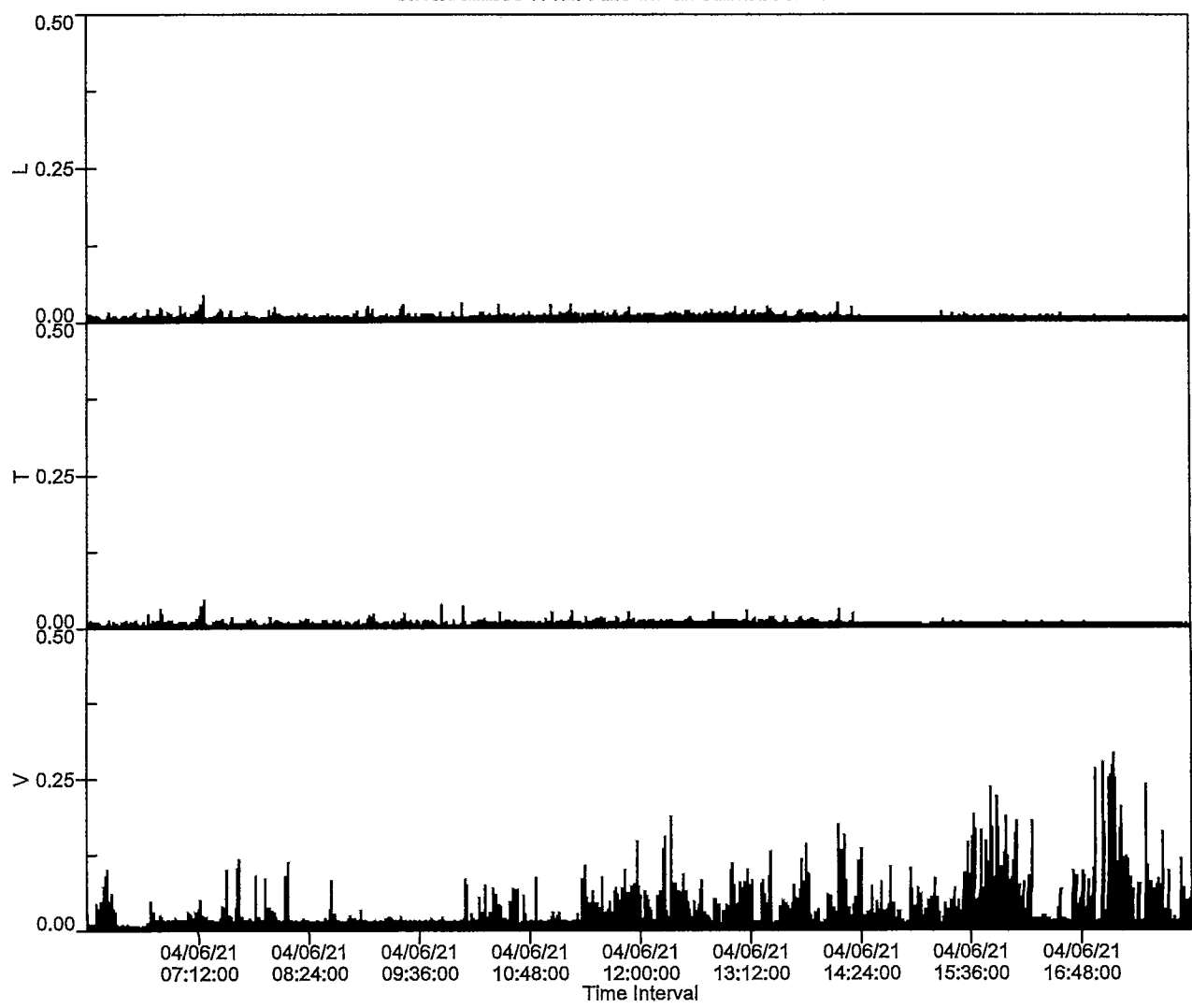
	L	T	V
PPV (in/s)	0.043	0.045	0.290
FREQ (Hz)	20.8	23.8	56.3
Peak Air Pressure:	81 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 53

Record Max PPV: 0.290 in/s Record Max DB: 81 db



SN: 3559 v2.75
Date: 04/07/2021 **Time:** 06:01:00
Event: 54
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

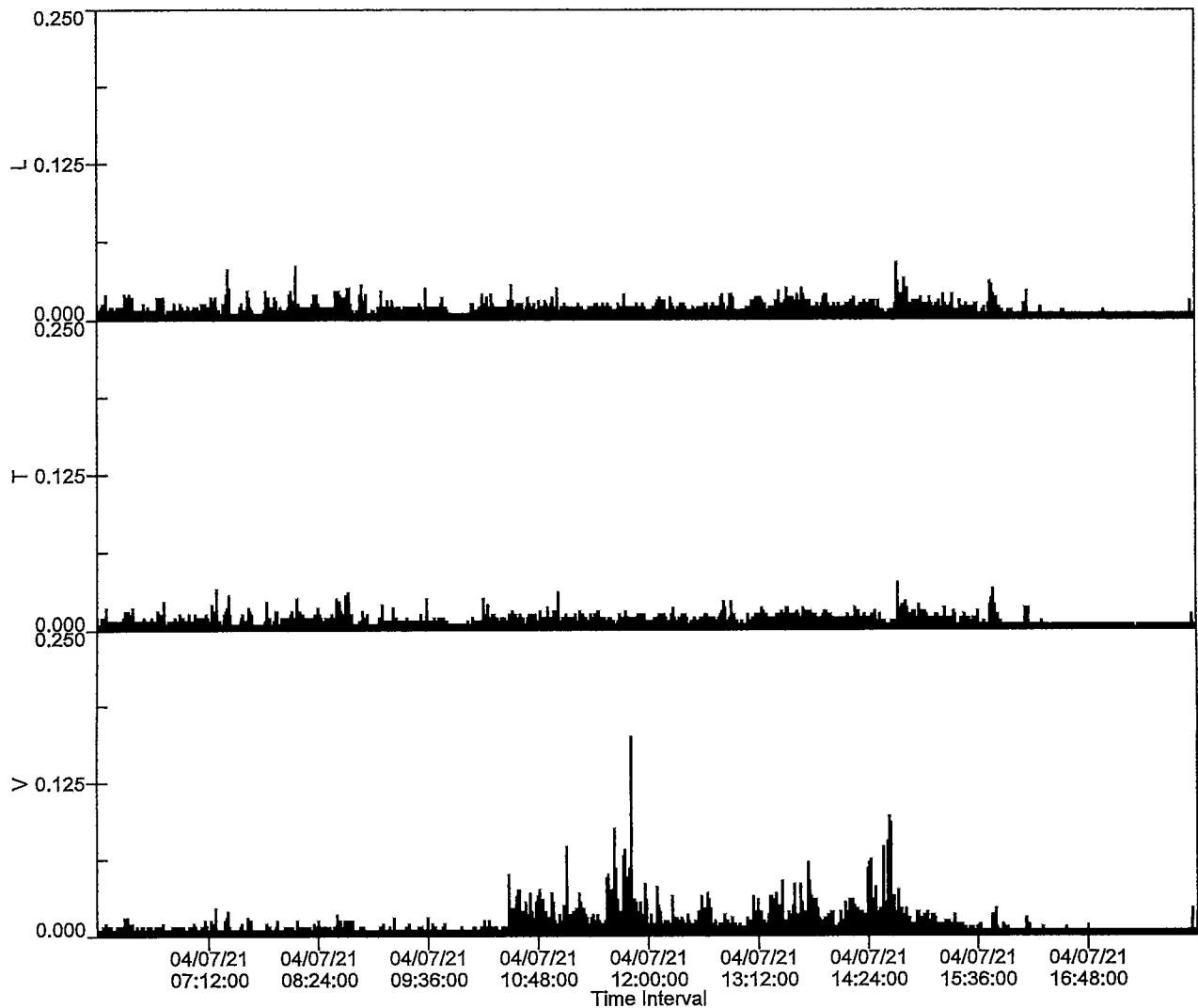
	L	T	V
PPV (in/s)	0.045	0.038	0.163
FREQ (Hz)	12.5	10.2	.7
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 54

Record Max PPV: 0.163 in/s Record Max DB: 78 db



SN: 3559 v2.75
Date: 04/08/2021 **Time:** 06:01:00
Event: 55
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

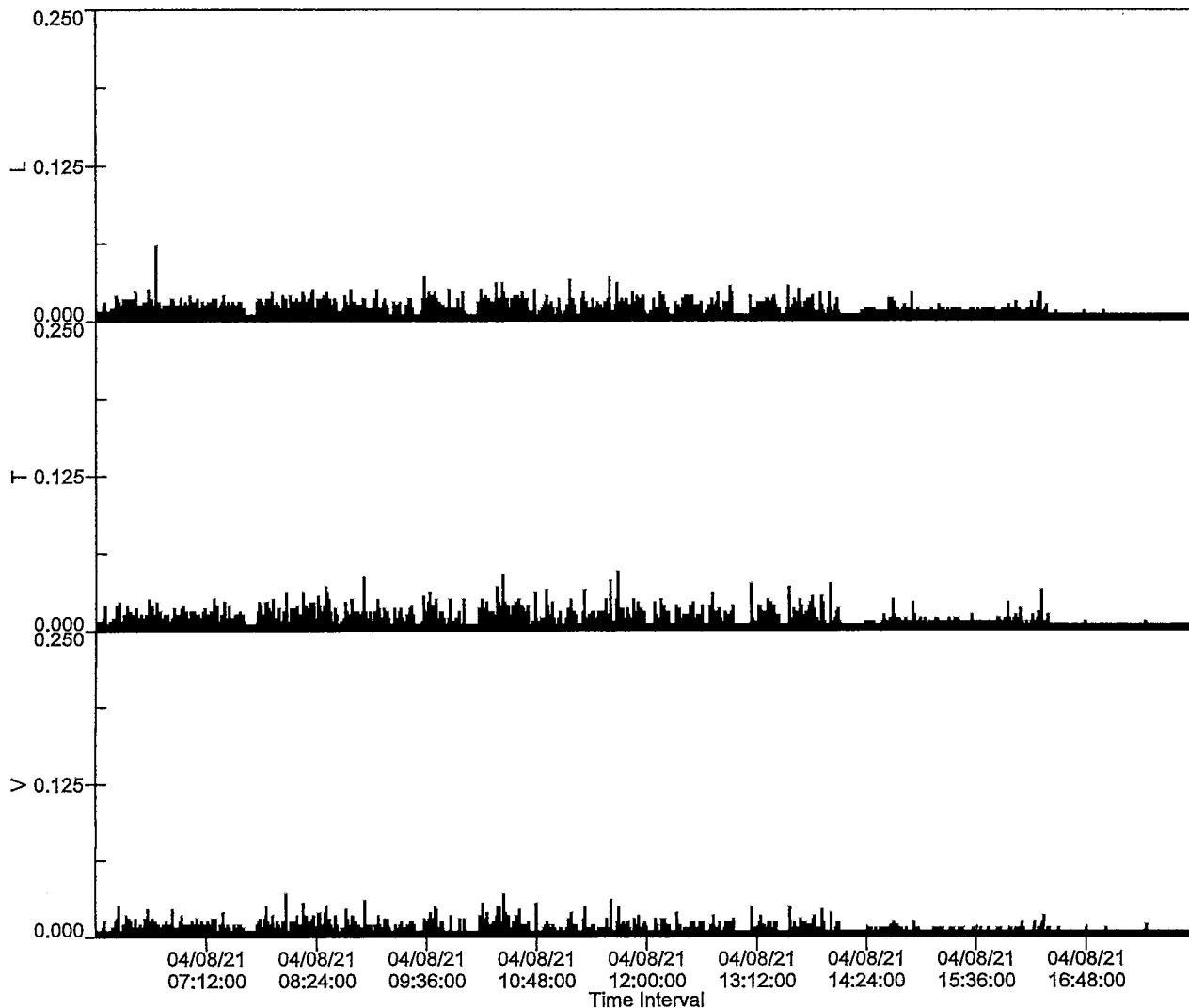
	L	T	V
PPV (in/s)	0.060	0.048	0.035
FREQ (Hz)	31.3	17.9	23.8
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 55

