

Miramar Siesmic Reading: White Rock Quarries.

Location: 5276 SW 152 Ave

Date:	Time:	PPV:
7/23/2019	1:48 PM	0.015

Location: 16171 SW 49 Ct

Date:	Time:	PPV:
8/6/2019	1:34 PM	0.113
8/9/2019	1:24 PM	0.068

Location: 17040 SW 53 Ct

Date:	Time:	PPV:
7/24/2019	11:32 AM	0.03
7/29/2019	11:19 AM	0.045
7/31/2019	1:01 PM	0.038
8/5/2019	1:31 PM	0.033
8/6/2019	1:21 PM	0.108
8/6/2019	1:31 PM	0.108

Seismic Analysis

USBM/Velocity Waveform Report

Serial No: 5218 v5.25
Date: 07/24/2019 11:32:00
Event No: 1
Record Time: 15.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 17040 SW 53 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

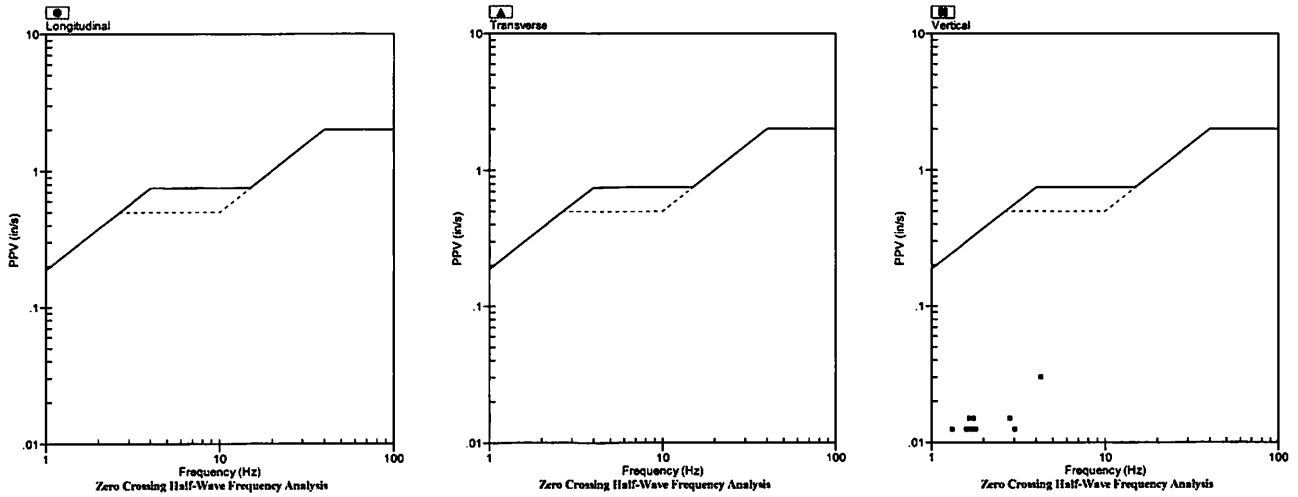
Summary Data

	L	T	V
PPV (in/s)	0.013	0.010	0.030
FREQ (Hz)	2.9	4.2	2.5
PD (.001")	0.59	0.71	1.71
PPA (g)	0.007	0.007	0.007
Peak Vector Sum:	0.033 in/s		
Peak Air Pressure:	102 db		
	0.00043 PSI @ 1.2 Hz		

Additional Info:

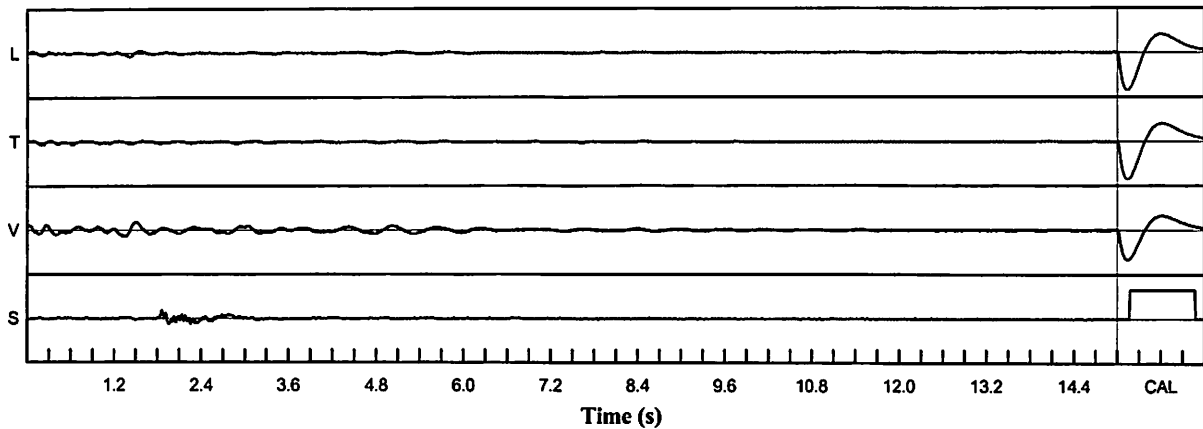
Shaketable Calibrated: 01/22/2018
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

USBM Safe Blasting Levels



Velocity Waveform

SN: 5218 Event: 1



Velocity Waveform Graph Scale

Time Scale: 0.300 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

Serial No: 5218 v5.25
Date: 07/29/2019 11:18:39
Event No: 2
Record Time: 15.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 17040 SW 53 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