Record Max PPV: 0.060 in/s Record Max DB: 78 db



SN: 3559 v2.75
Date: 04/09/2021 **Time:** 06:01:00
Event: 56
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

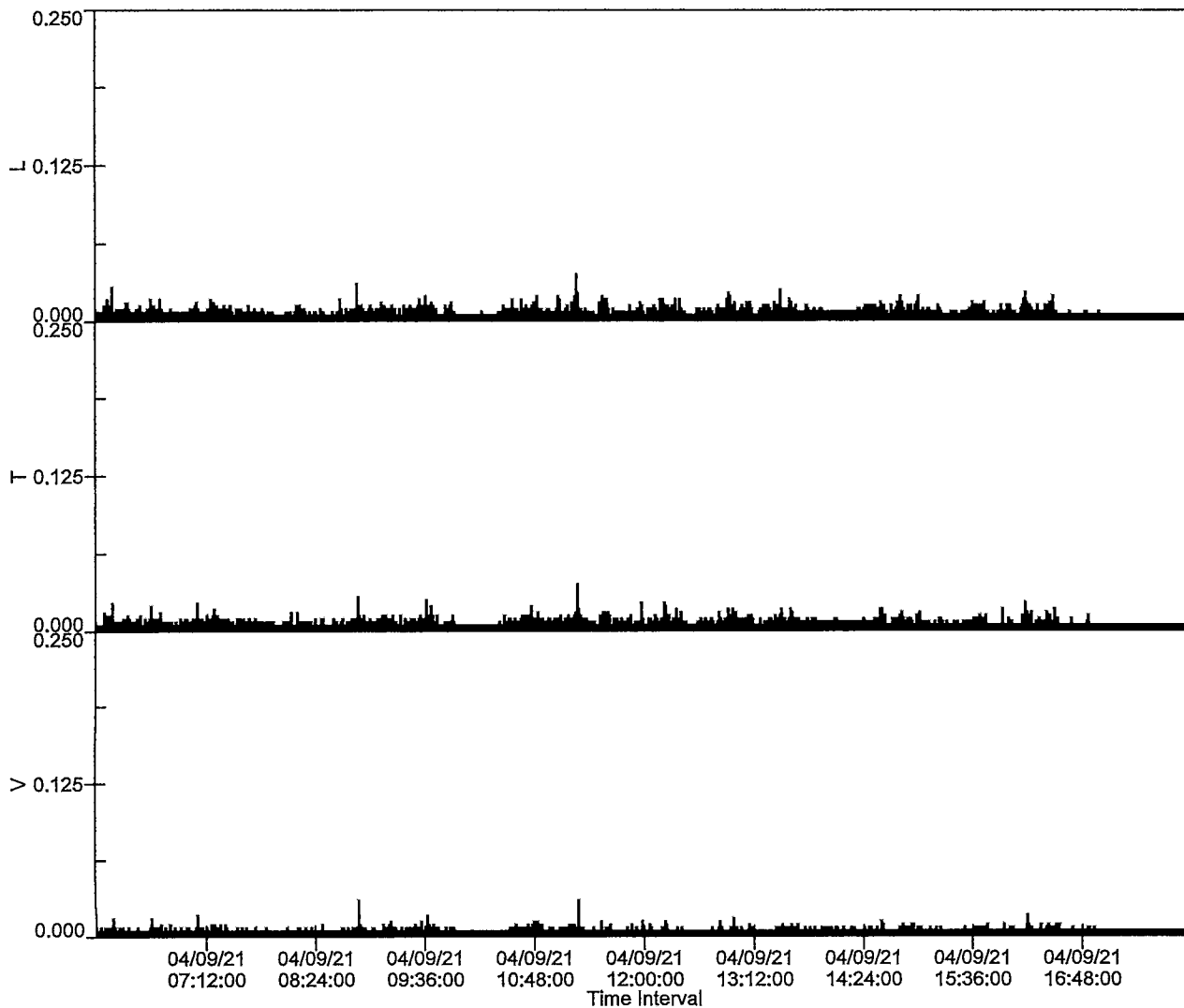
	L	T	V
PPV (in/s)	0.038	0.038	0.030
FREQ (Hz)	7.8	7.0	29.4
Peak Air Pressure:	76 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 56

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



SN: 3559 v2.75
Date: 04/10/2021 **Time:** 06:01:00
Event: 57
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

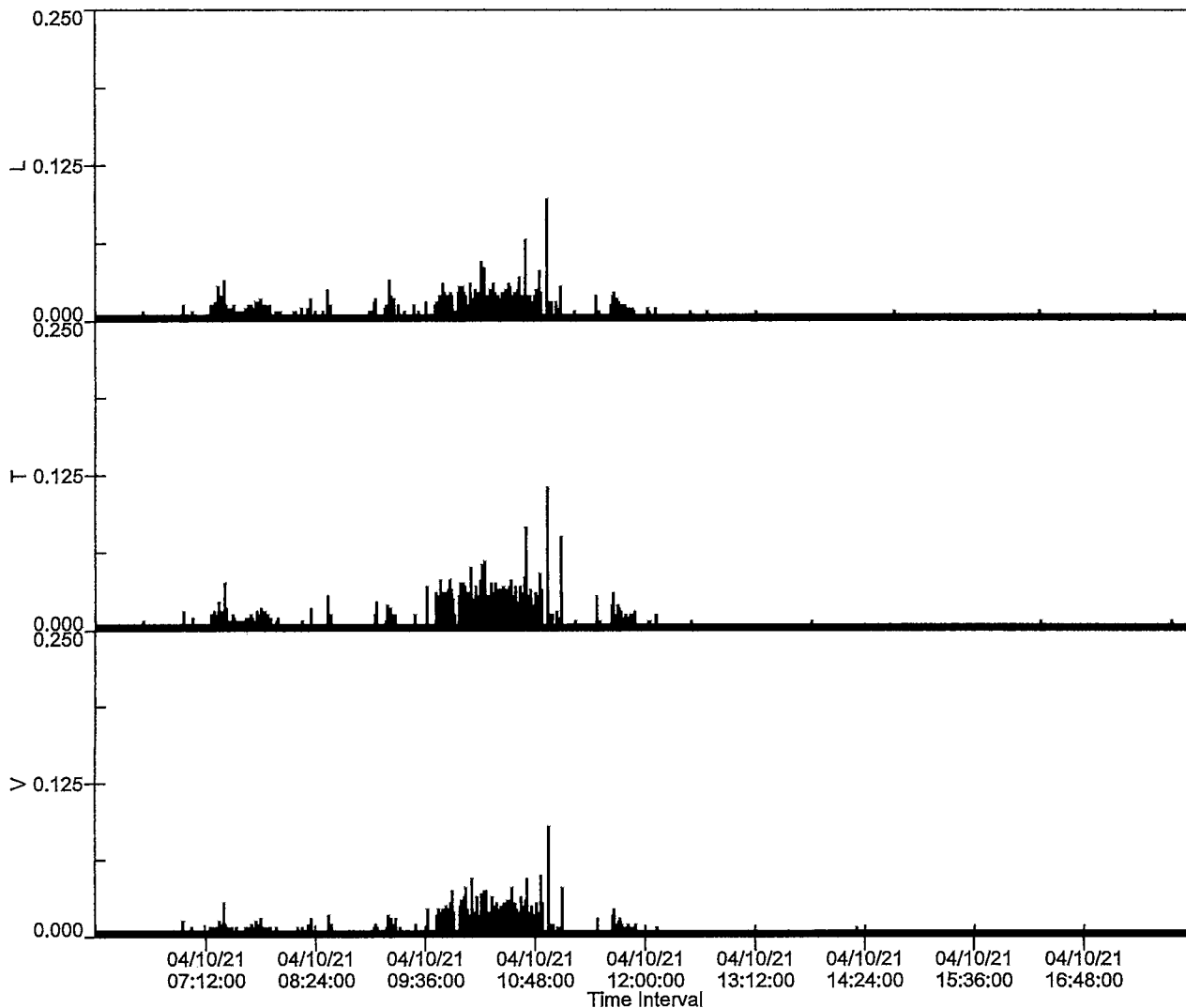
	L	T	V
PPV (in/s)	0.098	0.115	0.090
FREQ (Hz)	35.7	35.7	50.0
Peak Air Pressure:	76 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 57

Record Max PPV: 0.115 in/s Record Max DB: 76 db



SN: 3559 v2.75
 Date: 04/11/2021 Time: 06:01:00
 Event: 58
 Client: V3 COMPANIES
 Operation: CONSTRUCTION
 Location: HIBBARD PARK
 Distance: 15.
 Operator: CTI INC
 Comment: 3005 WILMETTE AVENUE

Continuous Monitor Recording
Summary Data

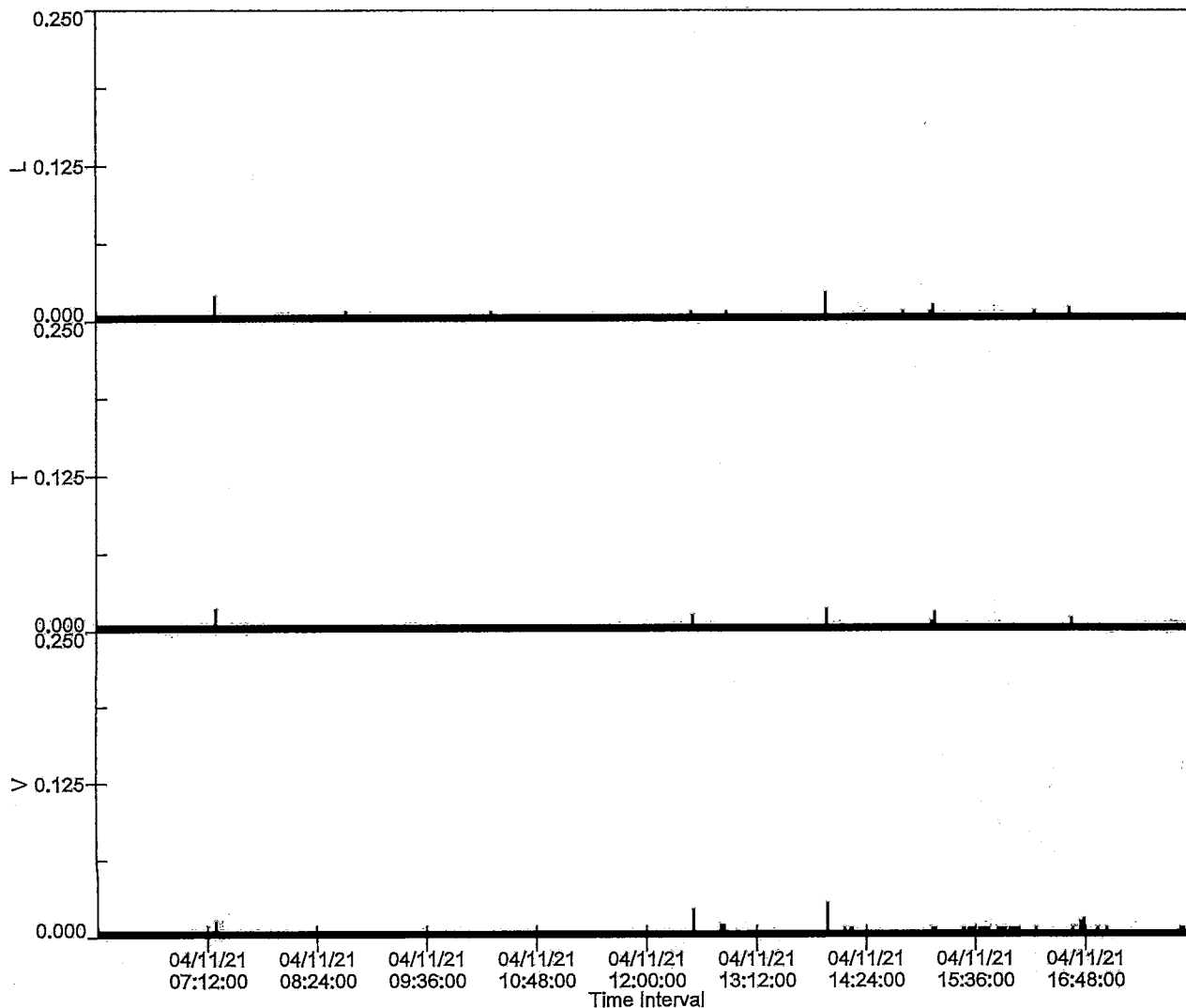
	L	T	V
PPV (in/s)	0.023	0.018	0.028
FREQ (Hz)	71.4	125.0	35.7
Peak Air Pressure:	76 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 58

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



SN: 3559 v2.75
Date: 04/12/2021 **Time:** 06:01:00
Event: 59
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3005 WILMETTE AVENUE

**Continuous Monitor Recording
Summary Data**

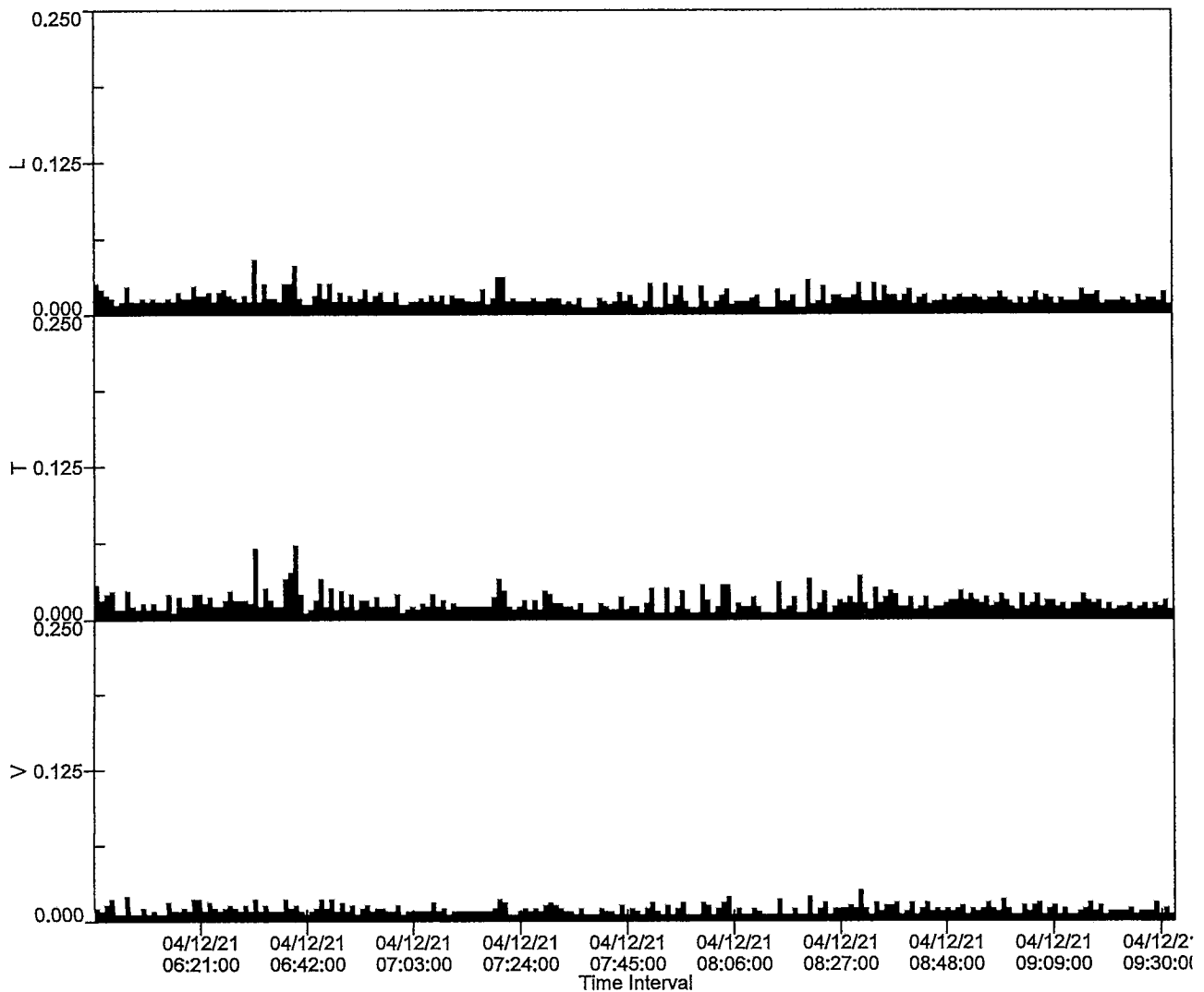
	L	T	V
PPV (in/s)	0.045	0.060	0.025
FREQ (Hz)	15.2	22.7	26.3
Peak Air Pressure:	81 db		
Recording Time:	212 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 59

Record Max PPV: 0.060 in/s Record Max DB: 81 db



SN: 3734 v3.22
Date: 03/29/2021 **Time:** 06:45:00
Event: 45
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)	0.045	0.053	0.048
FREQ (Hz)	13.5	11.6	10.0
Peak Air Pressure:	82 db		

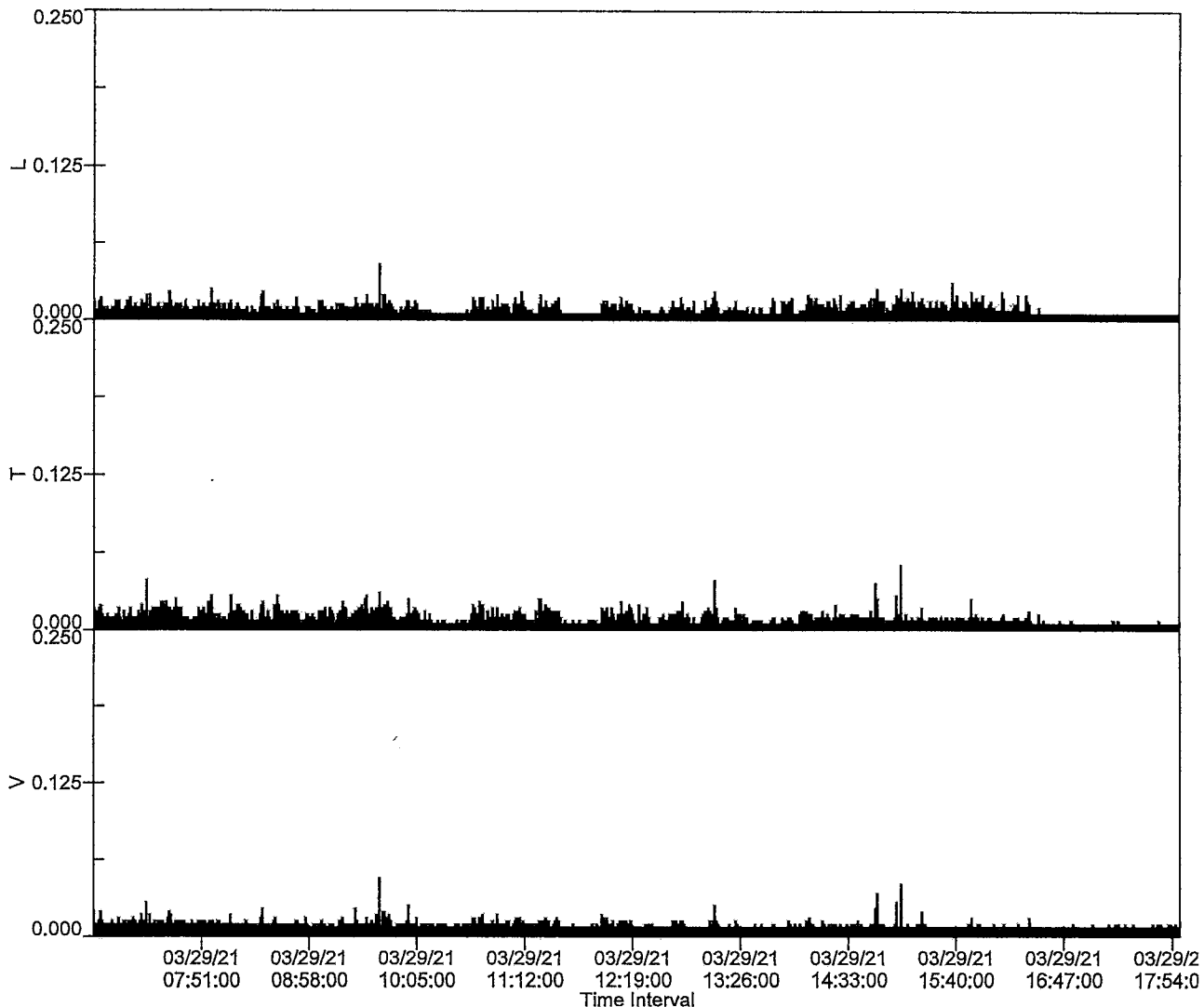
Recording Time: 674 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 45