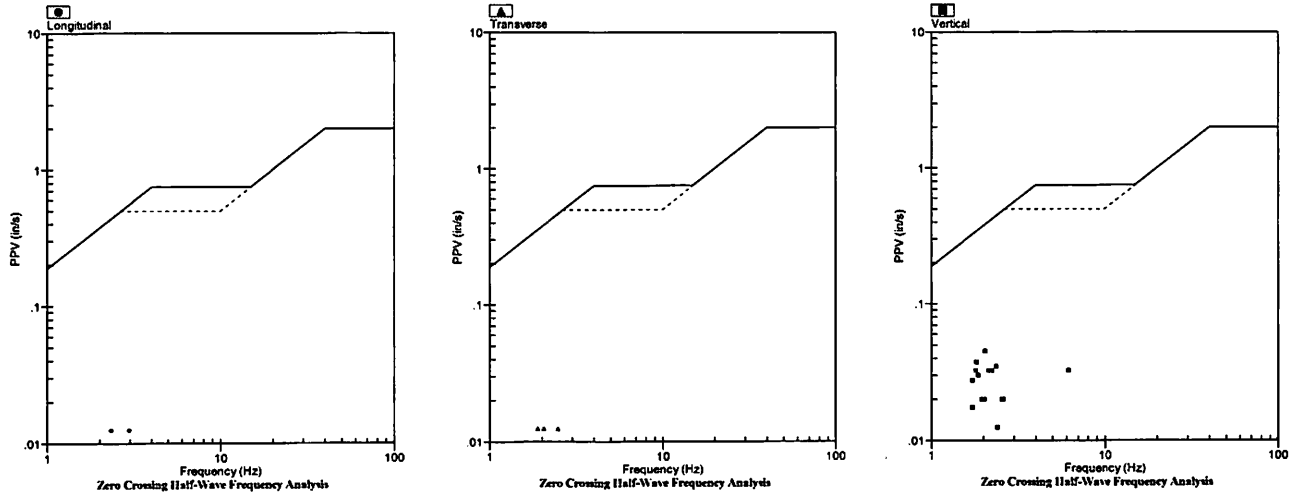
Summary Data

	L	T	V
PPV (in/s)	0.013	0.015	0.045
FREQ (Hz)	2.5	2.0	2.1
PD (.001")	1.21	1.48	3.05
PPA (g)	0.007	0.007	0.007
Peak Vector Sum:	0.045 in/s		
Peak Air Pressure:	101 db		
	0.00034 PSI @ 4.5 Hz		

Additional Info:

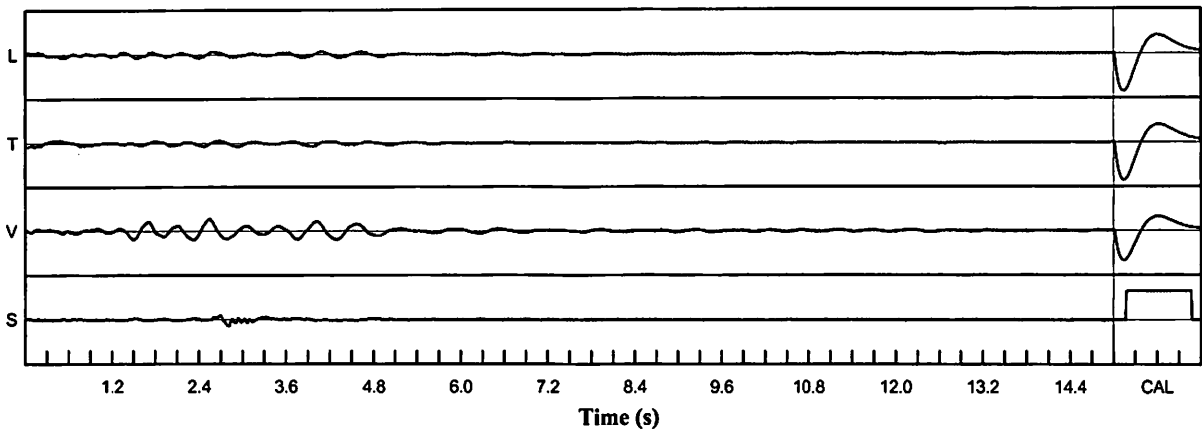
Shaketable Calibrated: 01/22/2018
By: GeoSonics Inc.
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USBM Safe Blasting Levels