Record Max PPV: 0.053 in/s Record Max DB: 82 db



SN: 3734 v3.22
Date: 03/31/2021 **Time:** 06:01:00
Event: 47
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

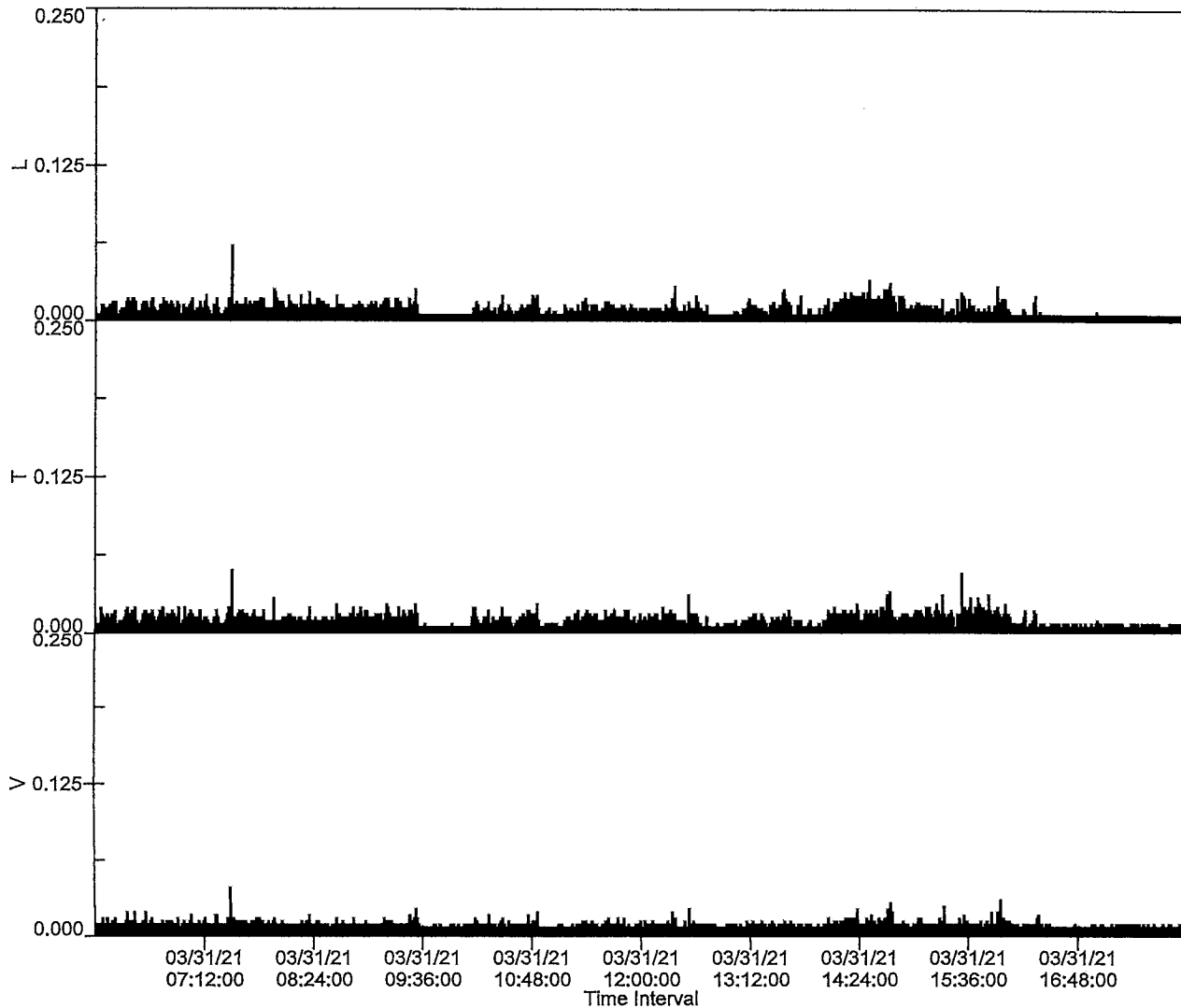
	L	T	V
PPV (in/s)	0.060	0.050	0.040
FREQ (Hz)	22.7	21.7	18.5
Peak Air Pressure:	79 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 3734 Event: 47

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



SN: 3734 v3.22
Date: 04/01/2021 **Time:** 06:01:00
Event: 48
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)	0.073	0.050	0.033
FREQ (Hz)	15.6	12.2	10.9
Peak Air Pressure: 86 db			

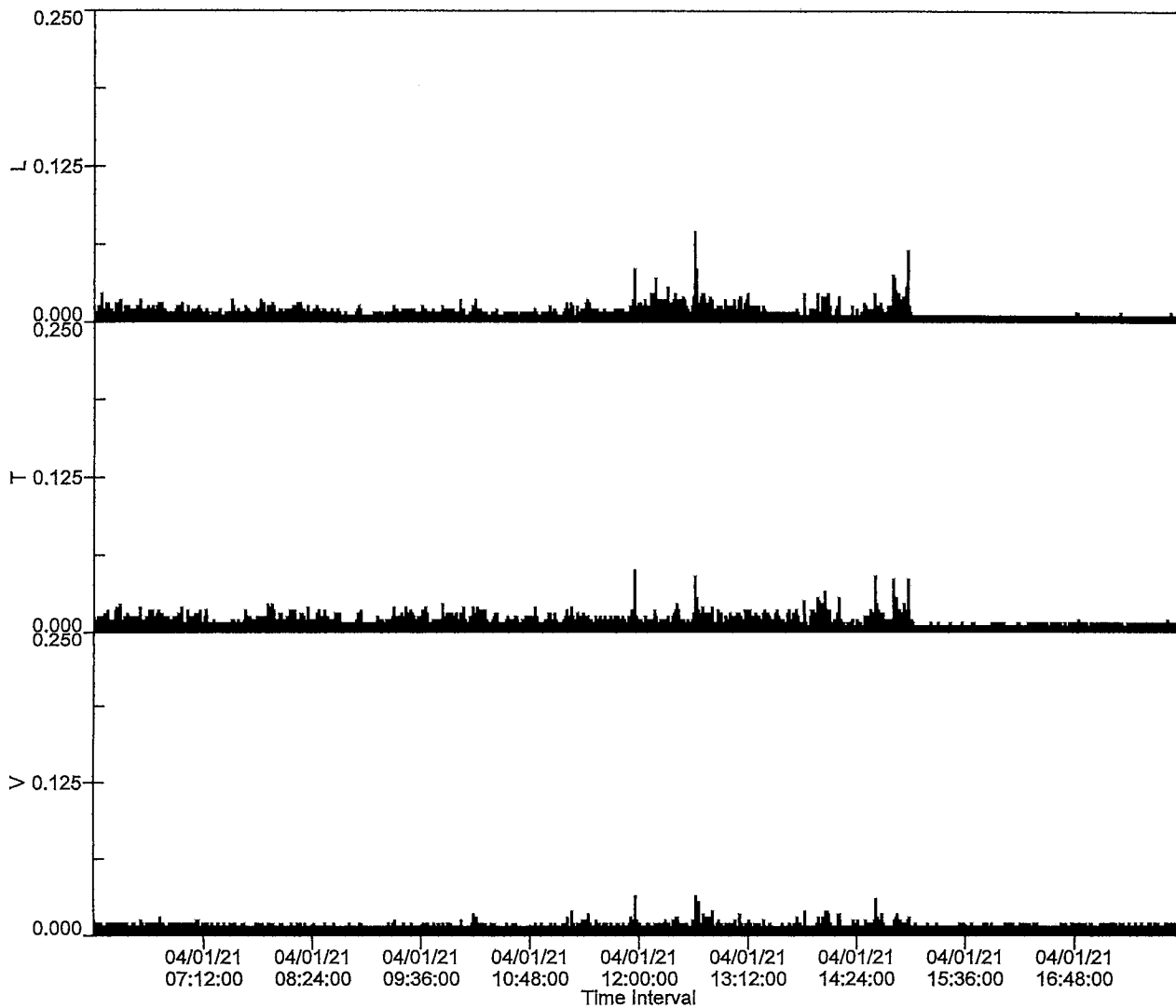
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 48

Record Max PPV: 0.073 in/s Record Max DB: 86 db



SN: 3734 v3.22
Date: 04/02/2021 **Time:** 06:01:00
Event: 49
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

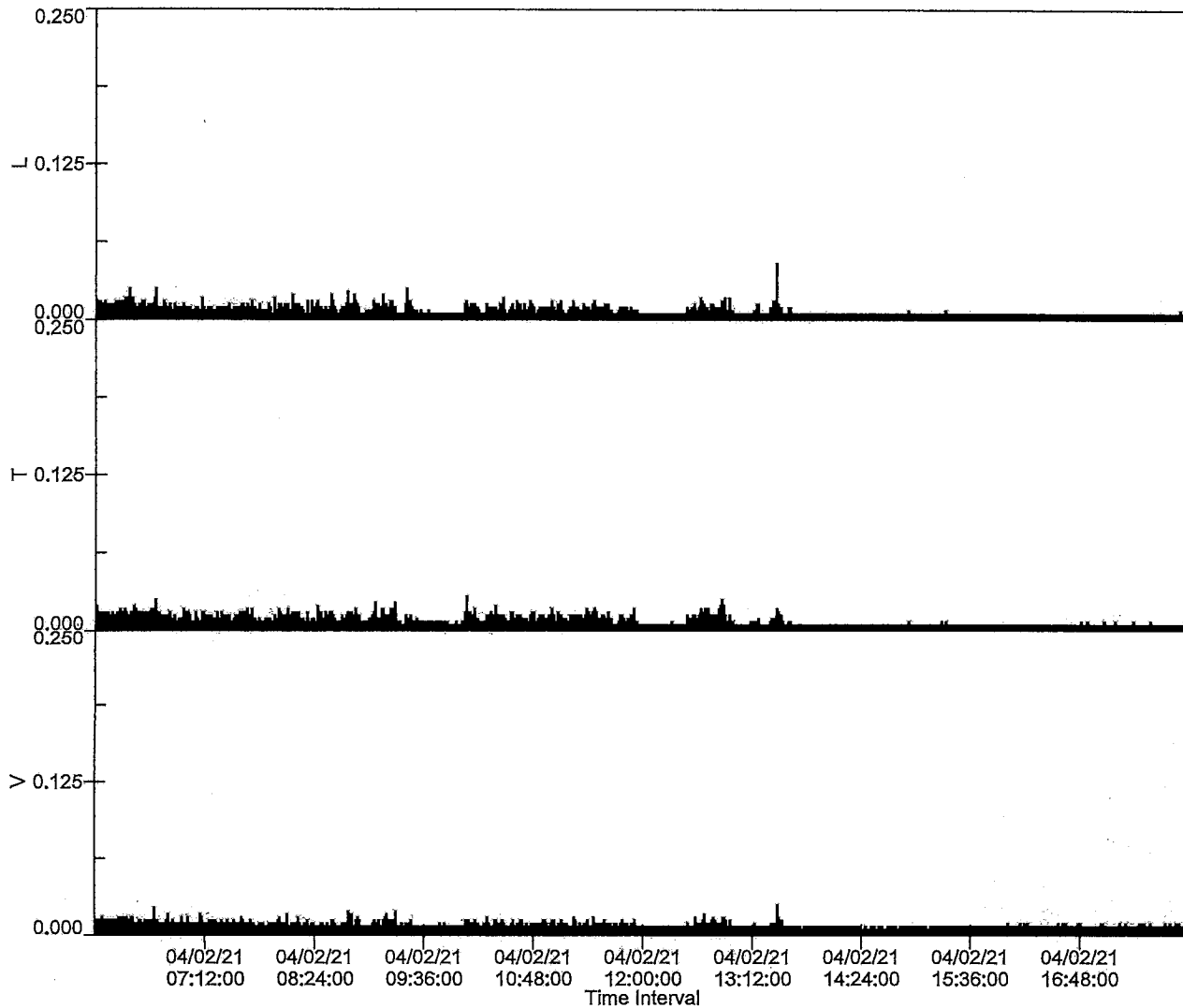
	L	T	V
PPV (in/s)	0.045	0.028	0.025
FREQ (Hz)	20.8	8.5	16.7
Peak Air Pressure:	87 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 49

Record Max PPV: 0.045 in/s Record Max DB: 87 db



SN: 3734 v3.22
Date: 04/03/2021 **Time:** 06:01:00
Event: 50
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

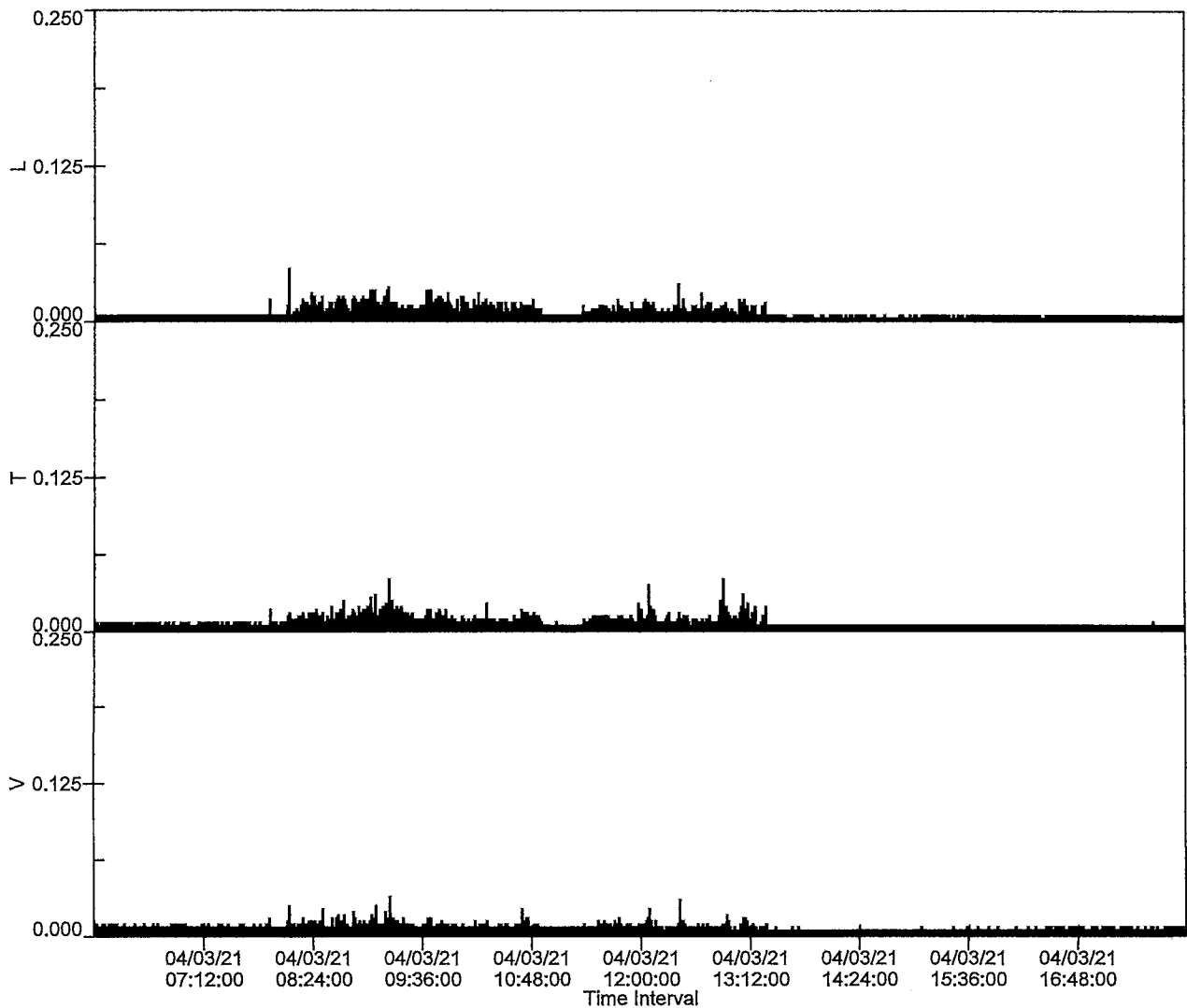
	L	T	V
PPV (in/s)	0.043	0.043	0.033
FREQ (Hz)	20.8	12.5	11.9
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 3734 Event: 50

Record Max PPV: 0.043 in/s Record Max DB: 78 db



SN: 3734 v3.22
Date: 04/04/2021 **Time:** 06:01:00
Event: 51
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

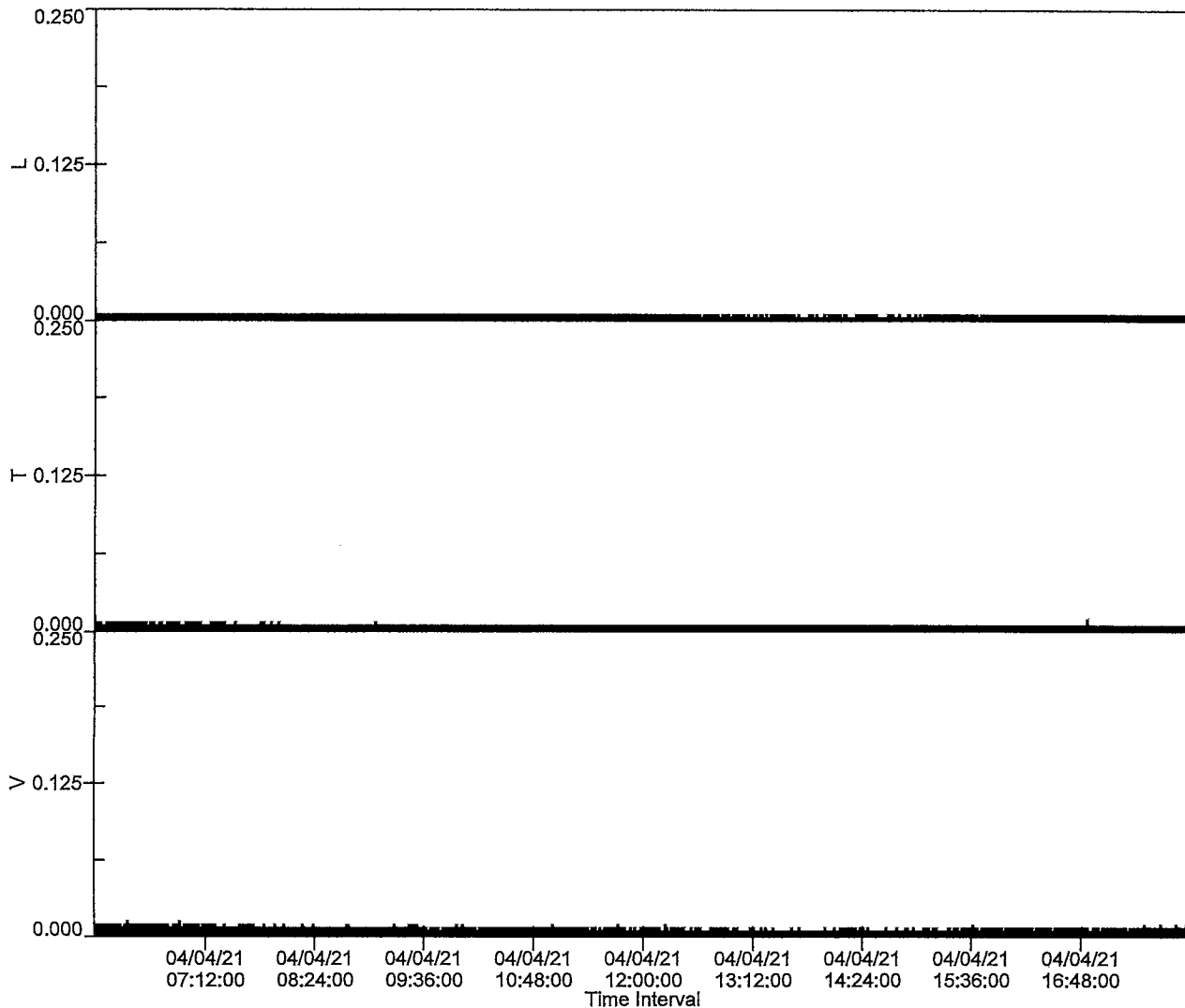
	L	T	V
PPV (in/s)	0.010	0.013	0.013
FREQ (Hz)	.3	3.1	9.4
Peak Air Pressure:	79 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 51