Velocity Waveform

SN: 5218 Event: 2



Velocity Waveform Graph Scale

Time Scale: 0.300 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

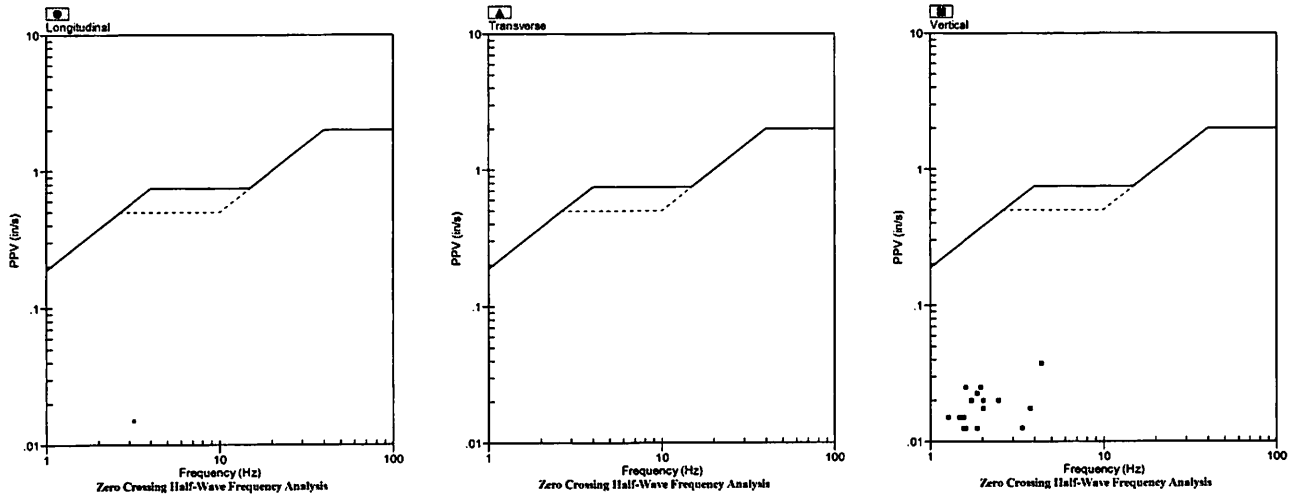
Serial No: 5218 v5.25
Date: 07/31/2019 15:01:01
Event No: 3
Record Time: 15.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 17040 SW 53 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

	L	T	V
PPV (in/s)	0.015	0.010	0.038
FREQ (Hz)	3.0	2.8	2.8
PD (.001")	0.71	0.67	2.17
PPA (g)	0.007	0.007	0.007
Peak Vector Sum:	0.040 in/s		
Peak Air Pressure:	101 db		
	0.00034 PSI @ 1.2 Hz		

Additional Info:

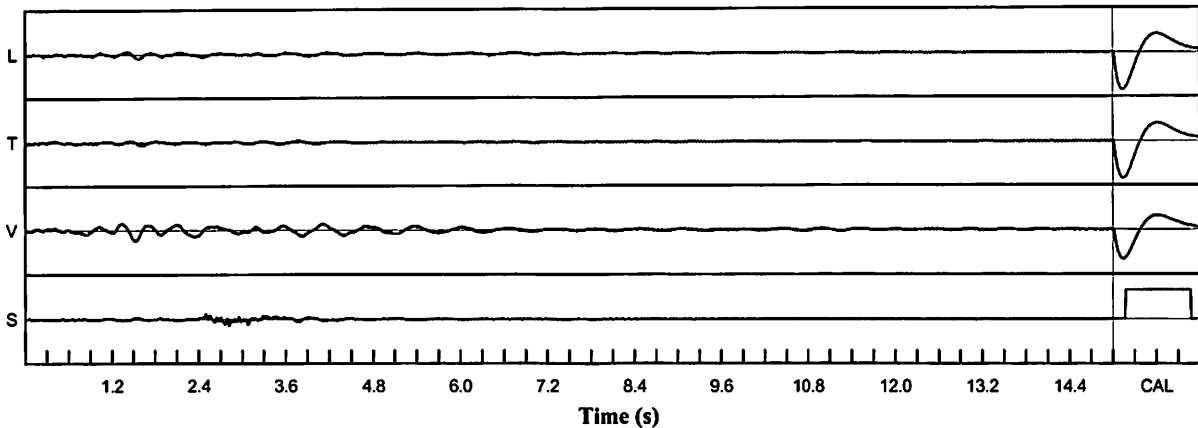
Shaketable Calibrated: 01/22/2018
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

USBM Safe Blasting Levels



Velocity Waveform

SN: 5218 Event: 3



Velocity Waveform Graph Scale
Time Scale: 0.300 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

Serial No: 5218 v5.25
Date: 08/05/2019 15:31:14
Event No: 4
Record Time: 15.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 17040 SW 53 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