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



SN: 3734 v3.22
Date: 04/05/2021 **Time:** 06:01:00
Event: 52
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)	0.030	0.040	0.043
FREQ (Hz)	11.9	10.4	18.5
Peak Air Pressure:	78 db		

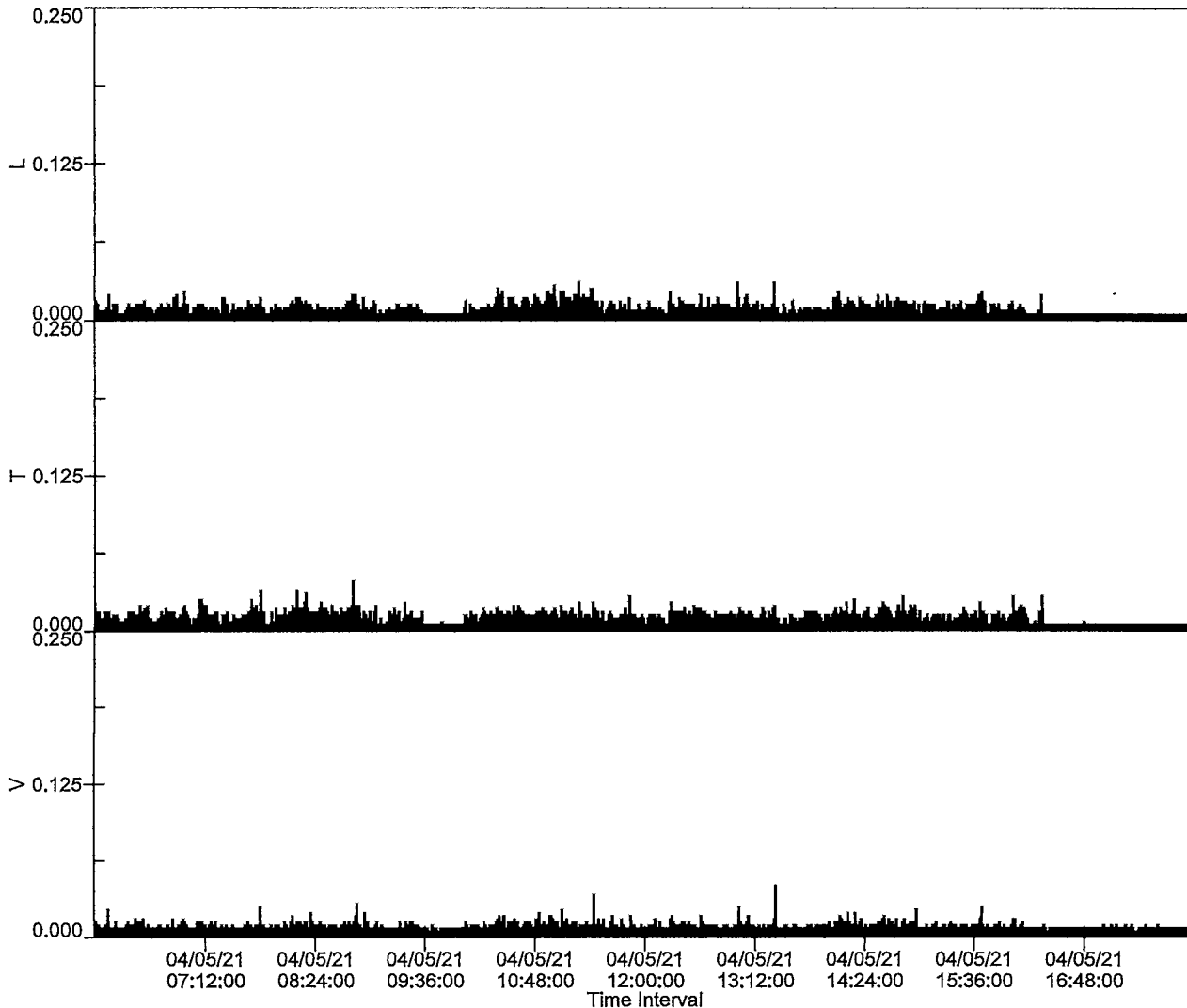
Recording Time: 718 minutes
Sample Size: 1440
Interval Size: 60 seconds

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: 3734 Event: 52

Record Max PPV: 0.043 in/s Record Max DB: 78 db



SN: 3734 v3.22
Date: 04/06/2021 **Time:** 06:01:00
Event: 53
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

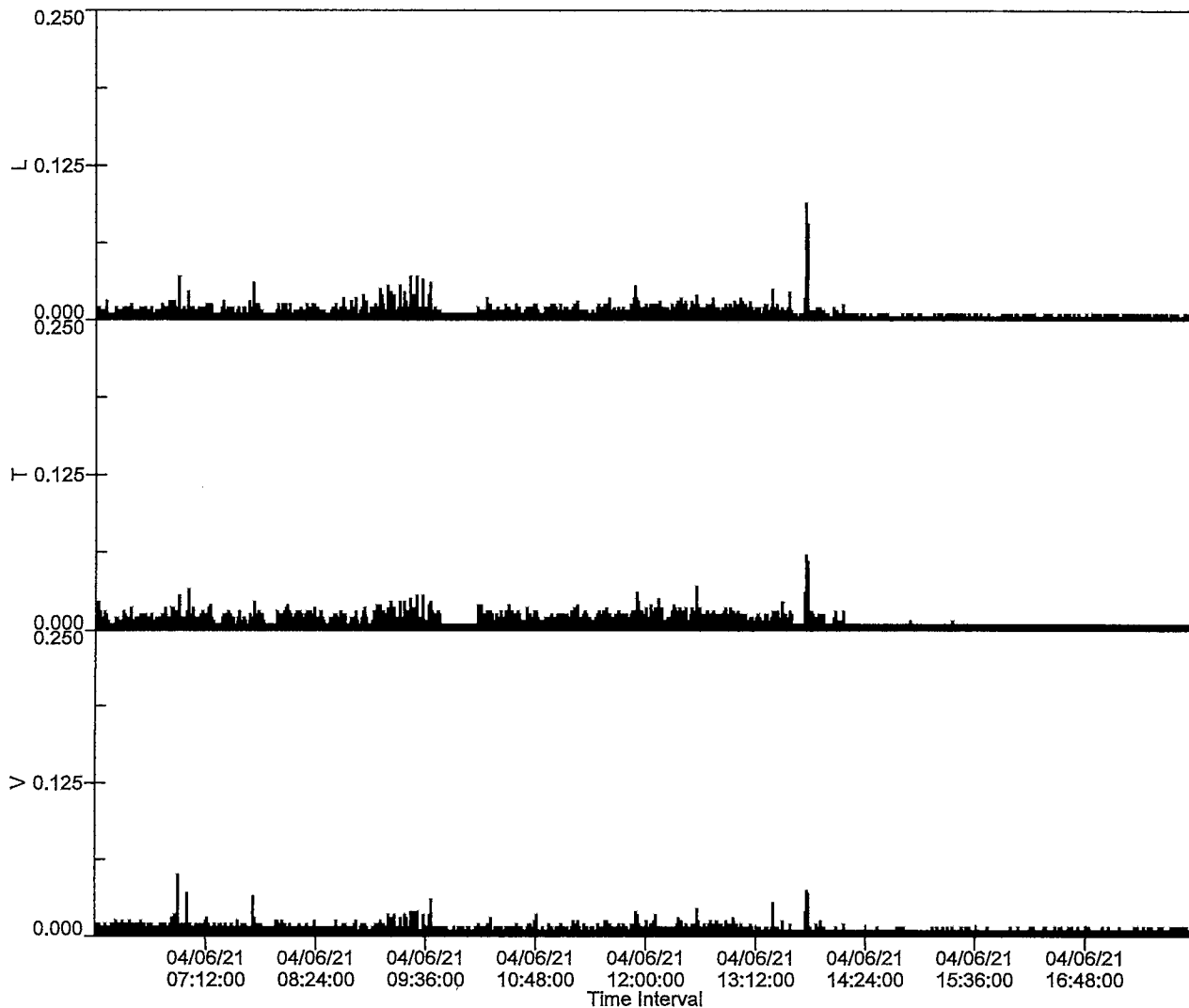
	L	T	V
PPV (in/s)	0.095	0.060	0.050
FREQ (Hz)	26.3	26.3	20.8
Peak Air Pressure:	79 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 53

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



SN: 3734 v3.22
Date: 04/07/2021 **Time:** 06:01:00
Event: 54
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
 Summary Data**

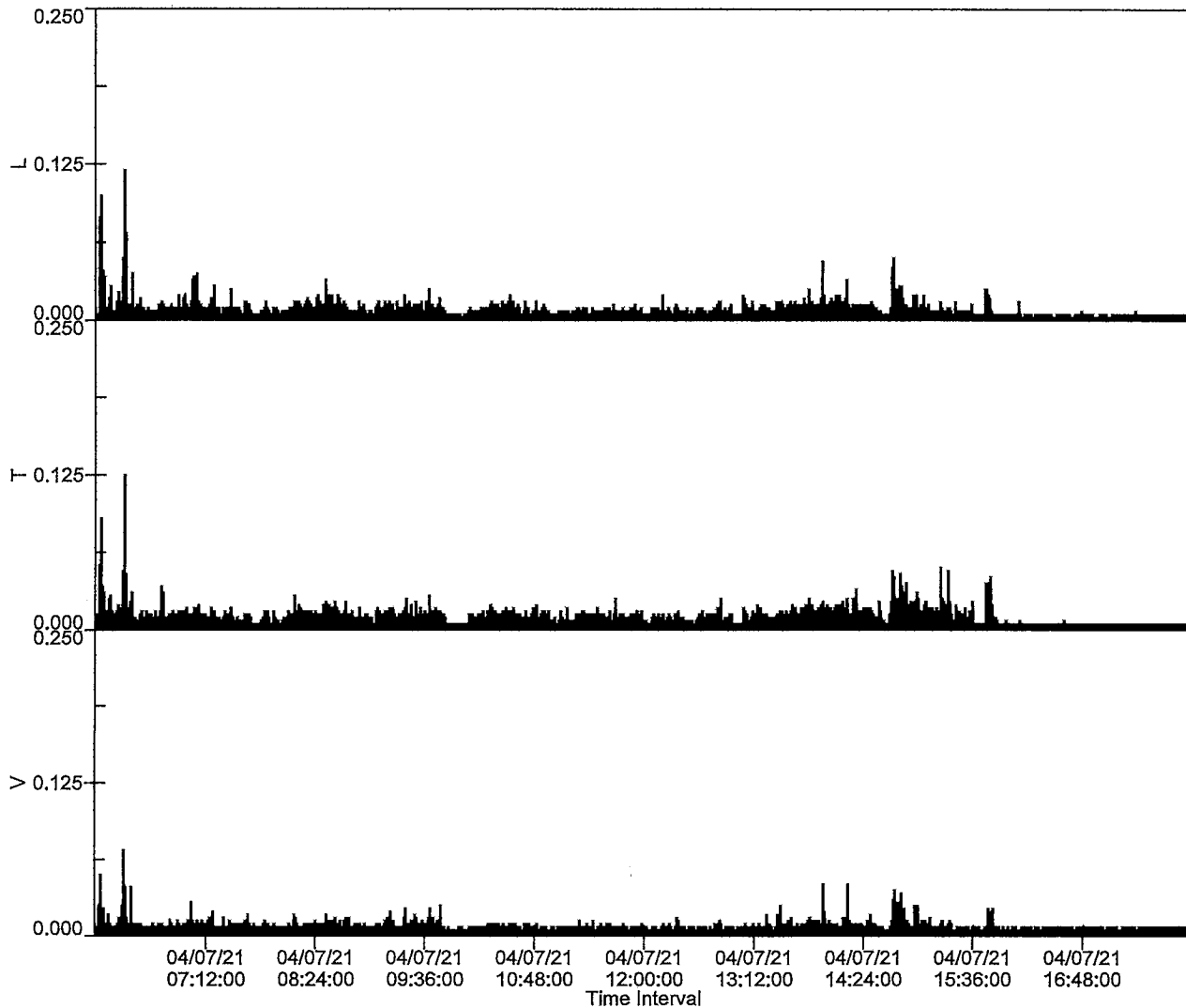
	L	T	V
PPV (in/s)	0.120	0.125	0.070
FREQ (Hz)	27.8	26.3	41.7
Peak Air Pressure:	82 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 54

Record Max PPV: 0.125 in/s Record Max DB: 82 db



SN: 3734 v3.22
Date: 04/08/2021 **Time:** 06:01:00
Event: 55
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

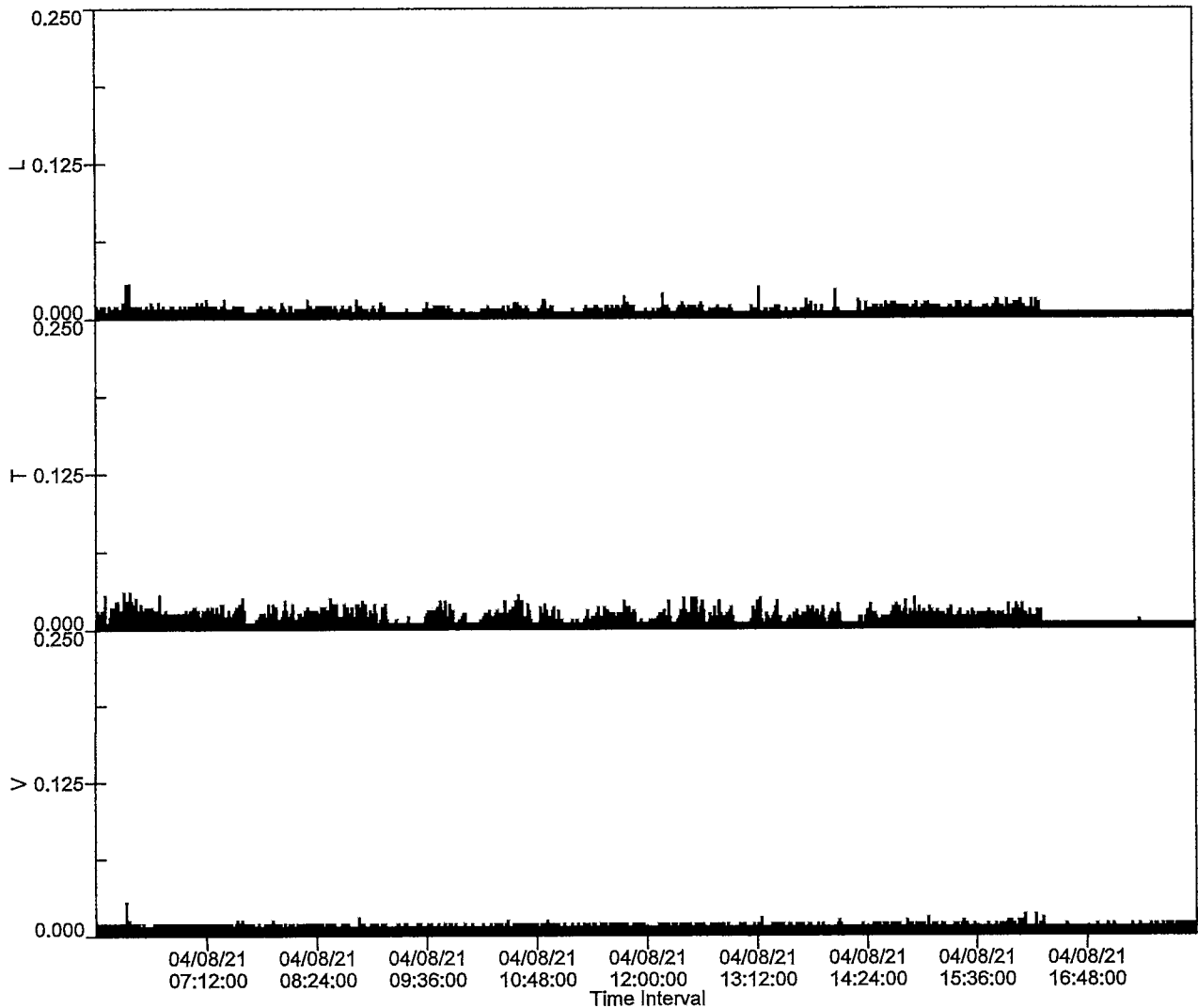
	L	T	V
PPV (in/s)	0.028	0.030	0.028
FREQ (Hz)	9.6	7.6	10.0
Peak Air Pressure:	79 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 3734 Event: 55

Record Max PPV: 0.030 in/s Record Max DB: 79 db



SN: 3734 v3.22
Date: 04/09/2021 **Time:** 06:01:00
Event: 56
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

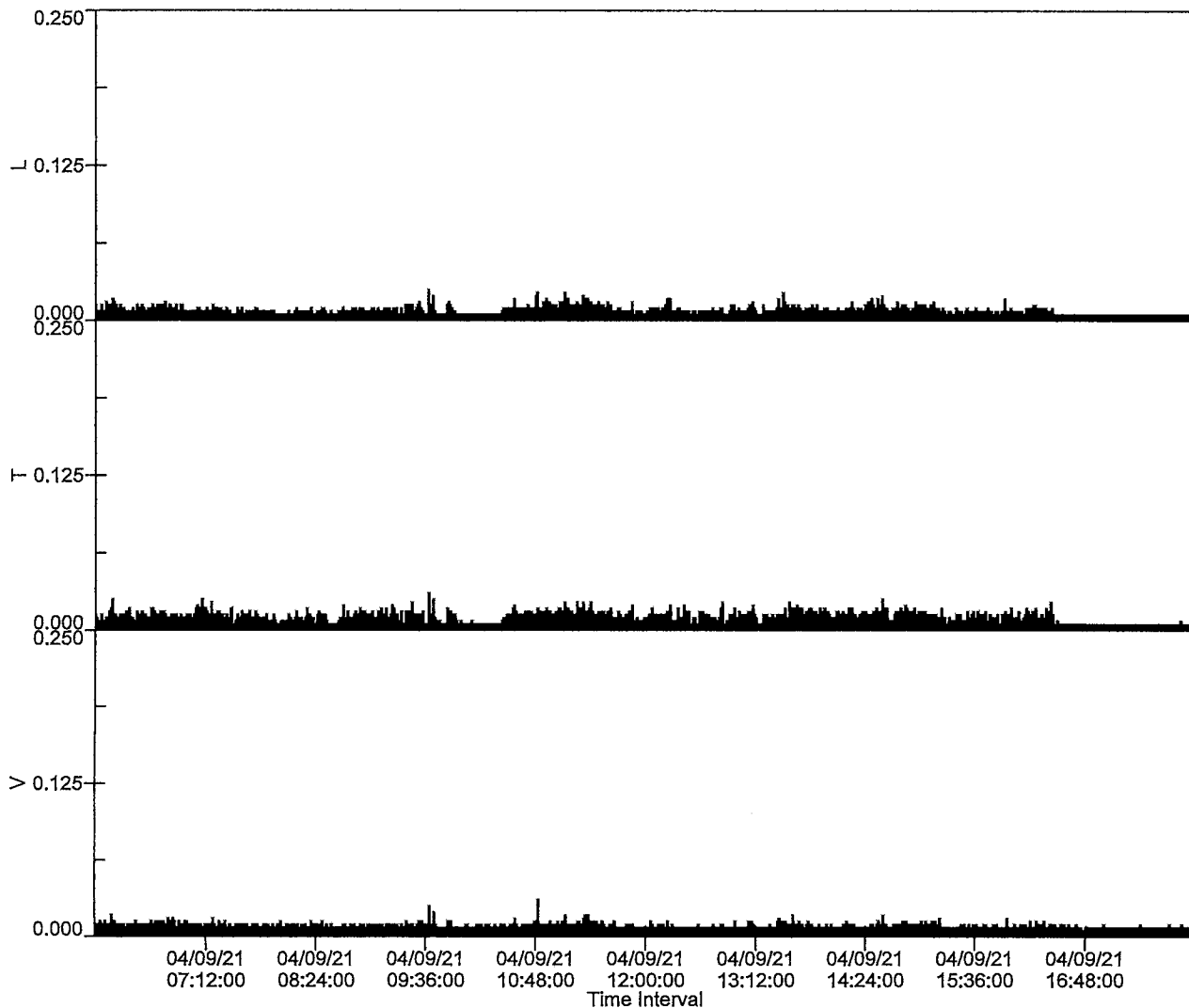
	L	T	V
PPV (in/s)	0.025	0.030	0.030
FREQ (Hz)	26.3	27.8	9.8
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 3734 Event: 56