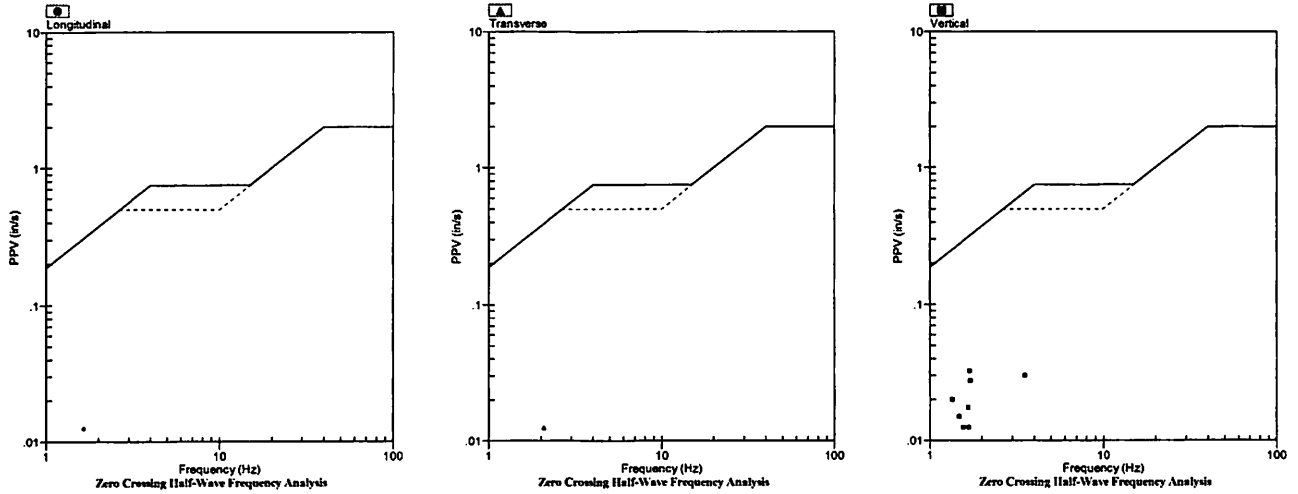
Summary Data

	L	T	V
PPV (in/s)	0.013	0.013	0.033
FREQ (Hz)	1.7	2.1	1.7
PD (.001")	0.97	0.79	3.03
PPA (g)	0.007	0.007	0.007
Peak Vector Sum:	0.035 in/s		
Peak Air Pressure:	101 db		
	0.00037 PSI @ 1.7 Hz		

Additional Info:

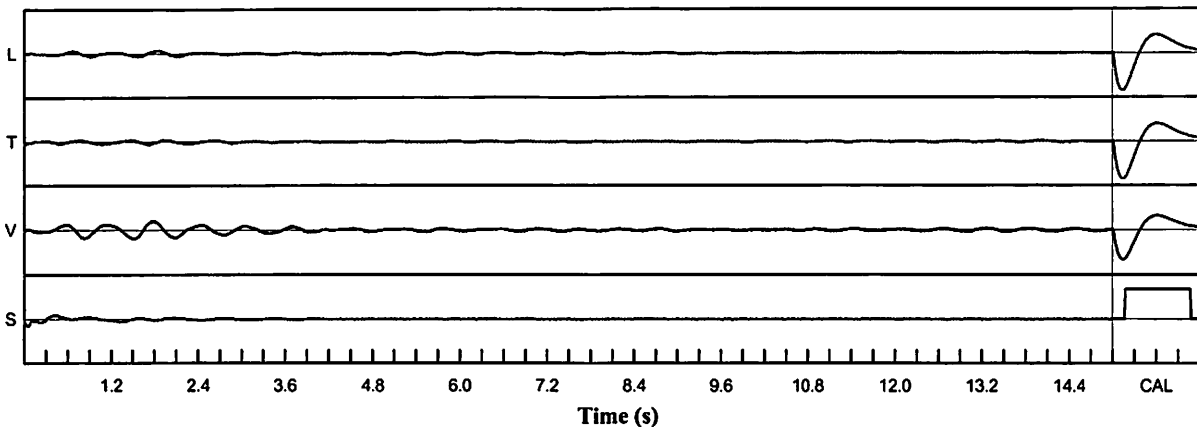
Shaketable Calibrated: 01/22/2018
By: GeoSonics Inc.
 359 Northgate Drive
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USBM Safe Blasting Levels



Velocity Waveform

SN: 5218 Event: 4



Velocity Waveform Graph Scale

Time Scale: 0.300 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

Serial No: 5218 v5.25
Date: 08/06/2019 13:31:08
Event No: 5
Record Time: 15.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 17040 SW 53 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

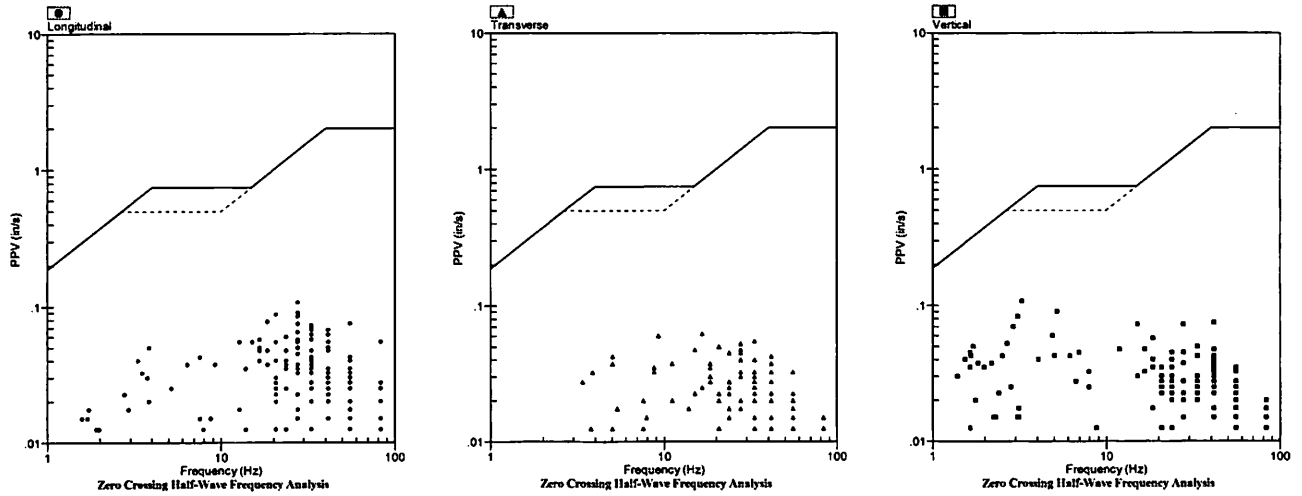
Summary Data

	L	T	V
PPV (in/s)	0.108	0.063	0.108
FREQ (Hz)	27.8	16.7	3.3
PD (.001")	1.84	1.64	5.25
PPA (g)	0.052	0.026	0.039
Peak Vector Sum:	0.113 in/s		
Peak Air Pressure:	106 db		
	0.00064 PSI @ 6.4 Hz		