Record Max PPV: 0.030 in/s Record Max DB: 78 db



SN: 3734 v3.22
Date: 04/10/2021 **Time:** 06:01:00
Event: 57
Client: V3 COMPANIES
Operation: CONSTRUCTION
Location: HIBBARD PARK
Distance: 15.
Operator: CTI INC
Comment: 3000 HILL STREET

**Continuous Monitor Recording
Summary Data**

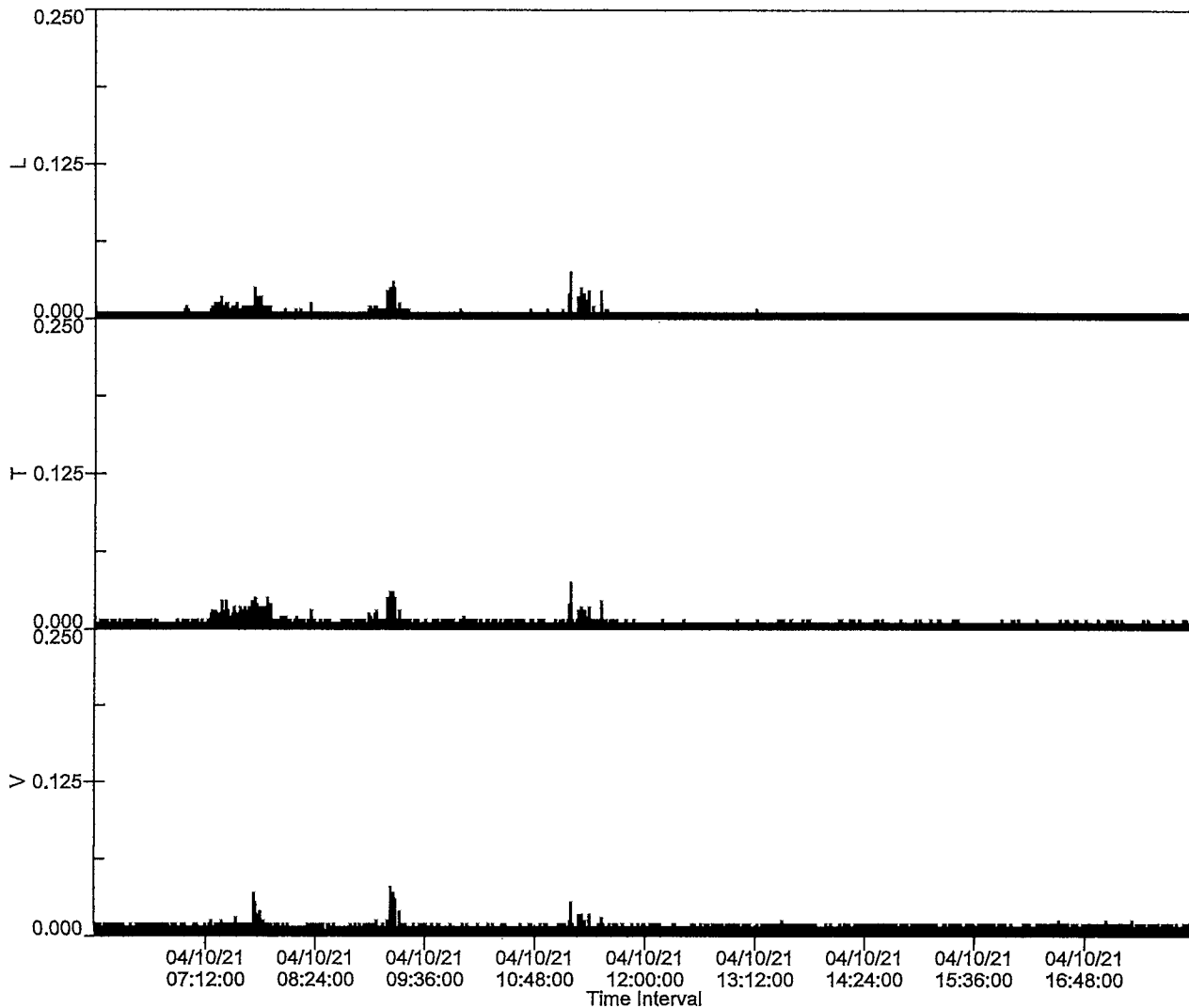
	L	T	V
PPV (in/s)	0.038	0.038	0.040
FREQ (Hz)	26.3	27.8	19.2
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 3734 Event: 57

Record Max PPV: 0.040 in/s Record Max DB: 78 db



SN: 3734 v3.22
 Date: 04/11/2021 Time: 06:01:00
 Event: 58
 Client: V3 COMPANIES
 Operation: CONSTRUCTION
 Location: HIBBARD PARK
 Distance: 15.
 Operator: CTI INC
 Comment: 3000 HILL STREET

Continuous Monitor Recording
Summary Data

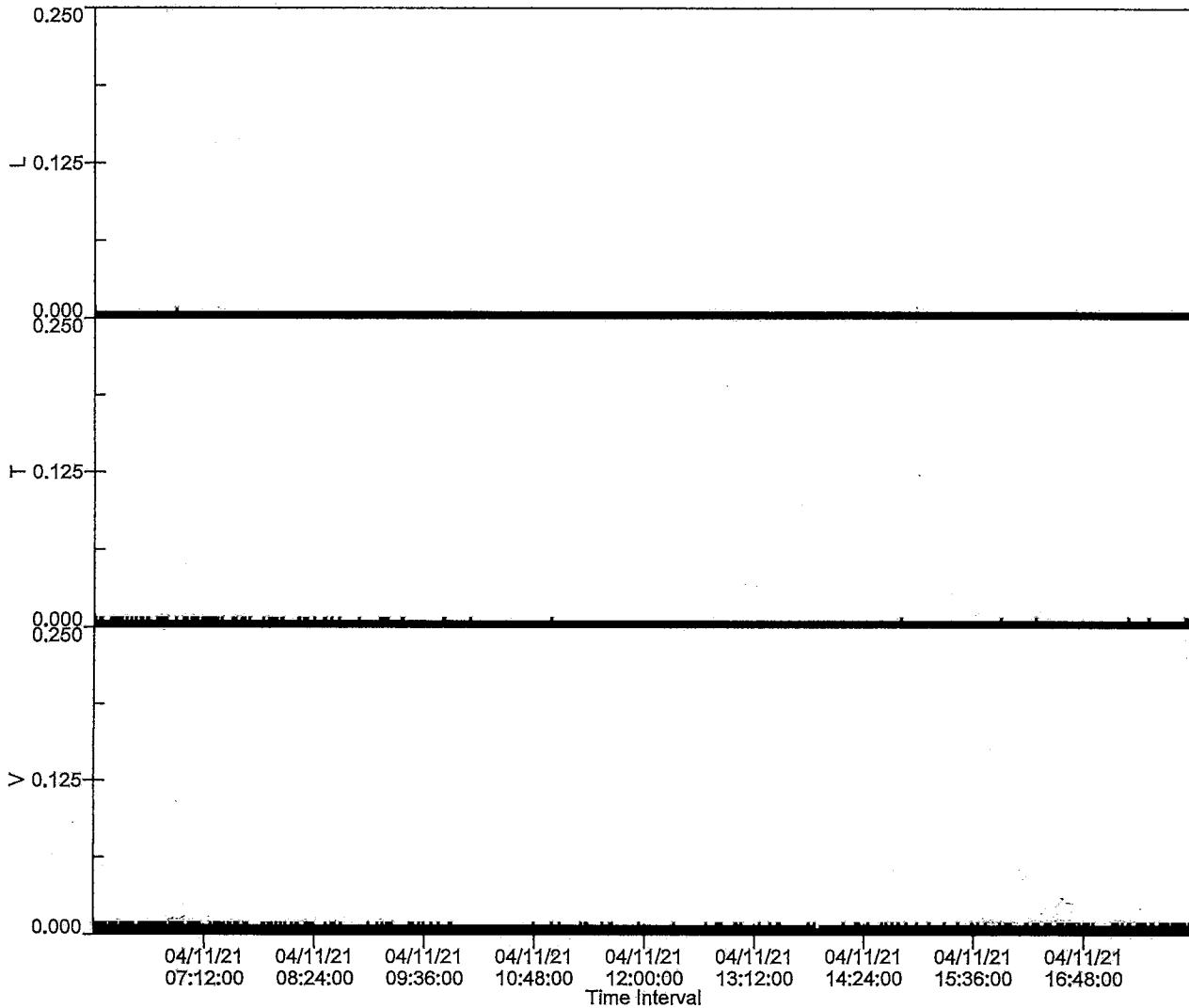
	L	T	V
PPV (in/s)	0.010	0.010	0.010
FREQ (Hz)	2	4.9	11.9
Peak Air Pressure:	78 db		
Recording Time:	718 minutes		
Sample Size:	1440		
Interval Size:	60 seconds		

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: 3734 Event: 58

Record Max PPV: 0.010 in/s Record Max DB: 78 db



SN: 3734 v3.22
Date: 04/12/2021 **Time:** 06:01:00
Event: 59
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)	0.033	0.030	0.020
FREQ (Hz)	22.7	27.8	33.3
Peak Air Pressure:	82 db		
Recording Time:	203 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: 59

Record Max PPV: 0.033 in/s Record Max DB: 82 db