Additional Info:

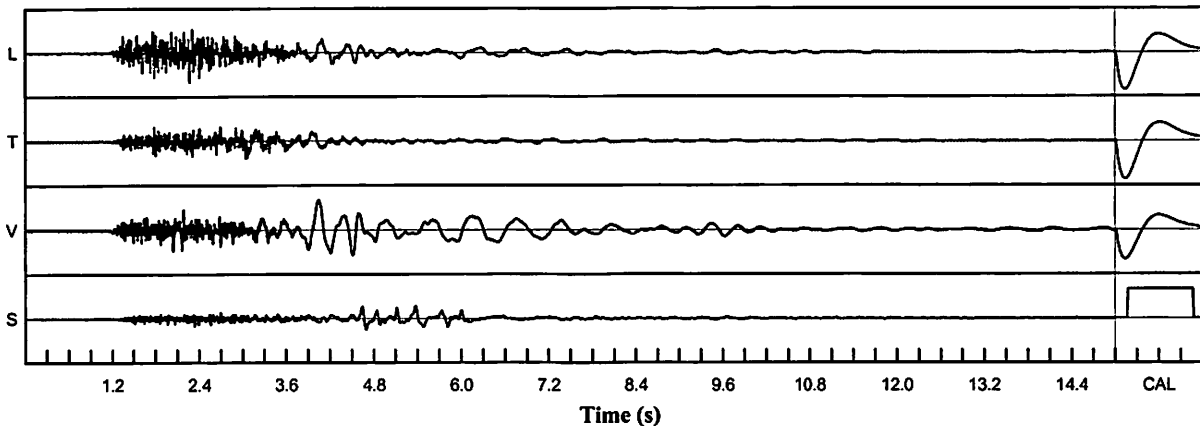
Shaketable Calibrated: 01/22/2018
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

USBM Safe Blasting Levels



Velocity Waveform

SN: 5218 Event: 5



Velocity Waveform Graph Scale

Time Scale: 0.300 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

Serial No: 5218 v5.25
Date: 08/09/2019 13:20:32
Event No: 6
Record Time: 15.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 17040 SW 53 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

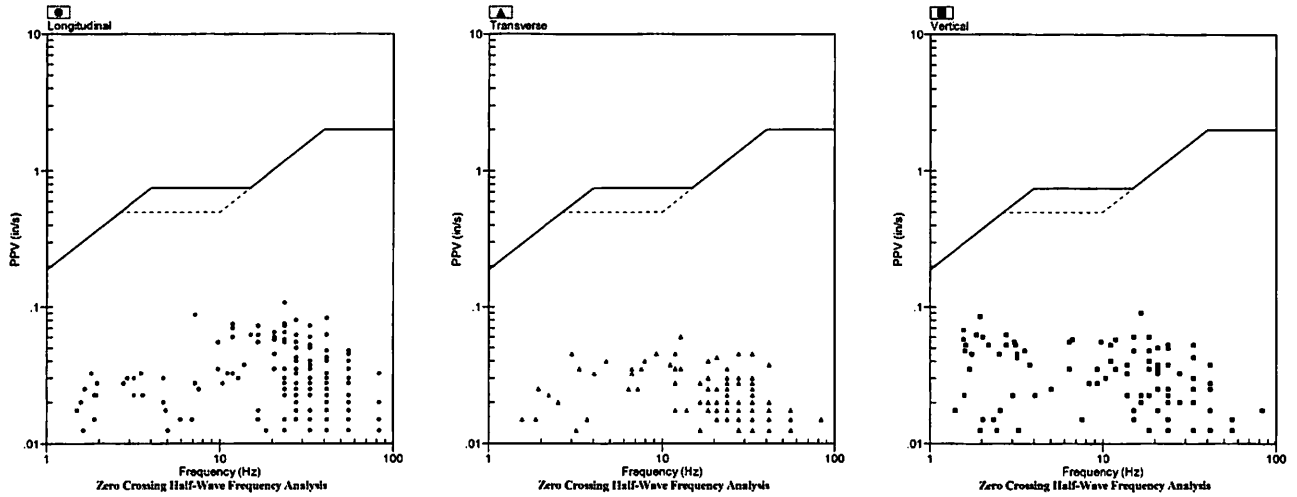
Summary Data

	L	T	V
PPV (in/s)	0.108	0.060	0.090
FREQ (Hz)	23.8	12.8	16.7
PD (.001")	1.95	1.91	5.96
PPA (g)	0.052	0.026	0.033
Peak Vector Sum:	0.113 in/s		
Peak Air Pressure:	109 db		
	0.00084 PSI @ 3.3 Hz		

Additional Info:

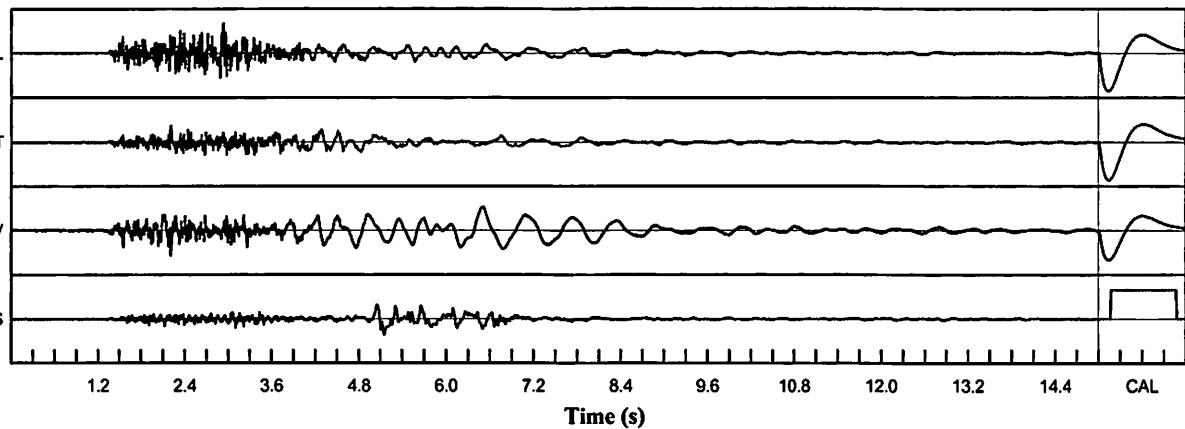
Shaketable Calibrated: 01/22/2018
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

USBM Safe Blasting Levels



Velocity Waveform

SN: 5218 Event: 6



Velocity Waveform Graph Scale

Time Scale: 0.300 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

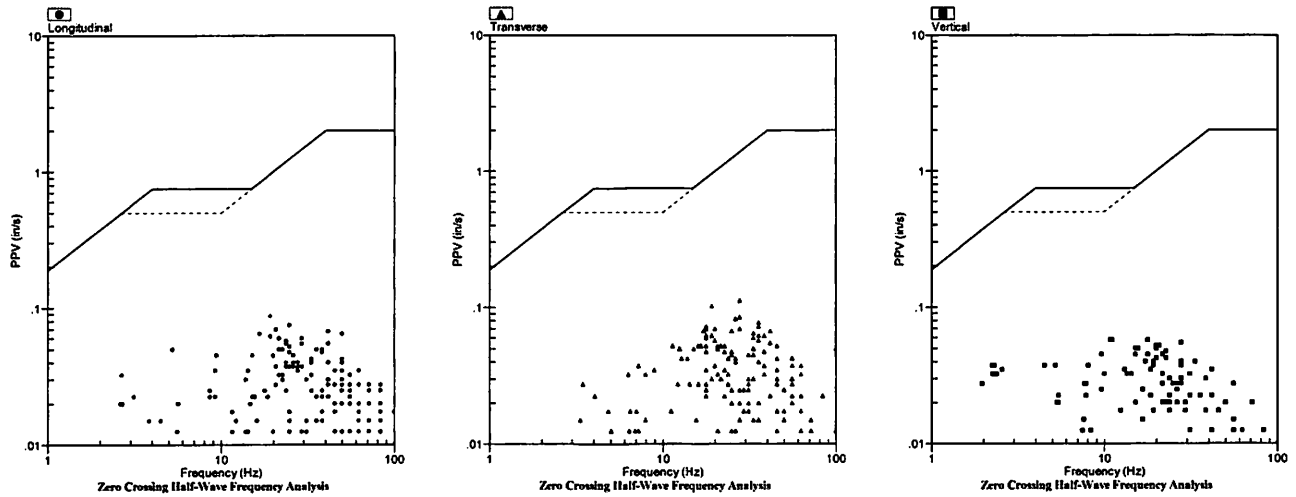
Serial No: 5149 v3.67
Date: 08/06/2019 13:34:15
Event No: 1
Record Time: 5.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 16171 SW 49 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

	L	T	V
PPV (in/s)	0.088	0.113	0.058
FREQ (Hz)	19.2	27.8	17.9
PD (.001")	1.38	1.30	2.58
PPA (g)	0.046	0.065	0.033
Peak Vector Sum:	0.143 in/s		
Peak Air Pressure:	105 db		
	0.00061 PSI @ 5.2 Hz		

Additional Info:

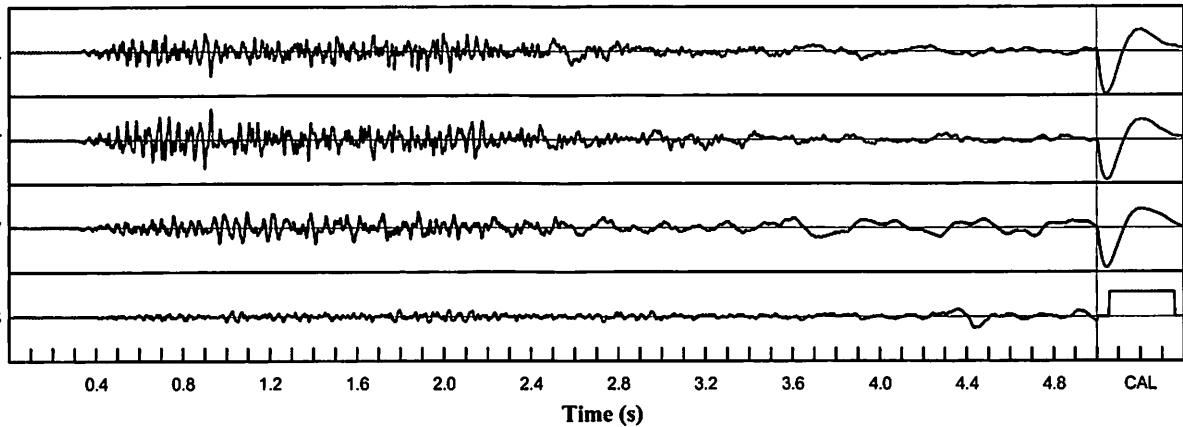
Shaketable Calibrated: 06/19/2019
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

USBM Safe Blasting Levels



Velocity Waveform

SN: 5149 Event: 1



Velocity Waveform Graph Scale
Time Scale: 0.100 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

Serial No: 5149 v3.67
Date: 08/09/2019 13:23:51
Event No: 2
Record Time: 5.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 16171 SW 49 Ct
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.030 in/s

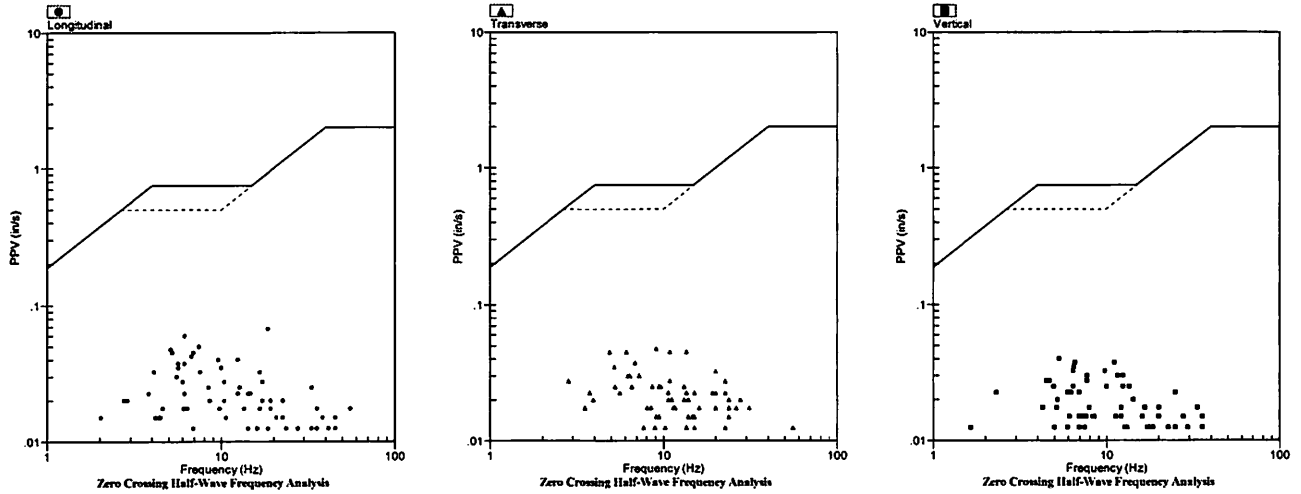
Summary Data

	L	T	V
PPV (in/s)	0.068	0.048	0.040
FREQ (Hz)	18.5	9.1	5.3
PD (.001")	1.27	1.33	1.22
PPA (g)	0.026	0.020	0.020
Peak Vector Sum:	0.083 in/s		
Peak Air Pressure:	92 db		
	0.00020 PSI @ 12.8 Hz		

Additional Info:

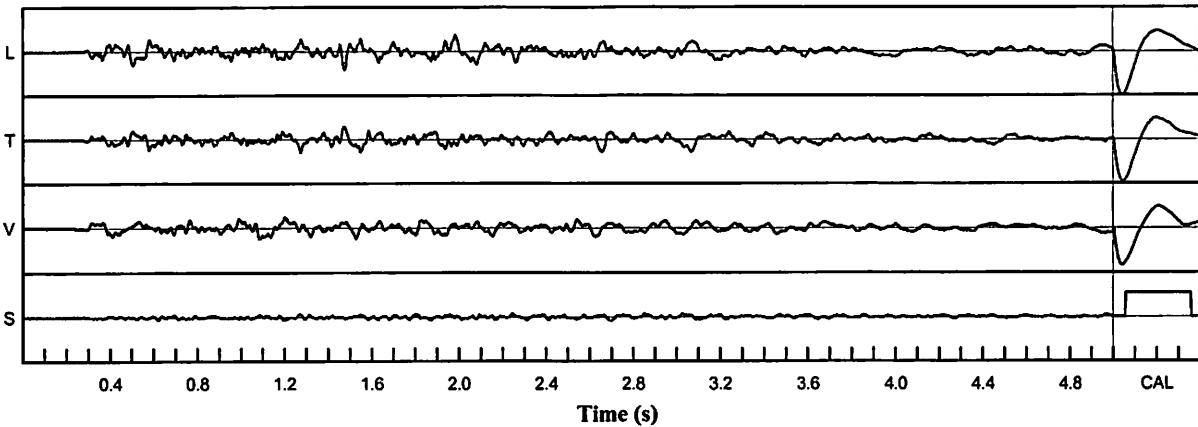
Shaketable Calibrated: 06/19/2019
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

USBM Safe Blasting Levels



Velocity Waveform

SN: 5149 Event: 2



Velocity Waveform Graph Scale

Time Scale: 0.100 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI

Seismic Analysis

USBM/Velocity Waveform Report

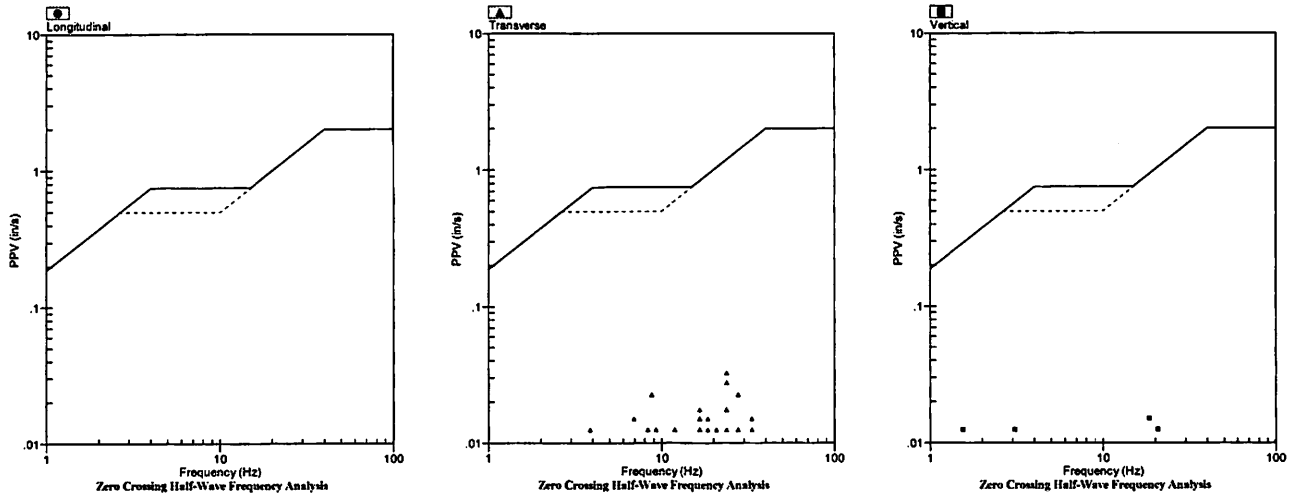
Serial No: 5150 v3.67
Date: 07/23/2019 13:47:57
Event No: 9
Record Time: 15.0 s
Client: City of Miramar
Operation: White Rock Quarries
Location: 5276 SW 152 Ave
Distance:
Operator: Roy A
Comment: In Ground
Seismic Trigger: 0.020 in/s

	L	T	V
PPV (in/s)	0.003	0.033	0.015
FREQ (Hz)	.6	23.8	18.5
PD (.001")	0.11	0.70	0.90
PPA (g)	0.007	0.013	0.007
Peak Vector Sum:	0.033 in/s		
Peak Air Pressure:	94 db		
	0.00021 PSI @ 9.8 Hz		

Additional Info:

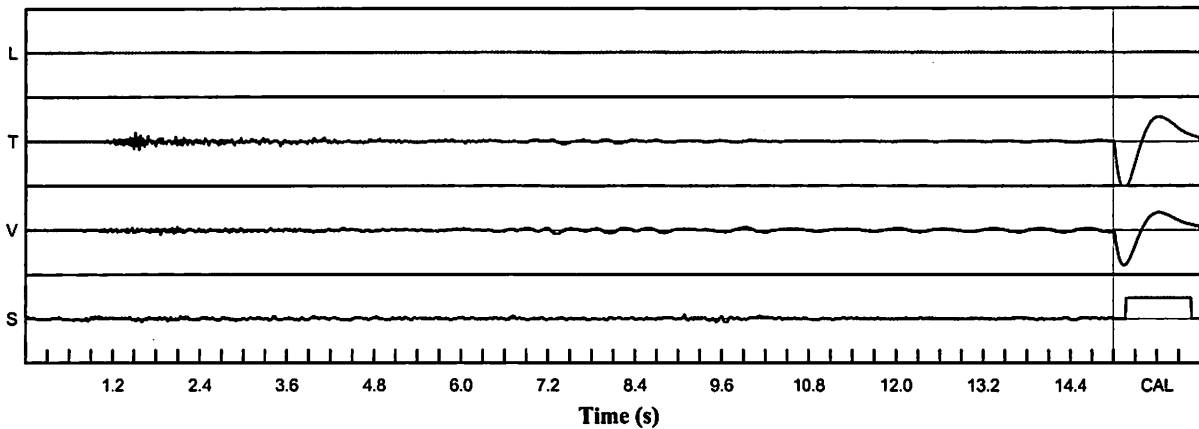
Shaketable Calibrated: 03/02/2019
By: GeoSonics Inc.
 359 Northgate Drive
 Warrendale, PA 15086 U.S.A.
 TEL: 724.934.2900 FAX: 724.934.2999

USBM Safe Blasting Levels



Velocity Waveform

SN: 5150 Event: 9



Velocity Waveform Graph Scale
Time Scale: 0.300 s
Seismic Scale: +/- 0.160 in/s
Sound Scale: +/- 0.0023 PSI